The importance of wheat in international food security

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The findings and conclusions in this presentation are those of the authors and should not be construed to represent any official USDA or U.S. Government determination or policy.
Globally, wheat is an abundant and critical staple crop

Wheat is primarily grown for food use; corn for feed use

Wheat plantings losing area to corn and soybeans in the U.S.

U.S. volume and share of global wheat exports trending lower

U.S. wheat food use is stable, despite growing population

Globally, wheat food use trending higher, especially for developing economies

<table>
<thead>
<tr>
<th>Changes in Food, Seed, and Industrial (FSI) use, by region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country</strong></td>
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<tr>
<td>-------------</td>
</tr>
<tr>
<td>Caribbean</td>
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<tr>
<td>Central America</td>
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<tr>
<td>East Asia</td>
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<tr>
<td>Former Soviet Union - 12</td>
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<tr>
<td>Middle East</td>
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<td>North Africa</td>
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<td>North America</td>
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<td>Oceania</td>
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<tr>
<td>Southeast Asia</td>
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<tr>
<td>Sub-Saharan Africa</td>
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<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

Wheat consumption varies by country

Kilograms per capita

North Africa: 223
Middle East: 174
Europe: 136
United States: 83
South Asia: 78
East Asia: 77
South America: 71
Mexico: 55
Sub-Saharan Africa: 30
Southeast Asia: 28

Note: calculations here are based on 2021/22 food, seed, and industrial use from USDA/FAS and 2021 population estimates.

Sources: USDA, Foreign Agricultural Service, Production, Supply and Distribution (PSD) database; USDA, Economic Research Service, Macroeconomic Data Set (population figures); USDA, Economic Research Service calculations.
Globally, supplies of wheat still sufficient to meet demand, while production lags behind consumption.

Global wheat stocks projected to decline in 2021/22

Wheat prices elevated in recent months, U.S. price among highest

FOB Quotes for Major Exporters

U.S. Dollars per metric tons

- Canada 1 CWRS (13.5%), Vancouver
- EU (France) Grade 1, Rouen
- Russia Milling (12.5%)
- US DNS (14.0%), PNW

Source: International Grains Council (IGC), export price database.
Framing food security by grains consumed
Framing the food security discussion

- The next slides summarize some findings from the ERS’s International Food Security Assessment 2021-2031 (IFSA)
- Results are presented in terms of the major grain consumed in the IFSA and four regions (Asia, Latin America and the Caribbean, North Africa, and Sub-Saharan Africa)
- The four regions account for 76 countries and a population of 3.9 billion
- The discussion focuses on:
  - Import dependency
  - The number of food insecure
  - The share of the population food insecure (prevalence of food insecurity)
Defining key food security metrics

• IFSA uses a demand-oriented framework
• Food security defined by a caloric target of 2,100 calories per capita per day
  – Prevalence of food insecurity
  – Population food insecure

• We report estimates for 2021 and project to 2031 based on trends throughout the 2018-2020 period
Defining grain import dependency

• **Grain import dependency ratio** =
  – \(\frac{\text{Grain imports}}{\text{Grain availability}}\) * 100

• Where:
  – **Grain Availability** = Production + Stocks + Imports – Exports

• The ratio is calculated for: Wheat, Rice, and Corn

• Major grain consumed is based on the number of Calories consumed and not quantity
Wheat has the highest import ratio of major grains consumed

<table>
<thead>
<tr>
<th>Grain import dependency ratio (percent)</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
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<td>North Africa</td>
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<tr>
<td>Latin America and the Caribbean</td>
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<tr>
<td>Asia</td>
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</tbody>
</table>

- Wheat
- Rice
- Corn

0 10 20 30 40 50 60 70 80 90
In the 76 countries covered, 1.2 billion (30.8 percent) people are estimated to be food insecure in 2021.

Where are the food insecure in 2021?

- Asia: 53%
- Latin America and the Caribbean: 4%
- North Africa: 2%
- Sub-Saharan Africa: 41%

Countries where wheat is the main grain account for the lowest share of 2021 food insecure population:

- Corn: 27%
- Rice: 56%
- Wheat: 17%
Relative to corn and rice, countries where wheat is the major grain consumed, the prevalence of food insecurity is the second highest in 2021.
Thank you!

For more information, please contact

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