COUNTRY SNAPSHOT

Population: 3,596,702
  - Urban: 2,154,424 (60%)
  - Rural: 1,442,278 (40%)

Rice Availability (g/c/d): 112
  - Urban: --
  - Rural: --

Rice market: 100% broken rice is 98% of the imported rice market. Limited information about domestically grown rice

Production:
  - USDA, 2016: 138,000 MT
  - FAO, 2011: 107,000 MT

Domestic industrial rice milling: Estimated none

Regional trade: Small rice import quantities from Senegal reported.

IMPORTS

Number of importers: Unknown

Mode of imports: Unknown

Total imports:
  - USDA, 2016: 100,000 MT
  - UNC, 2014: 165,230 MT
  - FAO, 2011: 122,000 MT

Type & Origins
  - Brown rice: 6 (0%)
  - Rough/paddy rice: 3 (0%)
  - Semi/wholly milled rice: 3,568 (2.6%)
  - Broken rice: 161,653 (97.84%)
  - Pakistan: 70,604 (43.7%)
  - Thailand: 37,531 (23.2%)
  - Brazil: 29,863 (18.5%)
  - India: 7,617 (4.7%)
  - Singapore: 3,519 (2.2%)
  - Malaysia: 2,724 (1.7%)
  - USA: 2,129 (1.3%)
  - Argentina: 1,832 (1.1%)

Sources:
1. CIA Factbook 2015
2. Overall estimate is FAO 2011; Inadequate data for FFI to estimate urban/rural availability
3. FEWSNET. Cross-border Trade and Food Security in West Africa: the Western Basin
4. UN Comtrade 2014

Abbreviations: g/c/d = grams per capita per day; MT = metric ton; USDA = United States Department of Agriculture; UNC = UN Comtrade; FAO = Food and Agriculture Organization; USA = United States of America
EXECUTIVE SUMMARY

A chronically food-insecure country that depends on wheat and rice imports to meet its food needs, Mauritania has a severe gap in data (or conflicting data) that requires resolution prior to consider fortification of rice, either domestically produced or imported. Mauritania has mandatory legislation of wheat flour fortification; in 2015 FFI reported that 55% of the industrially milled wheat flour there was fortified.

It is likely that domestically produced rice is hand-pounded or milled at small mills. Imported rice is consumed by middle and higher income households, likely in urban centers.

Fortification of imported rice in Mauritania could be feasible, as the rice importing industry is also thought to be consolidated. However, public health impact could be limited to middle and upper income households in urban populations. As there is existing legislation for the fortification of wheat flour, and wheat is considered more highly consumed by lower-income populations, it would be important to assess the implementation of the existing fortification program when also considering the potential impact of including rice.

Table 1: Demographics and annual rice (milled equivalent) availability

<table>
<thead>
<tr>
<th>Population</th>
<th>Urban</th>
<th>Availability</th>
<th>Imports</th>
<th>Exports</th>
<th>G/c/d</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,890,000</td>
<td>60%</td>
<td>0.151</td>
<td>0.10</td>
<td>0</td>
<td>112</td>
<td>0.138</td>
</tr>
</tbody>
</table>

2011-2016 trend

+2.23%/yr | +3.54% | +5.7% | +9.6% | -- | -- | +9.5%

G/c/d: grams per capita per day; MMT, million metric tons
1 CIA Factbook
2 FAO Food Balance Sheets, 2011
3 USDA, 2016

GRAIN CONSUMPTION AND FORTIFICATION STATUS

The most important cereal grains in Mauritania are wheat, rice, and maize, in descending order of importance (Table 2). Other grains also grown and consumed in Mauritania (in relatively small quantities) are sorghum and millet.

Table 2: Cereal grain consumption/availability and fortification status

<table>
<thead>
<tr>
<th>Cereal grain</th>
<th>FAO 20011 g/c/d</th>
<th>FAO 20111 g/c/d</th>
<th>Mandatory?</th>
<th>% Industrially milled2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>325</td>
<td>270</td>
<td>Yes</td>
<td>95%</td>
</tr>
<tr>
<td>Maize</td>
<td>4</td>
<td>10</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Rice</td>
<td>69</td>
<td>112</td>
<td>No</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

G/c/d: grams per capita per day
1 FAO Food Balance Sheets
2 FFI Database

Urban vs. Rural

Sixty percent of Mauritania is urban (2.3 million). The largest city in the country is the capital, Nouakchott, with a population of 719,167 (2005 estimate).

1 Key Consulting did not visit Mauritania in person. All information in this profile is secondary data collected by FFI.
2 Mongabay. 2005 population estimates for cities in Mauritania
There is limited information on dietary patterns in Mauritania, so it is not clear what proportion of rice is consumed in urban or rural populations. The 2006 WHO STEPwise Approach to Chronic Disease Risk Factor Surveillance survey was only conducted in Nouakchott where 96.3% of the population consumed rice every day. That compares to only 3.5% of the population who consumed wheat products daily. Unless foods made with wheat flour are predominantly eaten outside of the capital, this data is difficult to reconcile with FAO data indicating that wheat availability per person per day is 270 grams.

Rice varieties
The market for imported rice in Mauritania is 98% broken rice. Consumer preferences are for aromatic and non-aromatic 100% broken kernels. Wheat and locally grown rice is primarily consumed by lower income households, while imported rice is consumed by middle and high-income households.

DOMESTIC RICE PRODUCTION
Rice is the only cereal cash crop grown in Mauritania, the rest being subsistence crops. About half of the country’s rice needs are grown domestically. The rice production zone is focused in farmland near the border with Senegal in the Senegal River Delta. An unknown quantity of rain-fed crop is grown during May-July; irrigated crop is grown October-December.

The total harvested area for rice was 24 MT per hectare in 2000, with a low average yield of 4,308 kg/hectare (kg/ha), not even a full ton per ha. The Minister of Agriculture’s estimate for the 2013/14 rice harvest (202,000 MT) is 46% higher than the USDA’s 2016 estimate.

Table 3: Mauritania cereals production - 2016

<table>
<thead>
<tr>
<th>Cereals (MMT)</th>
<th>Maize</th>
<th>Sorghum</th>
<th>Millet</th>
<th>Rice (milled)</th>
<th>Wheat</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.015</td>
<td>0.090</td>
<td>0.005</td>
<td>0.138</td>
<td>0.0</td>
<td>0.248</td>
</tr>
</tbody>
</table>

International development support
Mauritania is one of the countries included in FAO’s Integrated Production and Pest Management Programme in Africa project, which is under the broader initiative to boost rice production in West Africa.
IMPORTED RICE INDUSTRY

**Table 4: Annual rice import volumes, 2012-2016 (MMT)**

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.135</td>
<td>0.15</td>
<td>0.08</td>
<td>0.10</td>
<td>0.10</td>
<td>0.113</td>
</tr>
</tbody>
</table>

1 USDA 2016 / Indexmundi

**Rice origins**
According to UN Comtrade 2014, 98% of the rice imported to Mauritania is milled white rice (as opposed to broken, paddy, or brown rice). Of this, the majority came from Thailand (18,065 MT, 60%) and Brazil (6,814 MT, 22%), with smaller amounts from Uruguay (2,597 MT, 8.7%) and Viet Nam (1,771 MT, 5.9%).

**Mode of imports**
There are two ports in the country: Nouakchott and Nouadhibou. However, given Nouakchott’s accessibility to the rest of the country, the majority of rice likely enters through Nouakchott port. It is not known whether rice is imported in break-bulk, containers, or bulk.

**Rice importers**
There is limited information on the rice importing industry in Mauritania, except that it is highly oligopolistic. It is estimated that six companies control 90-95% of the rice imported to Mauritania. The para-statal company Société Nationale d'Importation & d'Exportation, SONIMEX, imports and distributes rice as well.

**Imported rice storage**
The Port of Nouakchott has capacity for 60,000 20-foot equivalent containers (TEU), or 1.2 MMT of rice, and 12,205m² of warehouse capacity.

**GOVERNMENT RICE POLICIES AND PROGRAMS**
Because Mauritania depends on imported cereals (primarily wheat) for over 60% of its needs and food insecurity is historically a concern, there is political pressure to improve the country’s self-sufficiency for food. There are efforts to expand the agricultural area under irrigation.

**RICE MILLING**
There is limited information on the rice milling industry in Mauritania. It is assumed that for domestic production, traditional hand pounding and small capacity local mills are utilized.

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11 Assuming a standard 20-foot container holds 24 MT of rice
WHOLESALE AND RETAIL TRADE

Wholesale
Wholesale sale of rice will be concentrated in Nouakchott and other urban centers.

Retail
There is limited information on rice retailing in Mauritania. Rice is most likely sold in traditional marketplaces out of bulk bags. The cost of 1kg of imported rice in various cities ranged from 200-375 ouguiya in 2015/2016\(^\text{14}\) (0.57-1.07 USD\(^\text{15}\)); during the same period, the cost of domestically milled rice ranged from 200-300 ouguiya (0.57-0.85 USD\(^\text{15}\)).

REGIONAL TRADE
There is limited information about regional rice trade between Mauritania and its neighbors. However, FEWSNET/USAID indicates that there are small quantities of imports of rice from Senegal\(^\text{16}\).

REGULATORY MONITORING
Imports are managed by the SYDONIA (i.e. ASYCUDA) computer system\(^\text{17}\).

RICE FORTIFICATION – SWOT ANALYSIS

Strengths – Fortification positives
- Imported rice is consumed largely by the urban middle class or upper class.
- Rice importers suspected to be highly consolidated; however this requires confirmation.

Weaknesses
- Quantity of rice imported is low, limiting economies of scale.
- Wheat may be a more appropriate vehicle for fortification, given its higher availability levels and coverage among lower income households.

Opportunities
- More detailed understanding of the rice importing industry is necessary
- Evaluation of the impact and coverage of the wheat flour fortification program would be important before considering adding rice.

Threats
- Quality of regulatory monitoring of imported foods unknown.

\(^\text{15}\) 350 ouguiya =1 USD. November 2, 2016. https://www.oanda.com/currency/converter/