National Green Export Review - Moldova
2nd National Stakeholder Workshop - Chişinău 17.04.2018
The cereal sector
Global trends and market characteristics for cereals and grains
## World’s 10 largest producers of cereals

<table>
<thead>
<tr>
<th></th>
<th>Total cereal grains (million metric tones) 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production</td>
</tr>
<tr>
<td>USA</td>
<td>465.9</td>
</tr>
<tr>
<td>China</td>
<td>356.6</td>
</tr>
<tr>
<td>EU - 28</td>
<td>297.3</td>
</tr>
<tr>
<td>India</td>
<td>129.9</td>
</tr>
<tr>
<td>Russia</td>
<td>114.3</td>
</tr>
<tr>
<td>Argentina</td>
<td>74.7</td>
</tr>
<tr>
<td>Ukraine</td>
<td>66.3</td>
</tr>
<tr>
<td>Canada</td>
<td>57.2</td>
</tr>
<tr>
<td>Australia</td>
<td>51.5</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>19.4</td>
</tr>
</tbody>
</table>
EU import of cereals (wheat, maize, barley) in millions of tones per country-group, 2012-16
Main suppliers of cereals from the developing countries to the EU in millions of tons

South Africa (1%)
Mexico (1%)
Myanmar (1%)
Pakistan (1%)
cambodia (1%)
Thailand (1%)
Argentina (1%)
India (2%)
Moldova (2%)
Brazil (4%)
Serbia (5%)
Ukraine (45%)
Largest EU importers of cereals (as of 2016) in millions of tons
Current status/performance of Moldova’s cereals sector

Cereal production in Moldova 2012-2016; Forecast 2017

<table>
<thead>
<tr>
<th>Cereal</th>
<th>2012-2016 average 000 tonnes</th>
<th>2016 000 tonnes</th>
<th>2017 forecast 000 tonnes</th>
<th>change 2017/2016 percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>1269</td>
<td>1392</td>
<td>1762</td>
<td>27</td>
</tr>
<tr>
<td>Wheat</td>
<td>961</td>
<td>1293</td>
<td>1249</td>
<td>-3</td>
</tr>
<tr>
<td>Barley</td>
<td>208</td>
<td>260</td>
<td>246</td>
<td>-5</td>
</tr>
<tr>
<td>Others</td>
<td>26</td>
<td>26</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>2464</td>
<td>2971</td>
<td>3283</td>
<td>11</td>
</tr>
</tbody>
</table>
Current status/performance of Moldova’s cereals and grains sector

Wheat, Maize (corn) and Barley exports dynamics 2012-2016

Multi dimension COMTRADE Data
Source: WITS - UN Comtrade
Current status/performance of Moldova’s cereals and grains sector

Total cereal exports 2012-2016; Forecast 2017-18

![Bar chart showing total cereal exports from 2012/13 to 2017/18 forecast]
Current status/performance of Moldova’s cereals and grains sector

Moldova’s wheat/corn/barley export value and main export destinations, 2016 (based on UN Comtrade data)
Current status/performance of Moldova’s cereals and grains sector

Moldova’s exports of wheat, maize and barley to the EU in 2012-2015.
Important trends in the EU

- Increasing demand for high-value cereals
- Considerable consumption patterns
- Continuous growth of the organic market
Organic cereals in Moldova

Appr. 2/3 of organic land (75,000 Ha) is under annual crops:

Wheat – 35%
Corn – 25%
Barley – 8%

Export:
80,000 tons destined to the EU market (Netherlands, Germany and Italy)
Overview of stakeholders and the value chain in the cereals sector

- **Farmers**: large number of small farmers <20 Ha (OA) // small number of large producers – exporters (CA).

  **Challenge**: high % of underperforming small farmers. Lack of knowledge in organic cereal cultivation

- **Inputs suppliers**: a range of suppliers of seeds, fertilizers and plant protection products, equipment from international producers to local originator companies.

  **Challenge**: limited or non-availability of high-quality seedling materials (especially for OA) / Non-existence of an operational system for common approval of inputs to organic farming
Overview of stakeholders and the value chain in the cereals sector

- **Certification bodies**: there is a fair number of OA certification bodies (9 companies) operating in RM. 2 national and 7 international.

  **Challenge**: Only 2 national are accredited and authorized by MOLDAC/MARDE but are not recognized in the EU

- **Logistics**: transport infrastructure network in RM is sufficiently developed but requires major investments for modernization. Giurgiulesti port - the naval gateway of Moldova – offers considerable advantages for the cereal sector. There are storage capacities for conventional cereals but no capacities for organic cereals

  **Challenge**: absence of storage capacities for organic cereals and transportation of organic cereals (cross-contamination problem)

- **Processors and exporters**: Processing industry (mills/bakeries) for conventional cereals is fairly developed in RM. No processing of organic cereals yet.

  **Challenge**: development of organic cereals processing
Potential of market diversification and generating added value in the cereal sector

1. Reorientation towards high-value SPECIALTY CEREALS

<table>
<thead>
<tr>
<th>Product</th>
<th>Moldova net trade</th>
<th>EU net trade</th>
<th>Export potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>330</td>
<td>20,558</td>
<td>no</td>
</tr>
<tr>
<td>Maize</td>
<td>156</td>
<td>-8,875</td>
<td>Yes</td>
</tr>
<tr>
<td>Barley</td>
<td>137</td>
<td>7,334</td>
<td>no</td>
</tr>
<tr>
<td>Rye</td>
<td>0</td>
<td>165</td>
<td>rather yes, if production increases considerably</td>
</tr>
<tr>
<td>Oats</td>
<td>0</td>
<td>146</td>
<td>rather yes, if production increases considerably</td>
</tr>
<tr>
<td>Millet</td>
<td>0</td>
<td>-56</td>
<td>Yes</td>
</tr>
<tr>
<td>Sorghum</td>
<td>0</td>
<td>-356</td>
<td>Yes</td>
</tr>
<tr>
<td>Buckwheat</td>
<td>0</td>
<td>-23</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Potential of market diversification and generating added value in the cereal sector

2. Diversification of the organic cereal palette.

Current organic production/export: wheat, corn and barley. (the main factor for such a limited offer: destruction of animal husbandry system in RM- the largest consumer of fodder)

However, the pedo-climatic conditions allow for the re-introduction of other crops:
- rye,
- oats,
- millet,
- durum wheat,
- buckwheat
### SWOT Diagram for the Cereal Sector

#### Strengths
- Fertile soils, favorable climatic conditions for grain cultivation and high agricultural potential.
- Traditions and experience in cereal cultivation.
- Available capacities for the production, processing and storage of conventional cereals.
- Existing trade relations with the EU countries and proximity to developed markets with high demand for cereals/specialty cereals.

#### Weaknesses
- Large numbers of small and non-performing farms.
- The dominance of small-value crops in the production of cereals and restricted crop rotation.
- Local organic market is not yet developed.
- Dependence on raw materials export model.
- Conventional cereal market oligopoly.
- Farmers’ lack of knowledge and experience in organic cereals farming.
- Lack of inputs (certified seed material, plant protection products) certified organic.
- Lack of certified processing, storage and transportation capacity for organic cereals.

#### Opportunities
- Cultivation and export of specialty cereals (buckwheat, sorghum, millet) and smaller-scale „common“ cereals (rye and oats).
- Converting to organic farming of cereals.
- Development capacity of organic certified storage and processing facilities for cereals.
- Installing value-added cereal processing lines and obtaining finished products exported under the Organic Agriculture logo (long-term).

#### Threats
- Increasing costs of agricultural inputs (fuels, fertilizers, treatment, etc).
- High migration of labor force from rural areas.
- Monopolistic behavior of major cereals trading companies / large processors of raw materials.
- Increasing competition from large producers of cereals.
- Inconsistency in public policy/support measures.