New Models for Sustainable Agricultural Mechanization in Sub-Saharan Africa

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Outline

Industry perspective on the market for agricultural machinery in SSA and challenges

Concluding remarks and takeaway messages
In the not-too-distant future, our fields could be tilled, sown, tended and harvested entirely by fleets of co-operating autonomous machines by land and air.

And they'll be working both day and night.
Current trends and evolution in SSA: Winds of change

- Continuous GDP increase, average +5%
- Renewed political commitment to agriculture: NEPAD/CAADP
- A more dynamic private sector and growing investments in agriculture and food sectors
- Africa is home to half of the world’s uncultivated land: 202 million ha

**BUT!**

Over 60% of farm power is still provided by human muscle, mostly by women
Doing nothing in terms of promoting agricultural mechanization in SSA is not an option
Guiding principles for building sustainable models of agricultural mechanization for SSA

- Avoid mistakes of the 1960s and 1970s
- Adopt a supply chain approach to agricultural mechanization
- Benefits of emerging models must reach SSA’s diverse farm holdings (types and sizes)
**Industry perspectives:** Survey results about the importance and potential of the agricultural machinery market in Africa

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>How important is SSA for your company?</td>
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<td>How do you see the future potential of the agricultural machinery market in SSA?</td>
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<td>How do you see the role of public-private partnerships in developing sustainable mechanization in SSA?</td>
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</table>
Data sources

171 companies responded

16 countries representing the main suppliers of tractors and other agricultural machinery

- Austria
- Brazil
- Canada
- China
- France
- Germany
- Hungary
- India
- Italy
- Japan
- Korea
- Turkey
- South-Africa
- Ukraine
- United Kingdom
- USA
How important is SSA for your company, %?

- Not important
- Of little importance
- Of average importance
- Very important
- Absolutely Essential

**Current Importance:**
- Not important: 0%
- Of little importance: 0%
- Of average importance: 0%
- Very important: 46%
- Absolutely Essential: 43%

**Growth in Importance over the Past 5 Years:**
- Not important: 0%
- Of little importance: 0%
- Of average importance: 0%
- Very important: 43%
- Absolutely Essential: 46%
What has improved/worsened in your business dealings with SSA in the past 5 years?

**Improved**
- Demand for farm mechanization
- Technical knowledge
- Better understanding of the farmers for quality products
- Understanding of the markets
- Communication and response
- Less corruption
- Distribution network
- More knowledge of how to trade in Africa
- Commercial farms

**Worsened**
- Currency exchange
- Import regulations
- Financing potential
- Growing competition
- Subsidies
- High volatility of commodity prices
- Difficulties to find a strong partner
How do you see the future potential of the agricultural machinery market in SSA, %?

- No potential
- Little potential
- Average potential
- Great potential
- Very strong potential

- Expected market potential in the next 5 years:
  - 49%
  - 74%

- Expected market potential in the next 5-15 years:
  - 74%
What needs to improve in SSA for the industry to engage and invest more?

<table>
<thead>
<tr>
<th>Government</th>
<th>Finance and Market</th>
<th>Industry</th>
<th>Farmers and skills</th>
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</thead>
<tbody>
<tr>
<td>Policies and regulations</td>
<td>Credit availability</td>
<td>Develop dealership network</td>
<td>Technical know-how – education</td>
</tr>
<tr>
<td>Business environment</td>
<td>Reliable banking system</td>
<td>Companies needs to know better each other</td>
<td>Change in agricultural methods</td>
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<tr>
<td>Political and economical stability</td>
<td>More stable currencies</td>
<td>Exhibitions, trade fairs and B2B meetings</td>
<td>Focus on quality rather than price</td>
</tr>
<tr>
<td>Mechanization strategy</td>
<td>Payment issues and line of credits</td>
<td>Local production</td>
<td>More commercial farmers</td>
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<tr>
<td>Reduced custom tariffs</td>
<td>Market dynamics knowledge</td>
<td>Field testing of equipment</td>
<td>Awareness of technology</td>
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<tr>
<td>Less corruption</td>
<td></td>
<td></td>
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<td>Basic infrastructure</td>
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</table>
How do you see the role of public-private partnerships in developing sustainable mechanization in SSA, %?

- Not important
- Of little importance
- Of average importance
- Very important
- Absolutely Essential

CURRENT IMPORTANCE
EXPECTED GROWTH IN IMPORTANCE IN THE NEXT 5 YEARS
Which PPP best practices would the industry like to promote for agricultural mechanization in SSA?

- Exhibitions
- Knowledge sharing
- Clusters
- Assembly lines
- Technology centers
- Demo farms
- Access to credit lines
- Risk sharing
- Finance
- Education/skills
- Local manufacturing
- Communication
- Exhibitions
- Knowledge sharing
Concluding remarks
Doing nothing to develop agricultural mechanization in SSA is **not an option**!

Support is critical given the range of different challenges on the ground.

Capitalize on renewed impetus for growth and development through increased agricultural investments.

A new approach is needed:

- Reinforce institutional support for agricultural mechanization
- Promote greater inclusion of the private sector in public activities through PPPs
Leverage World Bank support for SSA’s agriculture sector

Support for Agriculture and Related Sectors in SSA ($ millions, annual average)

<table>
<thead>
<tr>
<th>Year</th>
<th>Support</th>
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</thead>
<tbody>
<tr>
<td>FY06-08</td>
<td>700</td>
</tr>
<tr>
<td>FY10-12</td>
<td>1,010</td>
</tr>
<tr>
<td>FY13-15</td>
<td>1,509</td>
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</tbody>
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Broader policy agenda

- Land
- Markets and trade
- Agricultural public spending efficiency
- Finance & risk management
- Business environment
- Inputs (seeds & fertilizers)
New PPP business models... Some quick wins to consider

- **Mechanization**
  - Demo farms
    - Focus on farmers
    - Field testing of machinery

- **Mechanization Centers of Excellence**
  - Focus on skills, R&D, sharing of best practices

- **Agricultural guarantee funds**
  - Support access to finance for mechanization
Three takeaways:

Agriculture transformation is key to sustaining SSA’s drive to end poverty and boost shared prosperity by 2030.

Sustainable mechanization can be a powerful force multiplier for securing SSA’s agriculture future.

Time is not on our side – our actions for the collective good must begin now!
Thank You

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