Bridging the gap between the seed industry and the smallholder farmer

FAO, 3 June 2016
FROM MDGs TO SDGs
UNLOCKING THE POTENTIAL OF THE PRIVATE SECTOR
Objectives of the Access to Seeds Index

• Create transparency on current activities to clarify and understand the role of the seed industry

• Provide an evidence base to the conversation where and how the seed industry can step up its efforts

• Encourage seed companies to enlarge their role and responsibility

• Help identify private sector partners based on insights in strengths, portfolio, presence
Smallholder farmers use a mixed bowl of seeds
Only 2% from the private seed sector

Source: CRS
Averages for sub-Saharan Africa
Fair Planet Seeds Trials

Over 5 times higher yields with improved varieties

Yield per tested variety in furrow irrigation (Kg/Ha)

Kilograms

Improved varieties yielding 5 times higher than average

Local variety in furrow irrigation

Average yield tomatoes in Ethiopia 8,850 Kg / Ha
(FAO STAT 2010)
Focus on four regions with (1) smallholder presence (2) food security challenge (3) agricultural potential
Company scope

In total 26 leading seed companies on global and regional level

<table>
<thead>
<tr>
<th>Global Index of Field Crop Seed Companies</th>
<th>Global Index of Vegetable Seed Companies</th>
<th>Regional Index for Eastern Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. KWS SAAT</td>
<td>5. Groupe Limagrain</td>
<td>5. Ethiopian Seed Enterprise</td>
</tr>
<tr>
<td></td>
<td>8. Sakata</td>
<td>8. Kenya Highland Seed</td>
</tr>
<tr>
<td></td>
<td>10. Takii</td>
<td>10. Monsanto</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. NASECO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. Pop Vriend</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. Seed Co</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14. Syngenta</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15. Technisem</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16. Victoria Seed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17. ZAMseed</td>
</tr>
</tbody>
</table>

In total 26 leading seed companies on global and regional level
Input for the methodology

What do we expect from seed companies?

June 2013: Ministers’ conference FAO

Oct 2013: Farmers’ Round Table Addis Ababa

Nov 2013: Industry Round Table Wash. DC

Farmers - Uganda

Seed company - Ethiopia

Government - Ghana
Smallholder farmers’ perspective on access to seeds

Six dimensions of access

1. Availability
2. Affordability
3. Suitability
4. Capability
5. Profitability
6. Autonomy
Methodology of the Access to Seeds Index

- 7 measurement areas with 73 indicators
- Relative ranking: comparing companies with each other
- Companies are scaled for size and portfolio
Main findings

1. Many of the **global seed companies** are exploring possibilities to address the needs of smallholder farmers

2. Seed companies are making a **broad portfolio of seeds** available to smallholders farmers

3. The global seed industry is present in all regions with the exception of **Western Africa**: half of the countries not covered

4. **Regional seed companies** are filling in critical gaps largely neglected by global peers (breeding for local crops, reaching remote villages)

5. Limited findings on some relevant stakeholder expectations
   - Few address the needs of **women farmers**
   - Few have a clear **position on farm saved seed** or **informal seed systems**
   - Many see smallholders only as end-user, not as **partner in production, breeding**
Limited private seed sector activity in Western Africa, highest density in Latin America and Asia
Only top 4 companies have business activities in the regions, others limit themselves to CSR-projects.

- Dupont Pioneer has the most extensive breeding programs.
- Syngenta leads on innovative capacity building and adoption activities.
• East-West Seed leads with a smallholder focused business model

• Smaller firms like Rijk Zwaan and Bejo focus contribution on breeding

• Japanese companies are active but lack transparency on activities
- Companies originating from the region outperform the bigger multinationals, filling in critical gaps
- Multinationals lead on transparency and commitment, regional companies on performance
- Many companies also lower on the ranking with specific strengths, interesting for partnerships
### East African Seed

<table>
<thead>
<tr>
<th>Operations in Scope</th>
</tr>
</thead>
</table>

#### Index Crops in Portfolio

<table>
<thead>
<tr>
<th>Global Field Crops</th>
<th>BDI</th>
<th>ETH</th>
<th>KEN</th>
<th>MOG</th>
<th>MWI</th>
<th>MOZ</th>
<th>RSG</th>
<th>SSD</th>
<th>TZA</th>
<th>UGA</th>
<th>ZMB</th>
<th>ZWE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeding Focus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High altitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid altitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low altitude</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Global Vegetable Crops

<table>
<thead>
<tr>
<th>Broccoli</th>
<th>Cabbage</th>
<th>Carrot</th>
<th>Cauliflower</th>
<th>Chili pepper</th>
<th>Cucumber</th>
<th>Eggplant</th>
<th>Green peas</th>
<th>Leek</th>
<th>Lettuce</th>
<th>Melon</th>
<th>Okra</th>
<th>Onion</th>
<th>Pumpkin</th>
<th>Spinach</th>
<th>Squash</th>
<th>Sweet pepper</th>
<th>Tomato</th>
<th>Turnip</th>
<th>Watermelon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Local Field Crops

<table>
<thead>
<tr>
<th>Cowpeas</th>
</tr>
</thead>
</table>

#### Local Vegetable Crops

<table>
<thead>
<tr>
<th>Amaranth</th>
<th>Black nightshade</th>
<th>Crotalaria</th>
<th>Jack’s melon</th>
<th>Spider plant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Seed companies exploring a broad approach to access to seeds on various dimensions

**Availability**
Mobile seed shops to reach local markets
*Victoria Seeds, Uganda*

**Affordability**
Seed insurance against weather risks
*Syngenta, Kenya, Tanzania, Rwanda*

**Capability**
School for next generation farmers
*Bayer, India*

**Suitability**
Breeding station for local crops and varieties
*RijkZwaan, East-West Seed Tanzania*
What is next?

1. **Discuss findings** with farmers, industry, other stakeholders

2. **Review methodology** towards the second Index (2018)

3. **Explore coordination** with public sector / enabling environment monitors (World Bank, TASAI)
For pdf of report and online data:
www.accesstoseeds.org