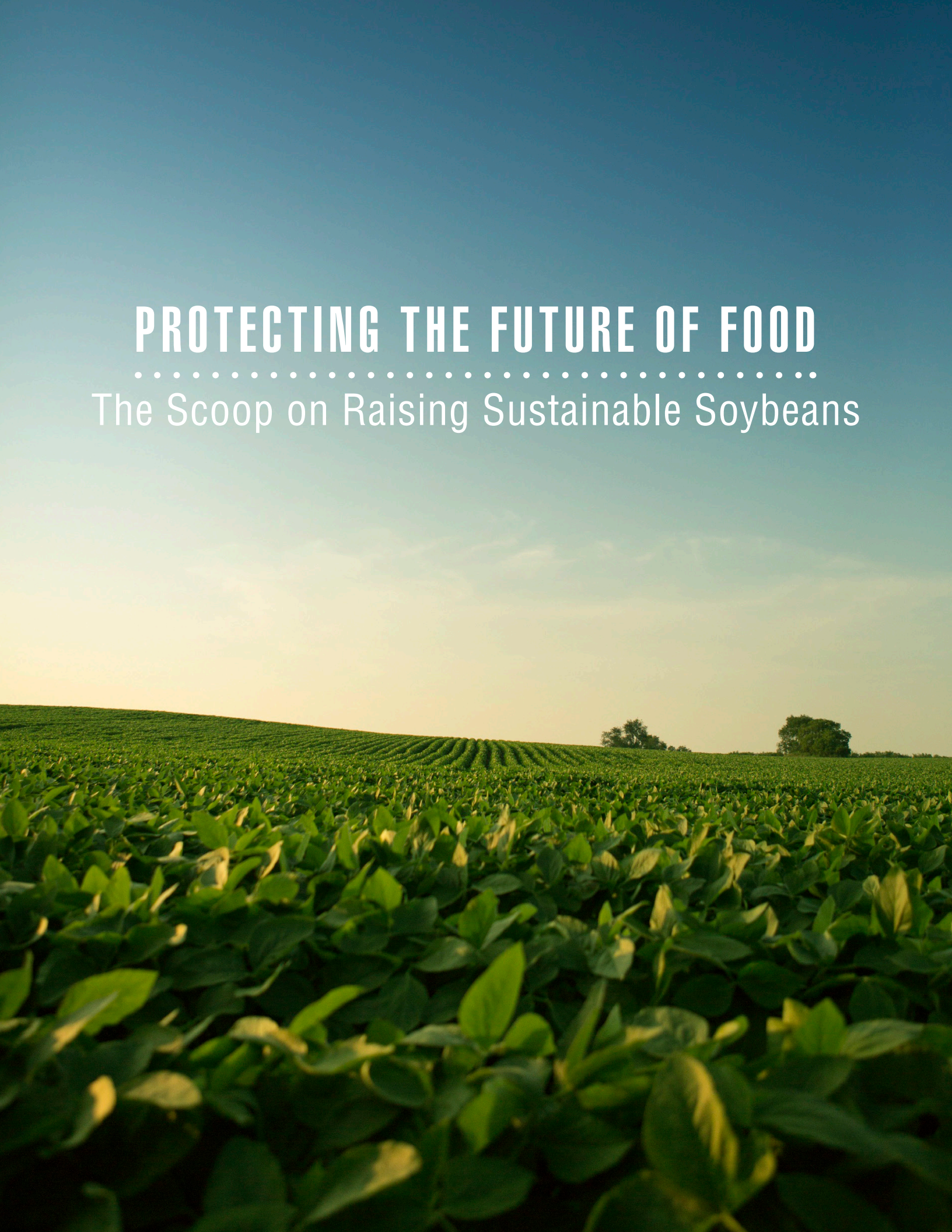


PROTECTING THE FUTURE OF FOOD

The Scoop on Raising Sustainable Soybeans

>> DID YOU KNOW?

Eighty-seven percent of the 2.1 million farms in the United States are family or individually owned.[1]

% Only **29 percent** of the world's surface is land. And that **only 11 percent of that land is suitable for farming.**[2] But our world population continues to rise.

That's why soybean farmers are always looking for ways to grow more food on the same amount of land – using less water, energy and other resources.

And they're succeeding.

sus·tain·a·ble >>
adjective \sə-stā-nə-bəl\

- able to be used without being completely used up or destroyed
- involving methods that do not completely use up or destroy natural resources
- able to last or continue for a long time[3]

WHAT DOES SUSTAINABLE FARMING LOOK LIKE?

Because soybean farmers raise their crop on different kinds of land in varying climates, sustainability looks different on every farm. Soybean farmers use a variety of practices, not limited to those listed here, to conserve and improve water and soil quality and to increase plant diversity.

PRECISION CHEMICAL APPLICATION

New technology allows farmers to improve the application of fertilizer, pesticides (insect protection products) and herbicides (weed killers) to reduce chemical drift and runoff.

CROP ROTATION/ DIVERSITY

The practice of planting different crops in a planned sequence helps farmers to control weeds and pests and reduces the need for pesticides and fertilizers.

CONSERVATION RESERVE PROGRAMS

Farmers have removed 27 million acres of environmentally sensitive land from production through programs developed by the United States Department of Agriculture to improve water quality, prevent soil erosion and reduce loss of wildlife habitat.[4]

TERRACES

This series of receding, flat soil platforms helps farmers reduce erosion, retain runoff and conserve water.

SCOUTING

Walking fields to watch for weeds, diseases and pests saves farmers from making unnecessary applications of pesticides, fungicides or other chemicals.

COVER CROPS

Plants that cover the soil during idle periods (such as oats or cereal rye) to help to improve fertility, control erosion and suppress weeds.

GROWING GREEN – AT A GLANCE

133,124 U.S. farms use cover crops.

27,485,000 U.S. farm acres are enrolled in conservation programs.

57,299 U.S. farms produce their own renewable energy.

36,311 U.S. farms use solar energy.

9,054 U.S. farms own and operate wind turbines for power.[5]

GMOs ARE SUSTAINABLE

Scientists have developed crops that can tolerate drought and control bugs and weeds through the use of biotechnology (also known as genetic modification, or GM). Using the process of GM, scientists can manipulate DNA to help an organism express specific beneficial traits. This occurs in nature all of the time – modern biotechnology just speeds up the process. Because of GM, farmers have the option to raise drought-tolerant and pest-resistant crops (also known as GMOs, or genetically modified organisms) on their farms. And the advantages don't stop there.

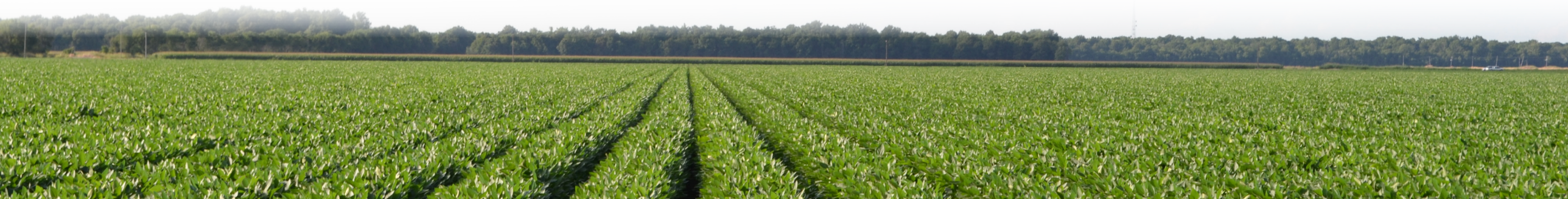
BIOTECHNOLOGY HELPS FARMERS TO:

>> **SPRAY LESS.** Compared with data from 1996, herbicide runoff is currently down 70 percent, which helps to keep our water supply clean.[6]

>> **PRODUCE MORE WITH LESS.** Traits like drought tolerance and pest resistance help crops survive in tough conditions and, in turn, improve yields.

>> **REDUCE CARBON DIOXIDE EMISSIONS.** Farmers who plant GM seeds can now produce crops that are more resistant to insects and weeds. This reduces the number of times a farmer must drive through a field to apply herbicides and pesticides.

IN 2012 ALONE FARMERS REDUCED CO_2 EMISSIONS BY 58 BILLION POUNDS, THAT'S THE SAME AS REMOVING **11 BILLION CARS** FROM THE ROAD FOR AN ENTIRE YEAR.[7]



IN THE END[8]

U.S. soybean farmers grow 55 percent more soybeans than they did 30 years ago.

They do on 35 percent less land.

In the last 30 years, soybean farmers have reduced their energy use, greenhouse-gas emissions and irrigation water use by more than 40 percent per bushel.

You see, today's farmers already work to improve sustainability performance, and they are continuously improving their operations in order to grow food – and shrink environmental impact.

A BUSHEL OF SOYBEANS

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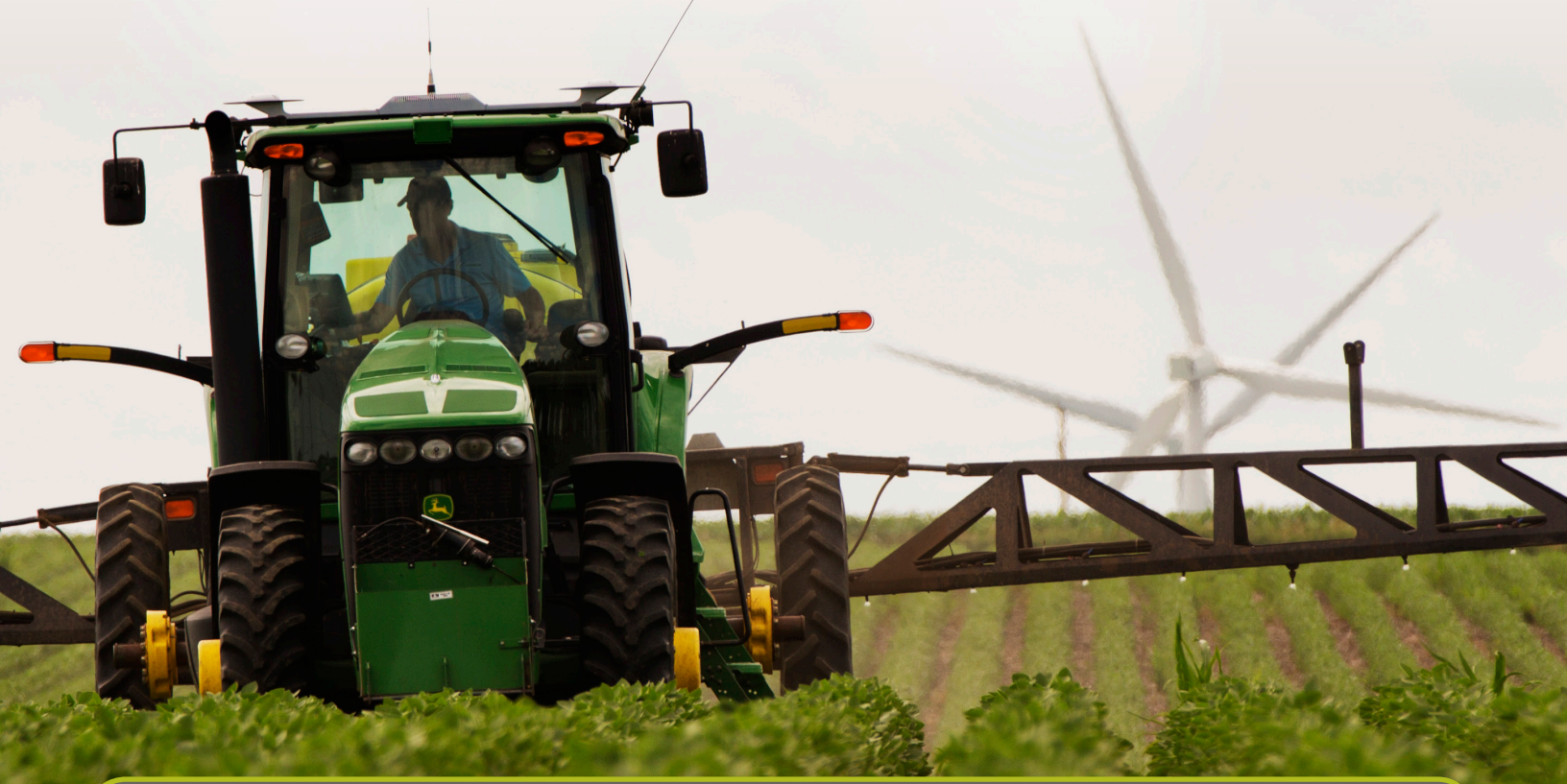
APPROXIMATELY 60 POUNDS OR 2,500 SOYBEANS[9]



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