

## PEANUTS: SUSTAINABILITY INDICATORS

## Understanding Peanut Trends in Field to Market's 2021 National Indicators Report

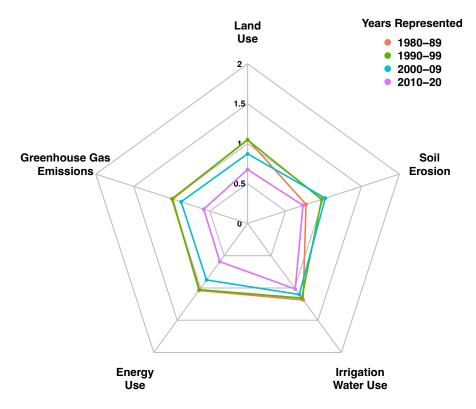
Field to Market's 2021 National Indicators Report – *Environmental Outcomes from On Farm Agricultural Production in the United States* – analyzes sustainability trends from 1980-2020 at the national scale for 11 commodity crops. Released every five years since 2009, the fourth edition of this peer-reviewed report analyzes trends over time in sustainability performance for U.S. commodity crop systems, providing a critical assessment of where U.S. agriculture has made progress in driving improved environmental outcomes, and where additional efforts are needed to advance industry-wide sustainability goals.

Use this factsheet to explore key findings from the report for Peanuts, identifying trends in Land Use, Irrigation Water Use, Energy Use, Greenhouse Gas Emissions (GHG) and Soil Erosion. Explore the full findings and learn how to properly cite the 2021 National Indicators Report at www.fieldtomarket.org/Report.

## **KEY FINDINGS FOR PEANUTS**

Peanut production in the United States is concentrated in the South, with large acreage in Georgia, Texas and Alabama, with Florida and the Carolinas also contributing significant peanut acreage at different times over the past 40 years.

This figure illustrates the difference in the average indicator value for each decade and demonstrates clear improvement in the 2010-2020 period compared to earlier periods for Land Use, Greenhouse Gas Emissions and Energy Use, with mixed results indicating fluctuating trends for Irrigation Water Use and Soil Erosion.



## Indicator averages for 1998-2002 used to scale data for display on radar chart

| Indicator                | Value    | Units                                 |  |
|--------------------------|----------|---------------------------------------|--|
| Land Use                 | 0.000405 | Planted Acres Per lb.                 |  |
| Irrigation Water Use     | 0.0115   | Acre-inches Per lb.                   |  |
| Soil Erosion             | 8.97     | Tons Soil Loss Per Acre               |  |
| Energy Use               | 1,740    | BTU Per lb.                           |  |
| Greenhouse Gas Emissions | 0.344    | Pounds of CO <sub>2</sub> Eq. Per lb. |  |

The table below provides the value for each indicator at the beginning of each decade (estimated from a fitted trend line).

| Year | Land Use                | Irrigation Water Use  | Energy Use    | Greenhouse Gas Emissions | Soil Erosion                  |
|------|-------------------------|-----------------------|---------------|--------------------------|-------------------------------|
|      | Planted Acres<br>Per lb | Acre Inches<br>Per lb | BTU<br>Per lb | Pounds of CO₂e<br>Per lb | Tons of Soil Loss<br>Per Acre |
| 1980 | 0.0005                  | 0.0133                | 1,960         | 0.37                     | 6.4                           |
| 1990 | 0.0004                  | 0.0138                | 1,789         | 0.34                     | 7.9                           |
| 2000 | 0.0004                  | 0.0119                | 1,689         | 0.33                     | 9.4                           |
| 2010 | 0.0003                  | 0.0137                | 1,243         | 0.24                     | 7.8                           |
| 2020 | 0.0003                  | 0.0075                | 880           | 0.17                     | 6.4                           |

- Land Use efficiency has increased over the study period up to 2010 when it plateaued, indicating the recent production increases are largely due to greater planted area.
- Irrigation Water Use efficiency for peanuts does not follow a consistent trend, showing both increases and decreases at different points in time. This may be impacted by the shifting regions of peanut production across the South, with irrigation requirements higher in the western part of the growing region.
- Energy Use per pound of peanut production has declined over the study period with reductions in energy used for tillage as well as reductions in crop chemical and fertilizer applications in recent years.
- Trends in GHG Emissions largely follow those for Energy Use, remaining steady in the first half of the study period and declining since 2000.
- Soil Erosion for peanuts at the national scale has varied over time. Values in 2020 are similar to those from 1980 following a period of higher erosion rates during the 1990s and 2000s.

While progress has been made on most indicators for the sustainability of peanut production, much of the dynamic can be attributed to shifts in the main production regions and reduced inputs over the past decade. The National Indicators Report highlights some areas to focus on to encourage and incentivize adoption of conservation practices that will lead to continuous improvement in these environmental outcomes.

Field to Market: The Alliance for Sustainable Agriculture brings together a diverse group of grower organizations; agribusinesses; food, beverage, restaurant, and retail companies; conservation groups; universities; and public sector partners to create opportunities across the agricultural supply chain for continuous improvement in sustainable agriculture. Field to Market offers America's food and agriculture industries an essential tool for unlocking shared value for all stakeholders—a common framework for sustainability measurement that farmers and the supply chain can use to better understand and assess environmental performance. Together, Field to Market and its members work to collectively meet the challenge of producing enough food, feed, fiber and fuel for a rapidly growing population while conserving natural resources and improving the ability of future generations to meet their own needs.



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