



Bayer

Corporate data
Headquarters: Leverkusen, Germany
Ownership type: Listed
Group revenue (2017): EUR 35,015,000,000
Seed revenue (2017): EUR 1,502,580,000

<https://www.cropscience.bayer.com>

Access to Seeds Index

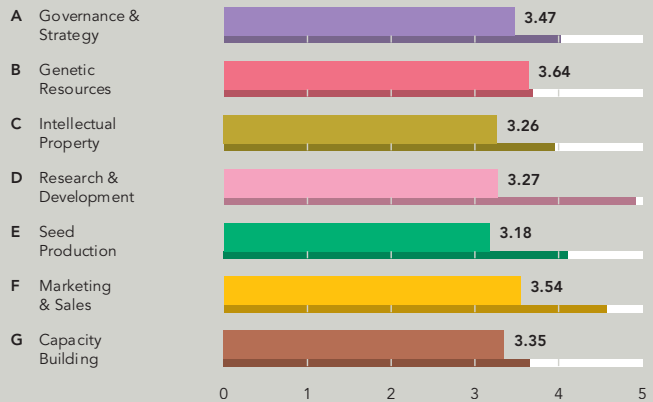
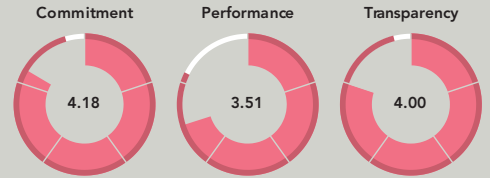
The Bayer Group (Bayer) is a life science company with three main divisions: pharmaceuticals, consumer health and crop science. The crop science division is the company's agricultural enterprise, with businesses in crop protection, seed and non-agricultural pest-control. In August 2018, Bayer completed the \$66 billion takeover of the US-based company Monsanto. As a result of this acquisition, Bayer has divested part of its seed activities and portfolios to German chemical company BASF. In the period 2015-17, the company offered a broad portfolio of vegetable crop varieties alongside a select number of varieties for field crops and cotton (including GM). Hybrid rice and vegetable crops dominate the company's activities in South and Southeast Asia, where around 95% of its clientele are smallholder farmers.

2
rank out of 24
score 3.39

South and Southeast Asia

Bayer ranks second out of 24 index companies. Its very strong performance can be attributed to consistently high scores across all measurement areas, with a marginal difference between its lowest (Seed Production) and highest (Genetic Resources) scores. The company's corporate commitment to

addressing the needs of smallholder farmers in the region is backed by strong practices, including the breeding and introduction of several adapted rice hybrids through its Arize brand, formalized inclusion of smallholder farmers in its seed production chain for several index crops, and a far-reaching geographic presence coupled with tailored packaging and distribution practices. The company's holistic approach to capacity building is characterized by a number of activities across varying extension services, improving access to output markets and programs with an explicit focus on the needs of women smallholder farmers.



Leading practices

■ Together with the College of Aquaculture and Fisheries, Can Tho University and the Center of Agricultural and Fishery Extension Centers of Bac Lieu, Ca Mau and Kien Giang provinces, Bayer has initiated a shrimp-rice project in Vietnam. Saltwater intrusion in the Mekong Delta has created a new ecological niche, with company research showing the positive environmental and economic impact of rotating shrimp production with rice production. Some 180,000 hectares are currently being farmed under this new method.

■ Bayer, Plant Breeders Without Borders and Bogor University have partnered to improve varieties of Bambara groundnut in Indonesia. The project seeks to empower smallholder farmers to improve performance through locally run breeding programs and increase local agrobiodiversity.

■ The company's Food Chain Partnership in India, Sri Lanka and Vietnam links smallholder farmers to output markets. A notable collaboration is with PepsiCo, which together with Bayer works with 12,000 contracted potato farmers across seven Indian districts.

■ Bayer's Integrated Rural Development Village Program emphasizes women's empowerment by providing training on child health and financial/legal literacy as well as helping to improve entrepreneurial skills through vocational training. Some 2,634 women have benefited thus far from the program in India.

■ Bayer's Child Care Program has 98 staff dedicated to monitoring the company's compliance with child labor standards in Bangladesh, India, the Philippines and Thailand. The program also oversees the Bayer-Ramanaidu Vignana Jyothi School of Agriculture in India, which provides 60 underprivileged youth with vocational training each year.

Areas for improvement

■ Only 5% of the company's local knowledge and feedback in research and development comes from women farmers, which the company attributes to socio-cultural norms. Bayer can do more to reach these farmers, as it has done in some of its capacity building activities, potentially in the form of a corporate-wide commitment.

Operations in scope

- Countries in scope
- Company presence
- Production locations
- Breeding station/R&D



Index crops in portfolio

	Sales										Seed type			Source		
	BGD	IND	IDN	MMR	NPL	PAK	PHL	LKA	THA	VNM	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
Field crops																
Millets		●									●			●		
Rice, paddy	●	●	●			●	●				●			●		
Soybean																
Wheat																
Vegetables																
Cabbage		●				●					●			●		
Carrot		●				●					●			●		
Cauliflower		●									●			●		
Cucumber		●						●			●			●		
Eggplant		●									●			●		
Gourd	●	●				●			●	●	●			●		
Green bean																
Green pea																
Lettuce																
Melon		●									●			●		
Okra	●	●	●					●	●		●			●		
Onion		●					●				●			●		
Pepper (hot)	●	●	●			●		●	●	●	●			●		
Pepper (sweet)		●									●			●		
Pumpkin																
Squash						●					●			●		
Tomato	●	●				●			●		●			●		
Watermelon	●	●	●								●			●		

Local crops in portfolio

Mustard

Notable findings

Along with the International Finance Corporation, Netafim and Swiss Re Corporate Solutions, Bayer is part of the Better Life Farming Alliance in India and the Philippines. The partnership aims to help smallholder farmers to grow their farms into commercially viable and sustainable farming businesses, through access to financing, quality seed, crop insurance and education.

Bayer partnered with the German Society for International Cooperation (GIZ), respective national and regional authorities and private players in the Better Rice Initiative Asia (BRIA). BRIA is a public-private partnership that aims to improve the livelihoods of rural rice farmers through the promotion of sustainable rice production and facilitated market access in Southeast Asia, including Thailand, Vietnam and the Philippines.

The company's rice breeding is focused on developing hybrids with higher grain yield and tolerance for/resistance to local biotic and abiotic stresses. An example is Arize AZ 8433T, bred for India and tolerant to brown plant hopper and bacterial leaf blight.

The company contributes to the HarvestPlus program, which aims to add vital nutritional elements to staple foods. The company has identified a pearl millet hybrid that has a high iron content and will help to meet rural communities' nutritional needs.

The company recently unveiled a hybrid seed conditioning line at its facility in Canlubang, the Philippines, which will increase its capacity for locally produced seed by 30% through 2018.

The company has partnered with ACI Ltd, a local agribusiness entity, in Bangladesh to distribute Arize varieties. It has similar relationships with external parties in India and Pakistan for the distribution of hybrid pearl millet.

The company tailors its seed packages for the specific benefit of smallholder farmers. In northern Vietnam, it markets its rice hybrids in packages as small as 0.8kg for those farmers with smaller plots, and in India in 1kg, 3kg and 5kg packages for farmers with different capacities.

In India, Vietnam and the Philippines, Bayer has Rice Centers of Excellence that work to integrate practices involving seeds, fertilizers, crop protection and water management. The company customizes these approaches for different agro-ecological zones within each country.

The 'Bayer Lubhsutra' concept aims to help smallholder farmers achieve a better return on their investment. The initiative divides participating farmers' land in two. Farmers apply Bayer products and expert guidance to one half and follow normal practices on the other. Yield increases have resulted in 12-27% incremental profit increases across 3,469 plots in India since 2013.

In Project Sahyog, Bayer is collaborating with the Indian Grameen Services to distribute five metric tons of Arize 6444 Gold seed to 600 farming families in the East Champaran District in Bihar. Those involved receive technical support and training on improved rice cultivation practices including sowing times and integrated crop management.