WEBINAR

Harnessing the Power of Data for Smallholders – Data and the Path to Food Security

Serving African SME’s and Farmers

Date: Thursday 27 August 2020  Time: 14:00 – 16:00 CAT / 12:00 – 14:00 GMT
## AGENDA

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<thead>
<tr>
<th>Time</th>
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<tr>
<td>14h00 – 14h30</td>
<td>Welcome Remarks and Setting the Scene: The Power of Data in Agriculture: Increased digital adoption to harness the power of data to drive decisions and AFAP’s role.</td>
<td>Joost Van Odijk, Technical Advisor at African Fertilizer and Agribusiness Partnership, Netherlands</td>
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<td>14h30 – 14h40</td>
<td>Presentation: Visualizing Insights on Fertilizer for African Agriculture (VIFAA)</td>
<td>Vinisha Bhatia-Murdach, Senior Learning Advisor at Development Gateway, USA <a href="mailto:vbhatia@developmentgateway.org">vbhatia@developmentgateway.org</a></td>
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<td>14h40 – 14h50</td>
<td>Presentation: The COVID-19 Africa Fertilizer Watch</td>
<td>Grace Chilande, Fertilizer Market Specialist and AfricaFertilizer.Org Coordinator at IFDC Kenya <a href="mailto:gchilande@ifdc.org">gchilande@ifdc.org</a></td>
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<td>14h50– 15h10</td>
<td>Presentation: Africa Fertilizer Map – A portal for Africa</td>
<td>Antonella Harrison, Strategic Advisor at Astrategia Limited UK <a href="mailto:antonella.l.harrison@gmail.com">antonella.l.harrison@gmail.com</a></td>
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<td>15h10 – 15h30</td>
<td>Presentation: Optimizing farmlands by using BigData</td>
<td>Ronald de Bruijn, CEO at Agrisim, Netherlands <a href="mailto:ronald.debruijn@agrisim.com">ronald.debruijn@agrisim.com</a></td>
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<td>15h30– 15h50</td>
<td>Presentation: Building a modern trading platform to affect social change – The case of India.</td>
<td>Viresh Prashar CEO, Founder at Fruitfal, India <a href="mailto:viresh@fruitfal.com">viresh@fruitfal.com</a></td>
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<td>15h50 – 15h55</td>
<td>Q&amp;A</td>
<td>Joost Van Odijk, Moderator</td>
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<td>15h55 – 16h00</td>
<td>Closing remarks</td>
<td>Jason Scarpone, CEO at African Fertilizer and Agribusiness Partnership</td>
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WHY?

- African food shortage is severe and increasing, e.g. in Nigeria, a country of 200M >40% of children under 5 years are stunted due to lack of proper food.
- +50% of African consumption covered by food imports.
- African population doubles within 30 years.

- +100M low-income African farmers can triple production of food crops e.g. Rice or Maize.
- Yields don't increase, because farmers don't receive punctual advice and training at scale.
- There's no structured supply chains, which secures stable off take at scale.
Today, we have an exciting line around 3 core themes driving food security leveraging the power of data:

- MARKET INSIGHTS
- RETAIL TRADING
- FARMLAND OPTIMIZATION
Power of Data & Food Security

IMPACT

LOGIC

DATA

PUBLIC PRIVATE PARTNERSHIPS

BUSINESS MODEL (PROFIT/ROI)
AFAP, Agribusiness and the Power of Data; some background

AFAP has co-developed the fertilizer sector across 12 countries in Africa developing market-driven Agro-dealer networks and related platforms.

AFAP provides practical business and technical support, actionable advice on regional regulations, branding and financial support services.

Over 5,000 major distributors and over 450 farmer organizations have benefited directly from this work. Over 7.5 million African farmers have been reached through these platforms and networks.

Next to AFAP’s own programs, this vast market reach and source insights, AFAP teams up with partners to address sectoral challenges for enhanced food security:

1. **Collective action on standards** for data collection of farm field data, digital data aggregation and usage;
2. **Leverage networks** of industry/SME’s, farmer groups, national governments and REC’s with the advances of digital technology;
3. **Actionable priorities** and programs using data-based assessment and benchmarking on policy, extension, financing or digitization;
Networks: Agro-dealer networks grow SME businesses and empower smallholder farmers

At the heart of AFAP are market-driven ‘Hub’ Agro-dealers, which AFAP develops and bolsters.

Hub networks add value to farmers in two ways:
1. **Input supplier** before and during the planting season; and
2. **Output aggregator** during harvest and post-harvest, reducing losses and increasing farmers income.
Actionable priorities using digital extension, which are tied to input/output market linkages.

Farmfield

**the core model**

**AFAP’s iFarming: extension 2.0**

Farming as a business
Yield optimisation
Financial planning
Access to services
Rejuvenate farming
Farmers collaboration

Digital extension calibrated with market needs and extension network

"Farmer's Foreman"
Best practise at scale
Input management
Record keeping
Secure off take
Partner agreements

(Lead) Farmers and Cooperatives

Processors, Aggregators and Agrodealers
Data collection for efficiencies in extension infrastructure and yield management using aggregated farmers data and management dashboards.
**Actionable priorities and programs** to create an enabling business environment for fertilizer systems through agribusiness partnerships and agricultural Transformation in Target countries (Ethiopia, Nigeria, Kenya, Malawi, Mozambique, Tanzania and Uganda)

**Fertilizer Dashboard and Online Database Contents**

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<tr>
<th>Fertilizer Market Performance</th>
<th>Fertilizer Market Maturity</th>
<th>Project Documents</th>
<th>Fertilizer Events</th>
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<td>Fertilizer market size</td>
<td>Fertilizer Policy &amp; Regulations</td>
<td>Policy Reform Tracking Table</td>
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<td>Quantity of blends traded</td>
<td>Fertilizer Quality</td>
<td>Fertilizer Policy briefs</td>
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<td>Price/bag/metric ton</td>
<td>Institutional Support &amp; Services to Farmers</td>
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<td>Fertilizer subsidies</td>
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<td>Fertilizer Policy Framework Documents</td>
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<td>Fertilizer Profit Margins</td>
<td>Research and Development</td>
<td>Fertilizer situation statements</td>
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<tr>
<td>Number of registered/ Accredited Agrodealers</td>
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<td>Fertilizer product failure reports</td>
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<td>Fertilizer Training Materials for blends</td>
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<td>Communication strategy for formulated blends developed</td>
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<td>Fertilizer Cost Benefit Analysis</td>
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<td>Fertilizer price build up</td>
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**Policy Review, Design and Implementation**
The Country Market Maturity Index:

Key Indicator scores (right) result in the rating index, which the matrix converts into market phasing and recommended public sector priorities (below)

Country Maturity Matrix

1. Setting Priorities
   - Multi-Stakeholder Platform
   - Gap Analysis
   - Institutional alignment
   - Shared vision and roadmap

2. Market/Industry Intelligence
   - Size of the Opportunity
   - Policy drivers
   - Business investment cases
   - Strategic planning

3. Collaborative Platform
   - Business development
   - Policy framework legislation
   - Match-making linkages
   - Investment agreements

4. Enforcement and Activation
   - M&E
   - Investment Activation
   - Mutual Accountabilities
   - Replicate and reinforce

Policy Review, Design and Implementation
QUESTION & ANSWER SESSION
CLOSING REMARKS
Exciting line up today around 3 themes driving food security leveraging the power of data:

MARKET INSIGHTS

RETAIL TRADING

FARMLAND OPTIMIZATION
Power of Data & Food Security

DATA (quantities, characters, symbols)

LOGIC (UI, Algorithms ML, AI)

IMPACT (supply, demand, yield, transactions, livelihood)

PUBLIC PRIVATE PARTNERSHIPS (funding, support, inclusion)

BUSINESS MODEL (Tax/Levies/Profit/ROI/Collateral)

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BUSINESS MODEL (Tax/Levies/Profit/ROI/Collateral)
THANK YOU FOR ATTENDING OUR WEBINAR!

SME Capacity Building and Technical Support
Fertilizer Markets Development Support
Financial Services Facilitation
Policy Design and Implementation Support
Data Generation, Analytics and Digitization
Back up
A few examples of AFAP’s work and its benefits in the Digital Space:

**Partnerships:**

- **Policy.** Data-based guidance to governments to create an enabling environment for agribusiness (AGRA, various African governments, EU)
- **Supply Chain.** Distribution, Business and SME-development with proprietary datasets to enhance agro-dealer networks and standardize M&E systems (BMGF, iSDA, various IT-providers, multiple countries)
- **POS Retail.** Retail management support tools to manage and measure product performance and stocks (various IT-providers, BMGF, iSDA).
- **Farmfield.** Customised advisory services to the farmer on inputs, GAP, recordkeeping and offtake (private sector, donor partners)

**Benefits:**

- **Policy.** Customised government support, tied to research-based facts, proven interventions and policy development programs.
- **Supply Chain.** Data-based interventions on capacity/distribution development of agro-dealers and product portfolio. Optimised coverage focused on availability and affordability of inputs. KM framework for robust m&e support.
- **POS.** Standardised measures to capture transactions and stocks at retail level. Efficient retail management, better ROI. Accurate aggregated analysis.
- **Farmfield.** Punctual, custom advice based on soil, performance and location with incentives for the farmer to adopt and collaborate.
Uganda Fertilizer Policy Reform Tracker 1990 - 2019

AFAP’s Contributions to Fertilizer Policy (2016-2018)

2016

2017

2018

2019

2019

Outcome

- Developed a position paper on the proposed tariff on imported fertilizers to protect local farmers.

Outcome

- Increased awareness of the potential impact on the Uganda fertilizer market if the tariff is introduced.

Outcome

- More enabling environment for fertilizer business in Uganda as a result of increased participation of hub agrodealers and agrodealers in policy and regulatory formulation and public fertilizer programs.

Outcome

- Increased awareness of the government’s response to the fertilizer sector challenges.

Policy Review, Design and Implementation
Systematic extension and input/output market linkages throughout the crop cycle based on solid record keeping.

Farmer training modules typically follow the crop cycle.

And also represent the users’ adoption cycle.