

Monsanto

Corporate data

Headquarters: St Louis, Missouri, United States of America Ownership type: Listed Group revenue (2017): USD 14,600,000,000 Seed revenue (2017): USD 10,913,000,000

www.monsanto.com

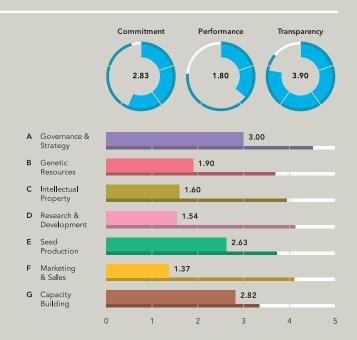
Monsanto is an agricultural company that operates in two segments: seeds and genomics, and agricultural productivity, which includes agrochemicals. The seeds and genomics segment covers both field crop and vegetable seeds under multiple brands, with DEKALB maize and Seminis vegetables among the most prominent, as well as developing biotechnology traits and licensing germplasm and traits to other seed companies. The company is active in all four index regions and employs over 20,000 people globally. In 2018, Bayer completed the \$66 billion acquisition of Monsanto. Activities to fully integrate Monsanto into Bayer are ongoing.



2019 Index - Global Seed Companies

Monsanto ranks seventh in the 2019 Index. The company's 2017 sustainability report, Growing Better Together, is an industry leader and largely responsible for the company's strong performance in Commitment and Transparency. It also accounts for Monsanto's best performing area, Governance & Strategy, where the

company links specific Sustainable Development Goals (SDGs) to the three pillars of Better Planet, Better Lives and Better Partner, and sets corporate-wide targets for reaching smallholder farmers. The company performs relatively strongly in Seed Production, with locations in all four index regions, and Capacity Building, with a variety of programs, albeit mainly in South and Southeast Asia. None of Monsanto's publicly stated positions on Intellectual Property are favorable towards smallholder farmers, and the company reports a narrow range of Research & Development programs and limited Marketing & Sales activities targeting smallholder farmers.

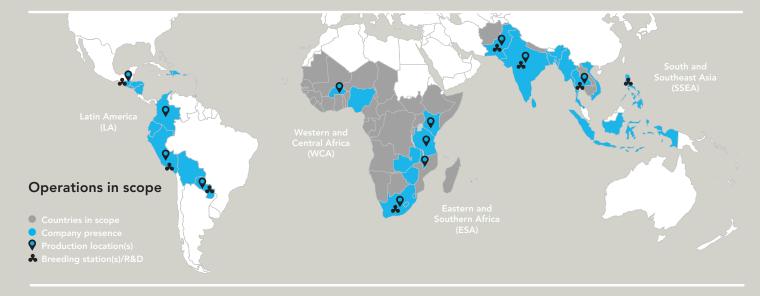


Leading practices

- Monsanto's 2017 sustainability report comprises three focus areas: Better Planet, Better Lives and Better Partner. Each addresses specific SDGs, incorporates company activities and sets 2020 corporate targets. These include training 4 million smallholder farmers, with 2.5 million tracked through 2017, and improving the lives of 5 million resource-poor families worldwide.
- The company's participation in the Water Efficient Maize for Africa (WEMA) project resulted in the project partners granting royalty-free licensed access to adapted maize hybrids to 23 African seed companies. Smallholder farmers have since benefited from the commercial release of 90 conventional WEMA hybrids in Kenya, Mozambique, South Africa, Tanzania and Uganda.

Areas for improvement

- Although Monsanto is transparent about its positions on patents, plant variety protection law and farm-saved seed, none are deemed favorable to the needs of smallholder farmers. The company is encouraged to consider these positions with respect to the needs of smallholder farmers within its broad client base.
- The company does not disclose information related to its breeding programs for index crops, particularly vegetables, and whether these consider traits beneficial for smallholder farmers. The company is encouraged to disclose the scope of its breeding programs aimed at smallholder farmers.
- The company discloses little or no information about the portfolio availability of its prominent brands in index regions, particularly DEKALB for maize and Seminis for vegetables. The company is encouraged to improve disclosure of its sales activities in index countries.



Index crops in portfolio

Field crops

| | Cowpea | Maize | Sorghum | Soybean | Wheat | | | | | |
|------------|---------|--------|-------------|--------------|----------|---------|------------|-----------|------------|--|
| Vegetables | | | | | | | | | | |
| | Cabbage | Carrot | Cauliflower | Cucumber | Eggplant | Gourd | Green bean | Green pea | Lettuce | |
| | Molon | Okra | Onion | Pannar (hat) | Pepper | Dumpkin | Sauach | Tomata | Watermalen | |

Notable findings

- Following the company's takeover by Bayer, Monsanto will no longer be a company name. The acquired products will retain their brand names and become part of the Bayer portfolio.
- Monsanto has committed to being carbon neutral by 2021. As part of this commitment, the company also targets smallholder farmers through training in sustainable agricultural practices.
- In response to the challenge of postharvest storage losses, the company's researchers evaluated over 500 tomato genotypes and identified two hybrid varieties with the necessary shelf life and firmness to make the journey from farm gate to market in India.
- Monsanto is involved in two notable breeding projects in Africa. It donates technology to the African Agriculture Technology Foundation to develop cowpea varieties resistant to pests such
- as Maruca pod borer, and it collaborates with the Danforth Plant Center in the Virus-Resistant Cassava for Africa (VIRCA) project. The company provides funding and technical advice on the use of genetic modification to improve resistance to regionally important pests and diseases, with an application pending for regulatory approval following successful field trials in Uganda and Kenya.
- The company sells other agricultural inputs to smallholder farmers under its Roundup, YieldGard and Bollgard brands in index countries including South Africa, Honduras, the Philippines, Colombia and Burkina Faso.
- The company demonstrates diverse capacity building activities in South and Southeast Asia, with a wide scope and monitoring and tracking of the numbers of smallholder farmers reached. These include 57,000 farmers in the Philippines and 115,000 in Indonesia who received training

- on best agronomic practices, 340,000 Vietnamese farmers reached through specific DEKALB maize training and 100,000 Indian smallholders trained on sustainable agriculture techniques as a part of Project SHARE 2.
- As part of its commitment to the World Economic Forum's Grow Asia platform, Monsanto collaborated with the Government of Vietnam to train 5,000 rice farmers on corn planting techniques, converting 2,200 hectares over a three-month period.
- Monsanto and its subsidiary, the Climate Corporation, have developed the FarmRise mobile application, which delivers free information and agronomic advice directly to smallholder farmers in India. As of 2017, the number of users had reached 4.2 million across 16 Indian states and was available in seven local languages.

Access to Seeds Index 2019 Last updated: January 2019