In 1944, the year Bir Bahadur (B.B.) Singh was born in the state of Uttar Pradesh in India, Indian agriculture was in shambles. During nearly 200 years of British rule, the country’s agricultural enterprise had been turned over to commodities such as cotton, indigo, and sugarcane for export; what little food was grown hinged on rainfall and the soil’s natural fertility—or lack of it. Crop yields were often abysmal as a result, and famine was common. So when India won independence from Britain in 1947, the Indian government enacted a sweeping program of nationwide, agricultural education.

That’s why when Singh graduated in 1956 from his village school with good grades and an interest in science, he found himself at one of India’s newly minted agricultural high schools. It was the only nearby school where he could study science, Singh says, as well as the closest high school to his home. Plus, his father wanted him to attend, saying, “Why don’t you study agriculture and see what help you can give to our people,” Singh recalls.

“So I was okay with going to an agricultural high school, and that later became my good luck,” he says. Turns out it also became the good luck of millions of the world’s smallholder farmers.

Today, Singh is among the most revered breeders of legume—or pulse—crops, credited with improving the diets, incomes, and lives of farming families across Africa, Asia, and South America. In the late 1960s and 1970s, for instance, the ASA and CSSA Fellow not only established the first systematic breeding program for soybean in India, but was also pivotal in bringing the novel food to millions of Indian people. Soybean production has since grown in India from just 5,000 tons in 1961 to about 12 million today.

Yet this was only the start.

“Of course, B.B. is best known for his work with cowpea,” says Bill Payne, an ASA, CSSA, and SSSA Fellow who was at Texas A&M and CGIAR in Ethiopia before becoming dean of agriculture at the University of Nevada–Reno this winter. “Almost anywhere in the world, you cannot work on cowpea without running into him in some way, fashion, or form.”

Known also as black-eyed pea, cowpea is a staple crop in many tropical areas, and Singh’s signature achievement is a fast-maturing variety that fits into the rotational niches between wheat, maize, and rice. Due largely to this advance, worldwide cowpea production rose from 1.3 million to 7 million tons between 1981 and 2013—the only food legume.