Corteva Agriscience™ (Corteva Agriscience) is the agriculture division of DowDuPont. DowDuPont was formed by the merger of Dow and DuPont, which was completed on August 31, 2017. The two companies merged their agriculture, materials science and specialty product portfolios. Corteva™ was established by combining DuPont Crop Protection, DuPont Pioneer and Dow AgroSciences and will separate from DowDuPont to become a publicly traded company in June 2019. It supplies a diverse range of field crop hybrids and varieties alongside crop protection products. In all index regions, the company primarily works through its Pioneer brand, with maize, rice and millets considered its main crops, while in Africa, Pannar is considered a significant maize brand.

Corporate data
Headquarters: Wilmington, Delaware, United States of America
Ownership type: Listed
Group revenue (2017): USD 14,342,000,000
Seed revenue (2017): USD 8,250,322,000

Eastern and Southern Africa
Corteva Agriscience ranks fourth in the Eastern and Southern Africa Index, improving upon the score and position of DuPont Pioneer from the 2016 Index. The company leads the index in Capacity Building, where it demonstrates holistic agronomic training of smallholders in Ethiopia and Zambia, including key target groups of women and young farmers. The company also performs strongly in Governance & Strategy, with a diverse use of resources and broad contributions to improving the enabling environment at both the national and regional level, and in Intellectual Property, where the company refrains from using mechanisms to prevent the use, exchange and sale of farm-saved seed as well as the application of its cutting-edge CRISPR-Cas technology to tackle regional diseases. In comparison to its leading peers, the company lags in Research & Development, where it lacks local crops in its portfolio and systematic mechanisms for receiving smallholder feedback, and particularly Marketing & Sales, where the company does not report tailoring of its packaging for smallholder customers or initiatives to ensure the affordability of seed and inputs.

Leading practices
- Corteva Agriscience has licensed proprietary transformation and CRISPR-Cas gene-editing technologies to a number of research organizations for the purpose of collaborating on improvements on food security crops. In its sustainability report, the company highlights the first use of the technology in a joint agreement with the International Maize and Wheat Improvement Center (CIMMYT) to combat maize lethal necrosis in sub-Saharan Africa.
- The company has seed production locations in seven countries in Eastern and Southern Africa and is the only globally active company that involves smallholder farmers in all such activities.
- The company partners with the Government of Ethiopia and USAID on the Advanced Maize Seed Adoption Program (AMSAP), which aims to improve the productivity of smallholder farmers by providing training in the use of adapted hybrid maize varieties. The company reports that by 2016, 250,000 smallholders had realized average yield gains of 300%. Another 200,000 farmers were projected to be reached by the end of 2018.
- Alongside AMSAP, the company has rolled out and replicated its maize adoption programs in Zambia (ZAMSAP). Participants, over 60% of which are women and youths with limited resources and minimal access to output markets, received agronomic, financial and literacy training, and the company also contributed to demonstration plots at 11 schools across northern Zambia.

Areas for improvement
- Corteva Agriscience can consider expanding its testing locations beyond South Africa in order to broaden its activities and encompass a wider variety of climatic and growing conditions.
- The company demonstrates distribution channels, including in remote areas, across the region but can consider more tailored approaches that consider the specific needs of smallholder farmers. This could include tailoring packaging with pictograms or local languages or developing or disclosing affordability initiatives to reduce the up-front costs for smallholder customers.
Notable findings

- Pannar was established in Greytown, South Africa in 1958. In 2013, Corteva Agriscience (under the former name DuPont Pioneer) acquired majority ownership. This acquisition strengthened Corteva Agriscience’s position in the region.

- Smallholder farmers are considered an important clientele for the company whereby 80% of total seed revenues in the region is coming from business activities for smallholder farmers.

- In 2018, the company signed a memorandum of understanding with USAID as part of the agency’s focus on increasing private sector partnerships. The five-year agreement will allow USAID’s food security initiative Feed the Future and Corteva Agriscience to build on existing programs to scale agricultural technology for smallholder farmers in Africa.

- In addition to seed trade association membership in Kenya, South Africa, Tanzania and Zambia, the company is also a member of the Grassland Society of South Africa, the Southern Africa Plant Breeders Association and the Grain Farmer Development Association, among others.

- The company is involved in the Seed Production Technology for Africa collaborative initiative alongside CIMMYT, South Africa’s Agricultural Research Council and the Kenya Agricultural and Livestock Research Organization. The program intends to utilize Pioneer proprietary technology to enable small regional seed companies to efficiently develop maize hybrid varieties within their own breeding programs, in order to bridge the gap between the formal sector and smallholder farmers in index countries who are reliant on open-pollinated varieties.

- The company has pledged to conserve and make available crop diversity by financially supporting the Global Crop Diversity Trust’s projects and crop germplasm bank operations.

- Similar to the collaboration with CIMMYT, Corteva Agriscience entered into a multiyear collaboration with the Donald Danforth Plant Science Center in 2017. Under the agreement, the company will provide the Danforth Center access to its intellectual property, technology capabilities and scientific expertise related to methods for using CRISPR-Cas advanced plant breeding technology for creating new varieties of improved food security crops, such as cassava, teff, sorghum and millets.

- In 2011-2016, through Dow Agrosciences, the company participated in AWARD - African Women in Agricultural Research & Development, investing in African women scientists and institutions. Female scientists from Kenya and Malawi, as well as Ghana, were offered professional and scientific training at the Indianapolis office and breeding station.

- Alongside a breeding program in Kenya and Zimbabwe, Corteva Agriscience has five research stations for global crops in South Africa, including maize, wheat, sunflower, sorghum, soybeans and dry beans. These programs focus on Africa as a whole.

- The company breeds and tests for a number of pests and diseases within its crop portfolio, including leaf blight, bacterial stalk rot and fusarium rot in maize.

- Corteva Agriscience has the largest sales presence among all index companies in the region. It is present in all countries, except Somalia, and typically sells the majority of its crops in portfolio in these countries, including through the Pannar brand.

- The company’s programs in Ethiopia (AMSAP) and Zambia (ZAMSAP) encompass activities related to reducing postharvest losses and increasing access to credit, inputs and markets. In Ethiopia, new seed and grain warehouse facilities were built in local communities for postharvest grain storage, reducing losses by 30%.

Portfolio information

<table>
<thead>
<tr>
<th>Index crops in portfolio</th>
<th>Sales</th>
<th>Seed type</th>
<th>Source</th>
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<td></td>
<td></td>
<td>Hybrid</td>
<td>OPV</td>
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<tr>
<td>Field crops</td>
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Access to Seeds Index 2019

Last updated: February 2019