U.S. WHEAT A GLOBAL LEADER IN SUSTAINABILITY

In Brief:

— U.S. wheat farmers work every day to contribute to a sustainable future in agriculture. Sustainability is reflected in agronomic practices, research and development, and transportation methods, all of which contribute to making the United States a sustainable source of wheat for export and domestic use. Sustainability is also about innovation—reducing inputs while producing better wheat varieties to increase yields and provide consistently high-quality wheat to customers around the world.

Environmental Stewardship: A commitment to continuous improvement

- ¹On average, U.S. farmers produce approximately 1.645 billion bushels (45 million tonnes) of wheat on more than 18 million hectares (45 million acres) of land.
- ²U.S. wheat is a very water efficient crop. In fact, only 7% of U.S. wheat area is irrigated.
- ³Since 1980/81, U.S. wheat farmers have increased total wheat yields by more than 50%. That means they are producing more wheat on less land. These yield gains have been achieved through improved agronomic practices, including:
 - Direct seeding, no-till methods that improve soil carbon sequestration;
 - Integrated pest management;
 - Precision nitrogen application;
 - Crop rotations to break disease cycles and reduce the use of pesticides and fungicides while improving overall soil fertility.
- As farmers are producing more wheat on less land, they are also conserving resources. According to Field to Market's soil conservation metric, soil conservation in wheat production has improved over 30% from 1980 to 2015, through the adoption of conservation tillage practices.
- State wheat commissions, nonprofit organizations funded by wheat producers, annually invest more than €10 million (\$12 million) in wheat research focused on key factors in improving sustainability, including increasing yields, pest resistance and disease resistance, while decreasing inputs. They often have robust partnerships with public university research programs.
- Publicly-funded wheat research places a priority on maintaining the highest milling and baking quality, ensuring that agronomic progress does not sacrifice important end-use qualities.



In a world of rapidly growing populations and everchanging weather and market risks, wheat farmers know they must grow more grain with less land, water and other resources. Making the most of what is available – efficiency – is perhaps the most important value farmers bring to their businesses.

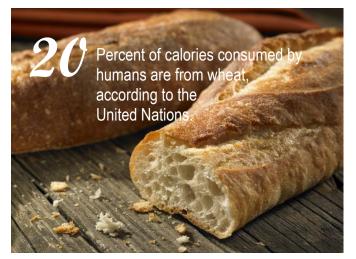


For more information please see: thesustainabilityalliance.us or contact info@thesustainabilityalliance.us



Social Responsibility: A commitment to future generations

- U.S. wheat farmers pride themselves on their ability to feed a growing population, and the legacy they pass on to future generations all depends on how they take care of the land and use natural resources.
- ⁴Today, U.S. farmers harvest more than 14 million hectares (35 million acres) of wheat, providing food for millions of people at home and abroad and supporting jobs in rural communities such as in mills, bakeries, grocery stores and restaurants.
- ⁵Wheat is a dietary staple. It is the source of 20% of the world's caloric intake and 20% of protein for the world's poorest people.



- Increased production and trade are critical to feeding the world's growing population because demand is
 rising fastest in equatorial regions that are unable to produce enough wheat to feed the people.
- ⁶More than 21 million American jobs have their roots in the U.S. food and fiber industry more than five times as many workers as the U.S. automotive manufacturing, sales and service sectors combined.

Economic Profitability: A commitment to long-term viability

- Sustainability is about smart business using more efficient production methods to reduce inputs while increasing yields and food quality.
- An independent study conducted in 2017 showed that every \$1 invested by U.S. wheat farmers and the U.S. government in wheat export programs returns \$127 in export revenue to the U.S. economy.
- ⁷In 2020, U.S. wheat exports were almost €5.4 billion (\$6.3 billion).
- Agricultural production is the backbone of rural economies. Wheat farmers support their local economies by buying inputs from local suppliers, selling their products to local elevators (silos), paying property taxes and frequenting local businesses.
- ⁸A large portion of U.S. wheat is transported for export via barge on the country's extensive river system. According to a 2017 study, barges can move a ton of cargo 1041 kilometers with 4.5 liters of fuel (647 miles per gallon, an increase from an earlier estimate of 616 miles).
- U.S. wheat is also moved via rail to export terminals. Rail can move a ton of cargo 767 kilometers per 4.5 liters of fuel (477 miles per gallon), and rail technology is improving every day.⁹

Sources

- ¹ ERS Wheat Data (as of 13/10/21) <u>https://www.ers.usda.gov/data-products/wheat-data.aspx</u>
- ² <u>https://www.ers.usda.gov/topics/farm-practices-management/irrigation-water-use/</u>

⁹ Source – as above





³ USDA FAS PSD (<u>https://apps.fas.usda.gov/psdonline/app/index.html#/app/home</u>)

⁴ ERS Wheat Data (as of 17/06/21) <u>https://www.ers.usda.gov/data-products/wheat-data.aspx</u>

⁵ FAO and BioNumbers: <u>http://www.fao.org/faostat/en/#home</u> and

https://bionumbers.hms.harvard.edu/bionumber.aspx?id=110562&ver=4

⁶ NAWG: <u>https://www.wheatworld.org/policy-action/issues/budget/</u>

⁷ USDA GATS (data accessed 17/06/2021) value for 2020 wheat exports was \$6.297 billion

⁸ Article cites U.S. National Waterways Foundation report from 2017 <u>https://www.maritime-executive.com/article/barge-transport-wins-on-fuel-efficiency</u>