National Green Export Review – Moldova
2nd stakeholder workshop – 17.04.18
The walnut sector
Walnuts - Global trends
World Walnut Production 2006-2017 (Source: INC 2017)
Production of walnuts by countries 2012-2017

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>China</td>
<td>720,000</td>
<td>780,000</td>
<td>900,000</td>
<td>1,000,000</td>
<td>1,060,000</td>
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<tr>
<td>United States</td>
<td>450,871</td>
<td>446,335</td>
<td>518,003</td>
<td>547,030</td>
<td>607,814</td>
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<tr>
<td>European Union</td>
<td>110,000</td>
<td>110,000</td>
<td>107,900</td>
<td>116,000</td>
<td>113,000</td>
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<tr>
<td>Ukraine</td>
<td>96,940</td>
<td>115,790</td>
<td>102,740</td>
<td>115,080</td>
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<td>110,000</td>
</tr>
<tr>
<td>Chile</td>
<td>53,000</td>
<td>60,000</td>
<td>81,634</td>
<td>80,000</td>
<td>100,000</td>
<td>100,000</td>
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<tr>
<td>Turkey</td>
<td>85,000</td>
<td>75,000</td>
<td>40,000</td>
<td>60,000</td>
<td>63,000</td>
<td>63,000</td>
</tr>
<tr>
<td>Moldova</td>
<td>22,700</td>
<td>23,100</td>
<td>32,000</td>
<td>30,000</td>
<td>32,000</td>
<td>31,000</td>
</tr>
<tr>
<td>Other</td>
<td>44,300</td>
<td>50,700</td>
<td>43,500</td>
<td>43,500</td>
<td>39,000</td>
<td>39,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,582,811</td>
<td>1,660,925</td>
<td>1,825,777</td>
<td>1,991,610</td>
<td>2,114,814</td>
<td>2,123,814</td>
</tr>
</tbody>
</table>

Production of walnuts by countries 2012-2017 (Source. USDA 2017)
2015 WORLD WALNUT EXPORTS
Shelled (Metric Tons)

- USA 54%
- Ukraine 10%
- Chile 8%
- Moldova* 6%
- Germany** 3%
- Romania 3%
- China 2%
- Others 14%

* Processing country
** Transit country

World Walnut Production 2006-2017 (Source: INC 2017)
Figure 6 - Top 12 world importers of walnuts in 2016 - cumulatively in-shell and shelled. (Source: own representation based on UN Comtrade Database, 2017)
## EU-28 Imports of Walnuts by Origin im MT

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>72,552</td>
<td>84,839</td>
<td>97,651</td>
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<tr>
<td>Moldova</td>
<td>21,262</td>
<td>23,280</td>
<td>24,452</td>
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<tr>
<td><strong>Chile</strong></td>
<td>16,464</td>
<td>21,710</td>
<td>24,041</td>
</tr>
<tr>
<td>Ukraine</td>
<td>18,041</td>
<td>19,855</td>
<td>22,206</td>
</tr>
<tr>
<td>China</td>
<td>3,617</td>
<td>5,014</td>
<td>3,404</td>
</tr>
<tr>
<td>Others</td>
<td>10,138</td>
<td>11,126</td>
<td>10,267</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>133,350</td>
<td>156,408</td>
<td>175,317</td>
</tr>
</tbody>
</table>

→ 14% of EU import

*EU-28 Imports of Walnuts by Origin im MT - Inshell Basis (Source USDA Tree Nuts Annual 2016)*
Walnuts – Moldova – key facts
Walnuts – Moldova – key facts

• We’re in those lucky 7% of the world territory best for Juglans regia
• Walnut – a ubiquitous and traditional culture in Moldova
• Road plantations: ca. 100,000 ha – 60% of national production
• Orchards: ca 24,000 ha (16,000 ha – yiedling in 2017)
Overall exports of Moldovan shelled walnuts (1994-2016), (Source: Own representation based on UN Comtrade Database, 2017)
EU 28+ imports of shelled walnuts from Moldova 2007-2016

(Source: Own representation based on UN Comtrade Database, 2017)
Top 9 export destinations for walnut kernels from the Republic of Moldova (>3 Thousand Tonnes over the past 10 years)
Adding value and diversification

- Organic walnut consumption is growing.
  - Selling price conventional: 1.50 to 2.00 EUR per 100 g,
  - Selling price organic and premium segment: up to 3-4 EUR per 100 g → 30-50% more value addition according to CBI

- Added-value products (walnut oil, flower, trail mix, etc.)

- Market niche diversification:
  - Middle-East ethnic minorities in the EU
  - Small, natural, artisanal market channels and consumer cooperatives

- Geographic diversification: more EU targeting, Middle East, Asia Pacific
SWOT Analysis for the Walnut Sector
Walnut sector - strengths

- Favorable climate and fertile soils
- Abundance of established trees and scientifically selected varieties suited to local conditions
- Suited to intercropping due to large spaces between the trees
- Walnut planted by majority of rural households – long tradition of knowledge in horticulture
- Orchard management low maintenance costs
- Agricultural subsidies for walnut orchards
- Well-developed processing (kernel extraction industry)
- Nearness to EU, world’s biggest importer of walnut kernels
- Benefits from FTAs with many importing countries
- Existing contracts for non-organic produce with foreign distributors
- Existence of the National Walnut Growers Association, and a recently established National Organic Value Chain Association
- Existence of organically certified producers
- Growing walnut consumption due to proven health benefits
Walnut sector - weaknesses

- Limited value-added production, reliance on raw commodities exports to foreign markets for processing
- Insufficient infrastructure for storage for smallholders and small intermediaries
- Lack of finance availability for smallholders (or Limited availability of micro-financing for small farmers)
- Rural youth leaving farms and farming for cities and abroad
- Low performance of the peripheral service sectors (packaging, consulting)
- Non-existence of Moldovan walnut brands and little recognition for the origin.
- Occasional poor quality of walnuts, especially those harvested along the roads too early
- Lack of understanding of technological necessities of walnut plantations
- Lack of post-harvest processing management (at least washing and drying)
Walnut sector - opportunities

• By creating jobs, development of the organic agriculture sector could significantly reduce rural unemployment
• Training program for farmers can bring new farms into organic production
• Higher margins can attract youth to entrepreneurship opportunities in the sector
• A national organic label can enhance visibility and demand for organic produce
• Target higher value buyers with more value and convenient products
• Improve linkages to tourism sector to tap local market for artisanal walnut products
• Improve quality and food safety to meet growing world quality standards
• Add value across entire value chain
• Harvest senile trees for furniture production
• Expand the organic certification
Walnut sector - risks

• Climate change consequences with less predictable frosts and drought periods
• Poor tree management promoting pests and disease
• Uncontrolled and too early harvesting of walnuts growing along the roads.
• Change in government policy
• Increasing supply worldwide
• Further price fall
• Rising quality standards of markets and competing countries
National Action Plan for the Honey sector
National Action Plan – Walnut Sector

• Creation of a strong National Walnut brand (incl. organic edition)
• Support in creation of effective small producers cooperatives in order to ensure scale effects and quality management
• Capacity Development and Institutional strengthening of the main National Association of Walnut Growers
• Large-scale Trainings on Good Agricultural Practices, Organic Walnut Production and Post-harvest management
• Instituting a minimum export tax of 0,2% for sector development
• Support in Market research and creation of effective trade partnerships for the added-value products (e.g. Walnut Oil)