

# U.S. SOY

## A GLOBAL LEADER IN SUSTAINABILITY

### In Brief:

- U.S. soybean production is based on a national system of sustainability and conservation laws, regulations and guidelines, combined with careful implementation of best production practices on the nation's 303,191<sup>1</sup> soybean farms. In addition, many soybean producers participate in numerous certified and audited voluntary sustainability and conservation programs.
- The U.S. Soy Sustainability Assurance Protocol (SSAP) is an aggregate approach audited by third parties that verifies sustainable U.S. Soy production at a national scale. The SSAP describes the regulations, processes, and management practices that ensure sustainable U.S. Soy production. Since the development of the SSAP in 2014, over 100 million metric tons of U.S. Soy have been shipped with a SSAP certificate.
- Each spring, when U.S. soy farmers plant their new crop, they do so without clearing forests, without encroaching on wetlands and without disturbing their soils more than necessary. Even so, soy farmers achieve increases in crop yields on almost an annual basis. These efficiencies allow U.S. soy to be the country's top agricultural export and provide jobs for more than 350,000 citizens.

### Environmental Stewardship: A commitment to continuous improvement

- Since 1980, U.S. soy farmers have increased production by 130% while using 46% less energy per 27.22 kgs (1 bushel).<sup>2</sup>
- Greenhouse gas emissions per 27.22 kgs (1 bushel) of soybeans produced in the U.S. decreased by 43% between 1980 and 2020.<sup>3</sup>
- Soil erosion has decreased by 34% (nearly 10 tonnes per hectare) between 1980 and 2020.<sup>4</sup>
- 95% of U.S. soybean farmers inspect their fields to identify harmful pests and diseases and prevent their spread to other fields and neighboring farms.<sup>5</sup>

<sup>1</sup> 2017 Census of Agriculture, USDA, National Agricultural Statistics Service. Chapter 1, Table 1-Historical Highlights. [https://www.nass.usda.gov/Quick\\_Stats/CDQT/chapter/1/table/1](https://www.nass.usda.gov/Quick_Stats/CDQT/chapter/1/table/1)

<sup>2</sup> Field to Market: The Alliance for Sustainable Agriculture, 2021. Environmental Outcomes from On-Farm Agricultural Production in the United States (Fourth Edition). ISBN: 978-0-578-33372-4.

<sup>3</sup> Ibid

<sup>4</sup> Ibid

<sup>5</sup> Best Practices Report, United Soybean Board, October 2014

- The vast majority of U.S. soy farmers participate in conservation programs and use sustainable production practices on a portion of their land.
- 94% of the U.S. soybean crop is grown under rotational cropping systems, contributing to improved biodiversity.<sup>6</sup>
- 92% of U.S. soybean farmers test their soil to maintain beneficial nutrient levels.<sup>7</sup>
- 90.5% of U.S. soybeans are grown on non-irrigated land.<sup>8</sup>
- About half of farmers in major soy producing states used precision technologies in 2021 to increase on-farm efficiency.<sup>9</sup>
- U.S. farmers took nine million hectares (22 million acres) out of agricultural production under the federal Conservation Reserve Program (CRP) in 2020.<sup>10</sup> The U.S. CRP program annually provides carbon sequestration equal to taking about 10 million cars off the road.<sup>11</sup>
- More than 70% of soy farmers practice conservation tillage on all or part of their crop land.<sup>12</sup>
- 15% of available U.S. cropland is taken out of production to protect sensitive areas.<sup>13</sup>

### **Social Responsibility: A commitment to future generations**

- 96% of U.S. farms are family farms and provide 96% of the value of U.S. agriculture output.<sup>14</sup>
- U.S. soybean farmers support the U.S. government’s long-term commitment to the protection of workers’ rights, including fair wages, safety precautions and insurance.
- In 2020, 2.02 million farms produced myriad crops in the U.S., with an average farm size of about 180 hectares (444 acres).<sup>15</sup>

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<sup>6</sup> <https://www.ers.usda.gov/amber-waves/2013/march/while-crop-rotations-are-common-cover-crops-remain-rare/>

<sup>7</sup> Best Practices Report, United Soybean Board, October 2014

<sup>8</sup> Field to Market: The Alliance for Sustainable Agriculture, 2021. Environmental Outcomes from On-Farm Agricultural Production in the United States (Fourth Edition). ISBN: 978-0-578-33372-4

<sup>9</sup> <https://release.nass.usda.gov/reports/fmpc0821.pdf>

<sup>10</sup> <https://www.fsa.usda.gov/news-room/news-releases/2020/usda-announces-more-than-12-million-acres-accepted-in-recent-signup-for-conservation-reserve-program-grasslands#:~:text=CRP%20is%20one%20of%20the,21.9%20million%20acres%20currently%20enrolled>

<sup>11</sup> <https://www.usda.gov/media/press-releases/2013/07/22/usda-announces-results-45th-conservation-reserve-program-general>

<sup>12</sup> <https://www.ers.usda.gov/webdocs/publications/90201/eib-197.pdf>

<sup>13</sup> <https://www.fb.org/market-intel/more-than-140-million-acres-in-federal-farm-conservation-programs>

<sup>14</sup> <https://www.nass.usda.gov/Publications/Highlights/2021/census-typology.pdf>

<sup>15</sup> <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/farming-and-farm-income/>

- Soybeans are the only oilseed that contains all nine amino acids essential for human health, and they are a very good natural source of dietary fiber.<sup>16</sup>
- Soybean oil is widely used in food products such as margarine and salad dressings and in industrial products such as plastics and biodiesel.

### **Economic Profitability: A commitment to long-term viability and reliable supply**

- The total economic impact on the U.S. economy from the soybean sector between the 2014 and 2017 crop years averaged \$115.8 billion per year.<sup>17</sup>
- The total U.S. wage impact of the soy sector in 2019 was \$11.6 billion.<sup>18</sup>
- 357,000 people are employed by the U.S. soybean sector.<sup>19</sup>
- Soy is the top U.S. agricultural export, and 50% of the soybean crop is marketed abroad.<sup>20</sup>
- The global animal agriculture sector is U.S. soy's No. 1 customer, consuming 70% of the annual U.S. soybean crop.<sup>21</sup>
- U.S. de-hulled soybean meal is valued by the swine and poultry sectors for its protein content, exceptional amino acid profile and superior amino acid digestibility.
- In the 2020-21 marketing year, the U.S. exported 74.76 million tonnes of total soybean complex (whole beans, soybean meal and oil), valued at more than \$34 billion.<sup>22</sup>
- The U.S. transportation infrastructure of highways, railways and waterways enables soy farmers and grain companies to move soy products quickly, reliably and efficiently - and to share the cost savings with their customers.

<sup>16</sup> <https://fdc.nal.usda.gov/fdc-app.html#/food-details/174270/nutrients>

<sup>17</sup> <https://www.nopa.org/resources/economic-impact-of-u-s-soybeans-end-products-on-the-u-s-economy/>

<sup>18</sup> <https://www.nopa.org/resources/economic-impact-of-u-s-soybeans-end-products-on-the-u-s-economy/>

<sup>19</sup> <https://www.nopa.org/resources/economic-impact-of-u-s-soybeans-end-products-on-the-u-s-economy/>

<sup>20</sup> <https://www.ers.usda.gov/data-products/foreign-agricultural-trade-of-the-united-states-fatus/u-s-agricultural-trade-data-update/> and <https://www.fas.usda.gov/data/percentage-us-agricultural-products-exported/>

<sup>21</sup> <https://www.usda.gov/sites/default/files/documents/coexistence-soybeans-factsheet.pdf>

<sup>22</sup> <https://www.unitedsoybean.org/hopper/u-s-soy-achieves-record-export-volume-for-20-21-marketing-year/> and <https://www.unitedsoybean.org/hopper/u-s-soy-achieves-record-export-volume-for-20-21-marketing-year/#:~:text=During%20the%2020%2F21%20market,distribute%20more%20U.S.%20Soy%20globally>