Possible Impacts of Conflict between Russian Federation and Ukraine on Food and Agricultural Markets in Pakistan

Food Security and Agriculture Working Group (FSAWG) Meeting
April 12, 2022
Share of Russian Federation and Ukraine in Global Production of Selected Crops

The Russian Federation and Ukraine produce:

- More than half of world’s Sunflower seed
- 19% Barley
- 14% Wheat
- 4% Maize
- 6% Rapeseed
- 2% Soybeans

Source: FAO XCBS System
Share in Global Exports-I

Share in Global Exports in 2021 (%)

- **Wheat**
  - Russian Federation: 18%
  - United States of America: 10%
  - Argentina: 10%
  - Canada: 7%
  - Australia: 6%
  - Others:

- **Barley**
  - United States of America: 18%
  - Russia: 20%
  - China: 15%
  - Others:

- **Maize**
  - Other:
  - United Arab Emirates: 5%
  - United Kingdom of Great Britain and Northern Ireland: 5%
  - Germany: 5%
  - Romania: 4%
  - Argentina: 3%
  - Canada: 3%
  - France: 3%
  - Others:

Source: Trade Data Monitor, FAO
Share in Global Exports-II

Share in Global Exports in 2021 (%)

Rapeseeds

- Other
- Latvia
- Germany
- France
- United States of
- Uruguay
- Lithuania
- Russian Federation
- Ukraine
- Australia
- Canada

Sunflower Seeds Oil

- Other
- Spain
- Serbia
- Netherlands
- France
- Bulgaria
- United Arab Emirates
- Turkey
- Argentina
- Russian Federation
- Ukraine

Rapeseeds Oil

- Other
- United States of
- Netherlands
- United Kingdom of
- Ukraine
- Germany
- Belarus
- Australia
- United Arab Emirates
- Russian Federation
- Canada

Source: Trade Data Monitor, FAO
Share in Global Exports in 2021 (%)

Nitrogen Fertilizers
- Russian Federation

Phosphorus Fertilizers
- Russian Federation

Potassium Fertilizers
- Canada

Source: Trade Data Monitor, FAO
In 2021, Pakistan imported $813 million worth of wheat, out of which 58.8% was imported from Ukraine and 18.5% from Russia.
Pakistan’s Exports-2021

Share of Russian Federation and Ukraine in Pakistan's Exports of Selected Commodities (2021)

- Man-made staple fibres
- Fruit and nuts, edible; peel of citrus fruit or melons
- Vegetables
- Articles of leather
- Optical, photographic, medical parts and accessories
- Cotton
- Apparel and clothing
- Apparel and clothing accessories

Source: UN Comtrade Database
Risks to Pakistan's Food and Agriculture Markets

• Trade Risks
• Price Risks
  • Wheat
  • Pulses
  • Cooking Oil
  • Fertilizer
  • Fossil Fuels
• Logistical Risks
• Energy Risks
• Production Risks
• Exchange rate Risks
International Price Risks-I

FAO Food Price Index

FAO Commodity Price Indices

Source: FAO World Food Situation
Price Risks-Wheat

- Second largest share of monthly food consumption expenditure (11.2%)

- Pakistan’s wheat production forecast for 2021-22 is 26.8 MMT against the target of 28.90 million metric tons (MMT) and the government plans to import 3 MMT

- Afghanistan may need to import over 3.4 MMT and about 2 MMT of wheat may be provided by Pakistan through private channels

- International Price Increase ➔ Larger import bill ➔ Impact on domestic price & affordability
Domestic Price Risks-II

Trend in Weekly Sensitive Price Indicator (SPI) of Pakistan

- SPI for lowest expenditure group
- Combined SPI

Trend in Weekly Price of Wheat in Pakistan

Source: Pakistan Bureau of Statistics, FAO
Domestic Price Risks-III

First Quarters comparison from 2020 - 2022
month-on-month wheat prices

<table>
<thead>
<tr>
<th>Price percent change</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>8%</td>
<td>Jan-20</td>
</tr>
<tr>
<td>-2%</td>
<td>Feb-20</td>
</tr>
<tr>
<td>5%</td>
<td>Mar-20</td>
</tr>
<tr>
<td>1%</td>
<td>Jan-21</td>
</tr>
<tr>
<td>3%</td>
<td>Feb-21</td>
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<tr>
<td>1%</td>
<td>Mar-21</td>
</tr>
<tr>
<td>-2%</td>
<td>Jan-22</td>
</tr>
<tr>
<td>-1%</td>
<td>Feb-22</td>
</tr>
<tr>
<td>-3%</td>
<td>Mar-22</td>
</tr>
</tbody>
</table>

Wheat price trend
(March 2021 to March 2022)
Trends in Weekly Prices of Cooking Oil and Vegetable Ghee

Price (Rs./Kg for Ghee & Rs./Liter for Oil)

Trend in Weekly Price of Pulses in Pakistan

Price of Pulses (Rs./Kg)

Source: Pakistan Bureau of Statistics
Domestic Price Risks - V

Trend in Weekly Prices of Fossil Fuels in Pakistan

Trend in Weekly Price of Urea Fertilizer in Pakistan

Source: Pakistan Bureau of Statistics
Trade Risks

- Port closures
- Suspension of oilseeds crushing operations in Ukraine
- Ukrainian farmers’ ability to sow/harvest crops
- Economic sanctions on Russia
- Pakistan may look for alternate origins for imports

Logistical Risks

- Damaged transport infrastructure in Ukraine
- Losses to storage facilities
- Losses to processing facilities
- Spike in insurance premium on vessels in the Black Sea region
- Rise in Maritime transportation costs
Energy Risks

- Following the news of the conflict, prices surged by USD 8/bbl (from USD 97 to 105/bbl)
- Agriculture relies on energy:
  - Directly through fuel and electricity use in farm operations
  - Indirectly through the use of agrochemicals
- Higher production costs leading to expensive food

Production Risks

- Rise in the price of inputs leading to their reduced use
- Reduced use of inputs affects yields
- Low yields affecting farmer’s income
- Lower income adversely affect production decisions
Exchange Rate Risks

- Pakistan rupee has depreciated from PKR157/USD in June 2021 to PKR184/USD in March 2022
- Pakistan's total imports increased from $34.8 billion in 2019-20 to $39.5 billion in 2020-21 (13.6%).
- During the same period, food imports increased from $3.9 billion to $6.1 billion (54.5%).

International Price Increase → Larger import bill → Impact on domestic price & affordability

Source: Economic Survey of Pakistan (2020-21)
Implications

• The conflict between the Russian Federation and Ukraine is likely to create a considerable shortfall in global supply of grains, oilseeds, and vegetable oils.

• The capacity of alternative origins to boost their supply is likely to be limited.

• The supply gap may push the food and feed prices up by 8 to 22 percent globally (FAO scenarios).

• Rise in global prices will ultimately affect local food prices and access to food especially for the low income groups (particularly urban poor).

• Severe implications for the poor population who spend a significant portion of their incomes on food. In Pakistan 15% of people cannot access basic food needs and 67% of people cannot access a healthy diet and are in need of greater affordability.

• As per latest IPC acute food insecurity analysis conducted in October 2021, around 4.69 million people are estimated to be food insecure (in IPC Phase 3 and 4) during April-June 2022.

• Though impact of rising food prices was considered in the IPC analysis. However, additional rise in food prices may push more people into food insecurity.
Thank You

http://www.fao.org/pakistan
## Price Risks-Monthly Household Food Expenditure

<table>
<thead>
<tr>
<th>Item</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat &amp; Wheat Flour</td>
<td>11.2</td>
</tr>
<tr>
<td>Rice &amp; Rice Flour</td>
<td>3.89</td>
</tr>
<tr>
<td>Pulses, Split &amp; Whole</td>
<td>1.97</td>
</tr>
<tr>
<td>Bread and Other Cereals</td>
<td>2.15</td>
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<tr>
<td>Vegetable Ghee</td>
<td>4.59</td>
</tr>
<tr>
<td>Tea (black &amp; green)</td>
<td>2.81</td>
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<tr>
<td>Milk, Fresh &amp; Boiled</td>
<td>22.81</td>
</tr>
<tr>
<td>Milk Tetra Pack</td>
<td>0.94</td>
</tr>
<tr>
<td>Mutton</td>
<td>2.2</td>
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<tr>
<td>Beef</td>
<td>3.15</td>
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<tr>
<td>Chicken</td>
<td>3.58</td>
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<tr>
<td>Fish</td>
<td>0.69</td>
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<tr>
<td>Fruits (fresh &amp; dried)</td>
<td>4.79</td>
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<tr>
<td>Vegetables</td>
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<tr>
<td>Salt</td>
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<tr>
<td>Spices</td>
<td>1.79</td>
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<tr>
<td>Sugar Mill/Desi</td>
<td>3.31</td>
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<tr>
<td>Gur &amp; Shakkar</td>
<td>0.24</td>
</tr>
<tr>
<td>Mineral Water, Soft Drinks, Fruits &amp; Juice</td>
<td>1.71</td>
</tr>
<tr>
<td>Hotel and Restaurants</td>
<td>6.15</td>
</tr>
</tbody>
</table>

*Source: Household Integrated Economic Survey 2018-19*
Assessed Control of Terrain in Ukraine and Main Russian Maneuver Axes as of April 11, 2022, 3:00 PM ET