POLICY BRIEFING 09|2021

German Economic Team
MOLDOVA

# Exports of fresh apples from Moldova: is a reorientation from Russia to the EU feasible?

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# Summary

- Fresh apples are among the top-10 export products of Moldova
- Russia is the dominant export destination for fresh apples from Moldova
- However, in early 2021, exports to Russia dropped significantly
- ➢ **Key question**: what happened and how to mitigate the shock?

**Results from our analysis**

- Structure of RUS market changes - export opportunities for MDA are shrinking
- MDA sector requires structural changes to regain int. competitiveness
- There are no good short-term policy options to mitigate the shock
- Medium- to long-term: investments and structural changes should allow penetrating EU and other markets and developing additional value chains for preserved/processed apples making the sector more resilient to shocks
- A specialized study is advisable

# Outline

1. Introduction
2. Moldovan apples market
3. Moldovan fresh apples exports
4. Russian apples market

5. How to reduce dependence on Russia? Key options
6. Option 1: exporting fresh apples to the EU
7. Option 2: exporting fresh apples to third countries
8. Option 3: preserving/processing of apples

# 1. Introduction

- Fresh apples are among the top-10 export products of Moldova
- Most apples (>70%) are grown in the North of Moldova, largely by individual producers
- Over the last 5 years, more than 90% of fresh apples were shipped to Russia (2020: 99% by volume)
- However, in early 2021, MDA exports to RUS dropped significantly

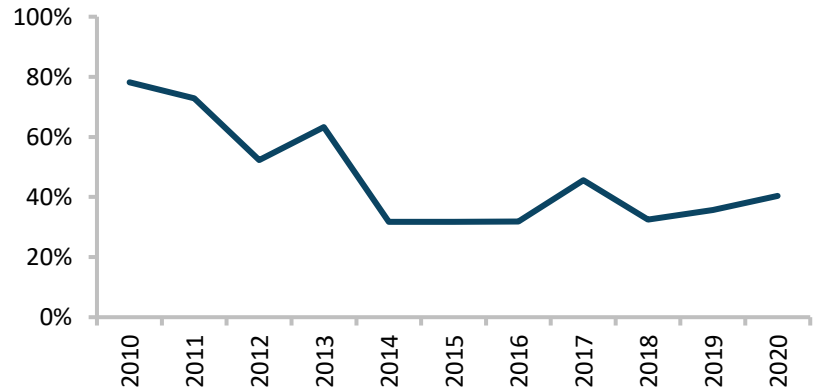
- **Key questions:**
  - What happened with MDA apples exports to RUS in 2021?
  - What can be done to diversify MDA apples exports and reduce dependence on RUS market?

- **Methodology of the study**: data analysis and interviews of sector representatives (producers, exporters, sector specialists)

# 2. MDA apples market: production vs exports

MDA apples production and exports, volume


Share of fresh apples exports in production, %




*Sources: FAO, UN Comtrade, National Bureau of Statistics of Moldova*

**MDA apples production, 2020:**

- Volume: 488 thousand tones (tt)
- Growth, 2020/2010: +131%
- Growth, 2020/2019: -21%

➢ **Upward trend since 2010**

➢ **Bad harvest in 2020**

**MDA fresh apples exports, 2020:**

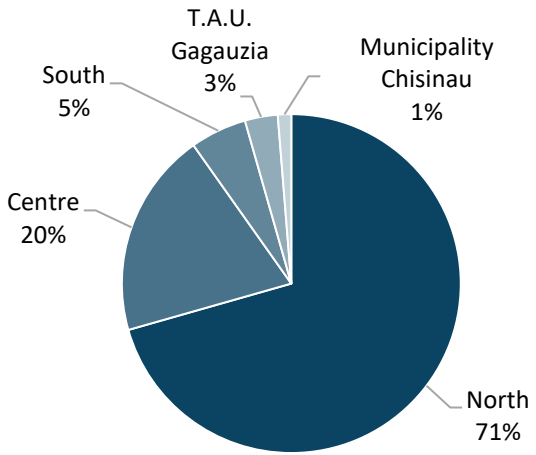
- Volume: 194 tt (40% of production)
- Growth, 2020/2010: -1%
- Growth, 2020/2019: -11%

➢ **No export expansion compared to 2010**

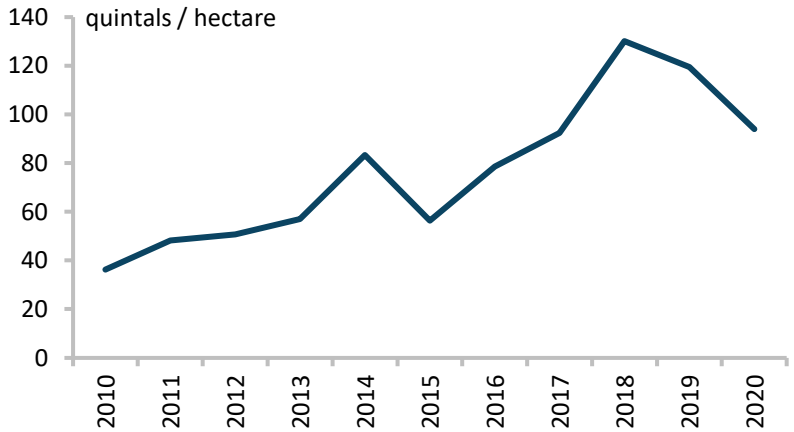
➢ **Role of exports important, but gradually declining**

# 2. MDA apples market: structure

MDA apples orchards, by area




MDA apples yield, total




*Sources: FAO, National Bureau of Statistics of Moldova; quintal = 100 kg*

**Location of apples orchards, 2020:**

- North: 71%
- Other regions: 28%

➢ **High regional concentration in North**

**Market structure, 2020:**

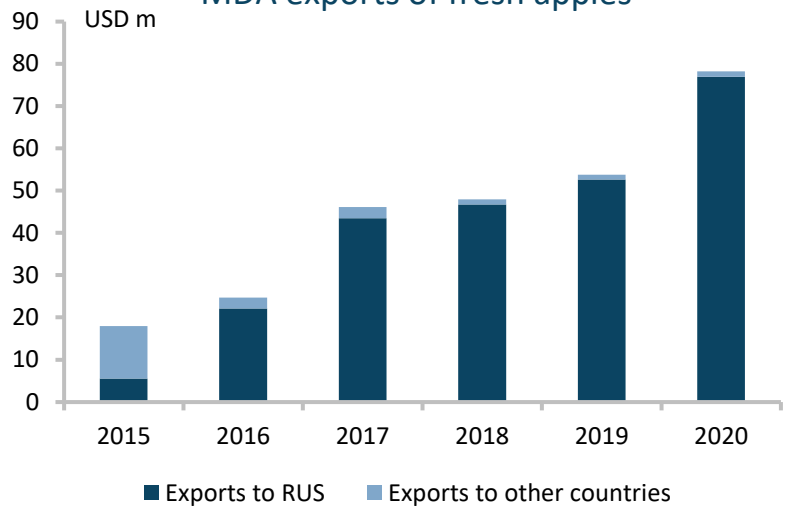
- Individual producers: 66% output, yield: 88 quintals/hectare
- Agricultural enterprises: 34% output, yield: 108 quintals/hectare

➢ **Less efficient individual producers dominate**

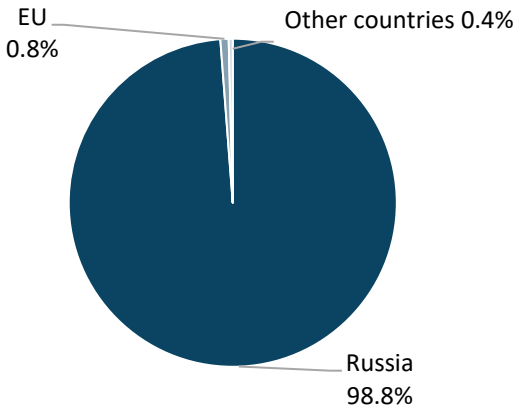
**Conclusion:** MDA apples are produced mostly in North and by less efficient individual producers → **structural vulnerability to shocks**

# 3. MDA fresh apples exports

MDA exports of fresh apples




Geography of MDA exports of fresh apples, by volume




*Sources: UN Comtrade, own estimates*

**MDA fresh apples exports, 2020:**

- Value: USD 78 m
- Share in total exports: 4%
- 7th most important export product

➢ **Important export product**

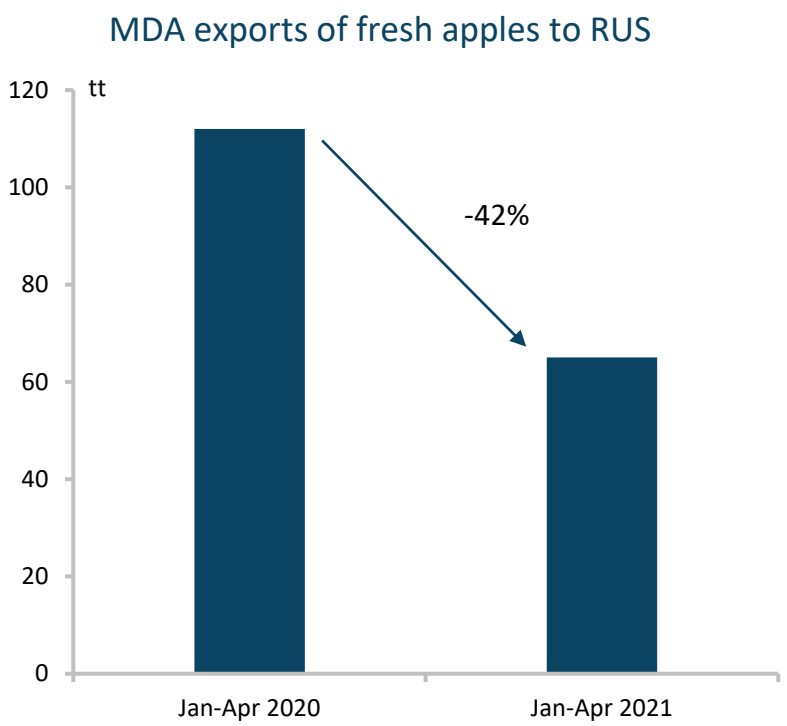
**Geography of exports, by volume, 2020:**

- Russia: 191.2 tt
- EU: 1.5 tt (TRQ: 40 tt – not binding)
- Other countries: 0.8 tt

➢ **Russia dominates as export destination**

**Conclusion**: high dependence on RUS market → high vulnerability

# 3. MDA exports of fresh apples to RUS in 2021




*Sources: UN Comtrade, MDA Customs Service, own estimates; fresh apples (HS 080810)*

**MDA fresh apples exports to RUS, Jan-Apr 2021:**

- Volume: 65 thousand tonnes
- Growth, 2021/2020: -42%

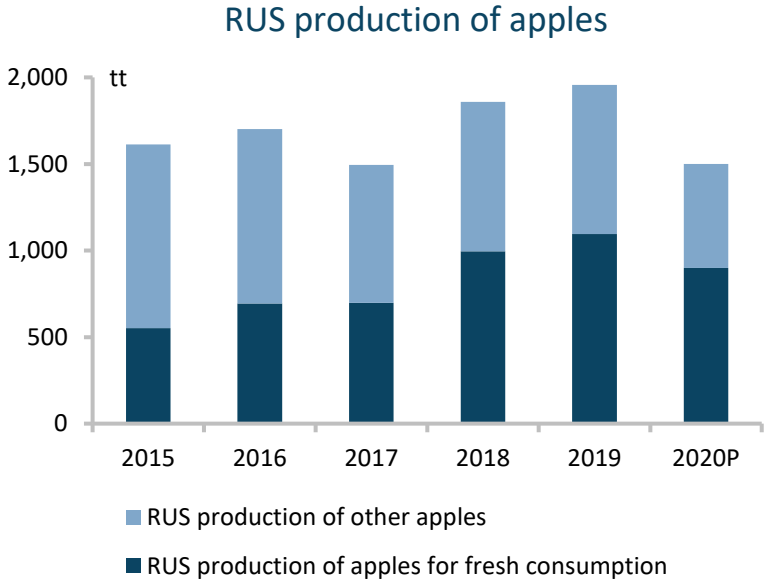
➢ **Sharp reduction in export volume**

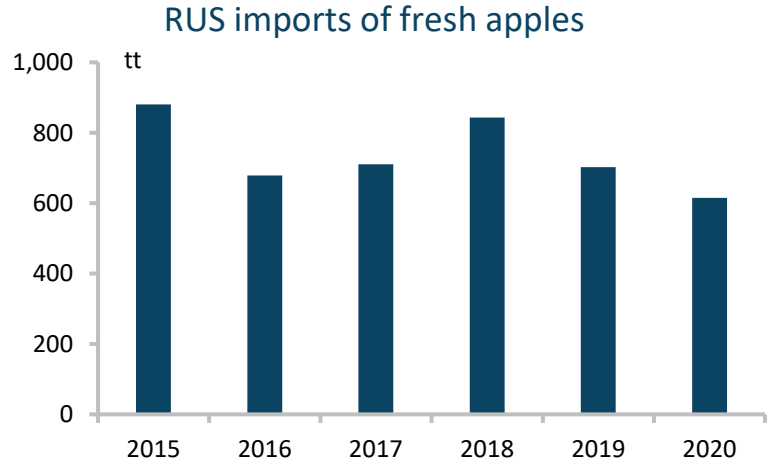
**Why? Several factors:**

- Increased supply of RUS own apples
- Increased quality requirements in RUS
- Apr-2021: RUS introduced import duties on MDA apples (since 2014, RUS can revise duties quarterly)
- Wrong selling strategy (stored for too long waiting for better prices)

➢ **Structural issues exacerbated short-term shocks**

# 4. RUS market of apples




*Sources: UN Comtrade, agroinvest.ru*

**RUS market of apples, 2020:**

- Production: approx. 1,500 tt, incl. approx. 60% of fresh apples (2015: 34%) → structural change
- Self-sufficiency as policy goal

➢ **Structural changes on RUS market**

**RUS imports of apples, 2020:**

- Volume: 615 tt (41% of production)
- Growth, 2020/2015: -30%
- Increased demand for quality

➢ **Gradual deceleration of imports**

**Conclusion:** structural changes on RUS market coupled with trade policy uncertainty → MDA export opportunities are shrinking

# 5. How to reduce dependence on RUS? Key options

**Main options:**

Option 1: export fresh apples to EU

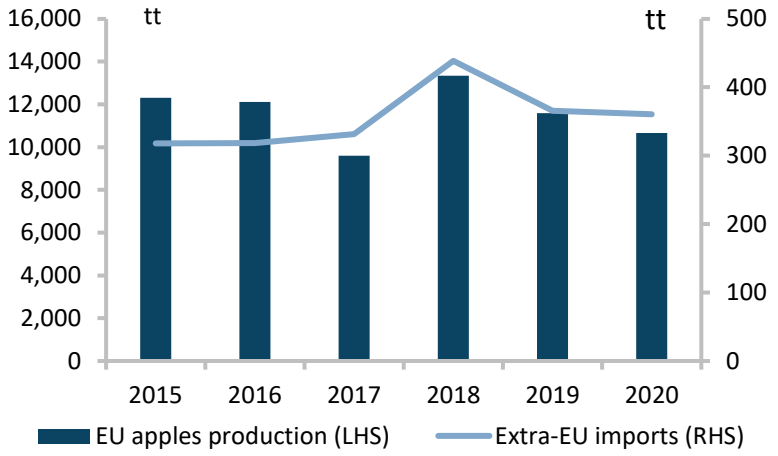
Option 2: export fresh apples to third countries

Option 3: preserving/processing of apples and exporting these products

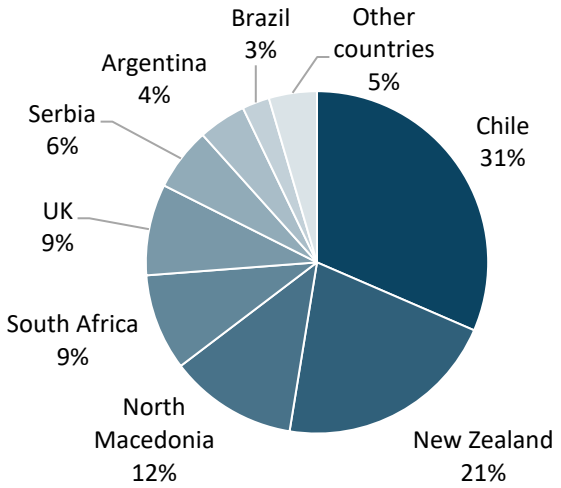
Option 4: diversify production of fruits reducing the reliance on apples – *requires separate analysis*

# 6. Option 1: export fresh apples to the EU

EU production and extra-EU imports of apples




Geography of extra-EU imports of fresh apples




*Sources: Eurostat, own estimates*

**EU market of fresh apples, 2020:**

- Production: 10,658 tt
- Extra-EU imports: 360 tt (3% of domestic production)

  *NB: MDA exports approx. 200 tt*
- Main sources of imports: Chile, New Zealand → countries located in southern hemisphere, other harvesting time

➢ **EU import market is small**

➢ **Main imports from countries with other harvesting season**

**Conclusion:** unlikely to absorb all MDA exports in the best possible conditions

# 6. Challenges faced in export to EU market

- **Variety:** access to new apple varieties needed; fast changes of tastes/needs require continuous updating of varieties
- **Quality requirements:**
  - need to meet chemical residual requirements - improved control of chemical use needed
  - need to use brand-new chemicals - limited access for MDA
  - need to use correct chemicals to ensure right quality - limited knowledge among small producers
- **Labour culture:** need to not damage apples, to not use chemicals recklessly
- **Technology:** need to invest in new sorting machines, new packaging etc.

➢ **Conclusion: MDA apple-growing needs structural changes to be competitive on the EU market**

# 6. Conclusion regarding Option 1

**In short-term:**

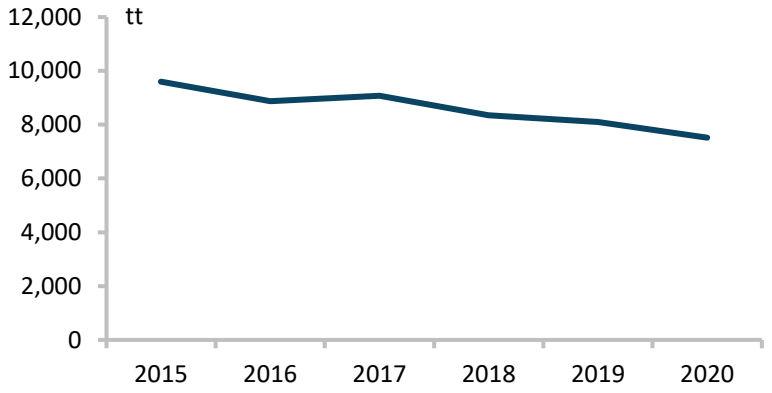
- Increased exports to the EU are not feasible
- We are dealing with structural problems on the supply side; there is not much government can do in the short term

**In medium- to long-term:**

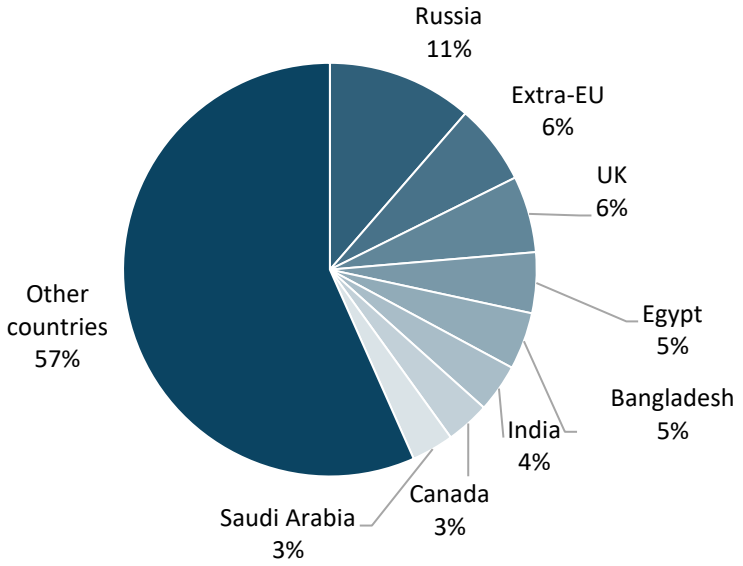
- If private investment takes place to modernize the sector, in principle MDA could expand exports of apples to the EU
- However: not clear if this option is commercially viable — not clear if investments would pay off
- Separate study necessary to assess this question
- In case investments pay off, government should assess whether interventions (facilitation of credit, guarantees, etc.) make sense

# 7. Option 2: export fresh apples to third countries

World imports of fresh apples, volume




Main importers of fresh apples, exc. intra-EU trade




*Sources: ITC Trade Map, Eurostat, own estimates*

**World imports of fresh apples, 2020:**

- Value: USD 7.5 bn
- Volume: 7,510 thousand tonnes
- Largest importers, excl. intra-EU trade: RUS 11%, extra-EU 6%, UK 6%

➢ **RUS & EU largest importers**

➢ **Other potential markets smaller**

**From interviews:**

- Each market has own requirements
- Example: Arab countries tend to buy small apples for fresh consumption, while EU & CIS prefer large apples

➢ **Reorientation requires adjustment of varieties, cannot be immediate**

# 7. Conclusion regarding Option 2

**In short-term:**

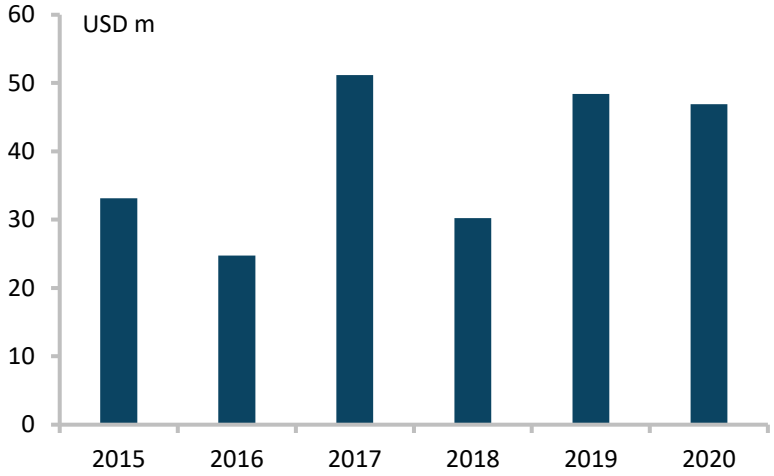
- Limited options for immediate reorientation

**In medium- to long-term:**

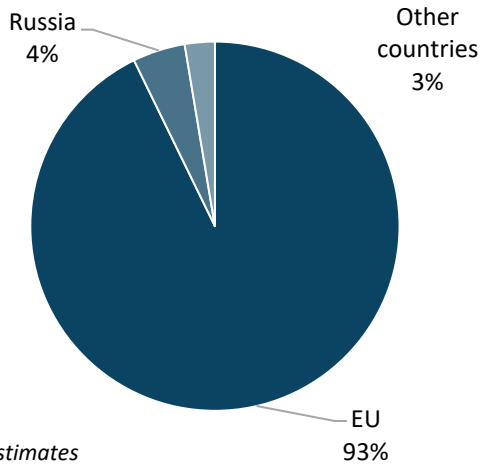
- Investment needed to match demands of potential counterparts, but still important to increase sector resilience
- However: not clear if this option is commercially viable — not clear if investments would pay off
- Separate study necessary to assess this question
- In case investments pay off, government should assess whether interventions (facilitation of credit, guarantees, etc.) make sense

# 8. Option 3: preserving/processing of apples

MDA exports of preserved/processed apples




Geography of MDA exports of preserved/processed apples, 2020




*Sources: WITS, own estimates*

**MDA exports of preserved/processed apples, 2020:**

- Value: USD 47 m
- Share in MDA total exports: 2%
- Growth, 2020/2015: +42%
  2020/2019: -3%

➢ **Uneven but upward trend**

**From interviews:**

- Processing needs lower-quality apples
- Prices paid by apple processors to growers are low → unattractive, often below production costs

➢ **MDA apple growers do not consider processing attractive business model**

# 8. Conclusion regarding Option 3

**In short-term:**

- For apple growers: option to avoid even larger losses
- For the economy: possibility to expand apple production value chain

**In medium- to long-term:**

- For food producers: potentially additional jobs/value-added
- To become attractive for apple growers, they should form vertically integrated companies, maybe cooperatives
- Further study is required

# About the German Economic Team

Financed by the Federal Ministry for Economic Affairs and Energy, the German Economic Team (GET) advises the governments of Ukraine, Belarus, Moldova, Kosovo, Armenia, Georgia and Uzbekistan on economic policy matters. Berlin Economics has been commissioned with the implementation of the consultancy.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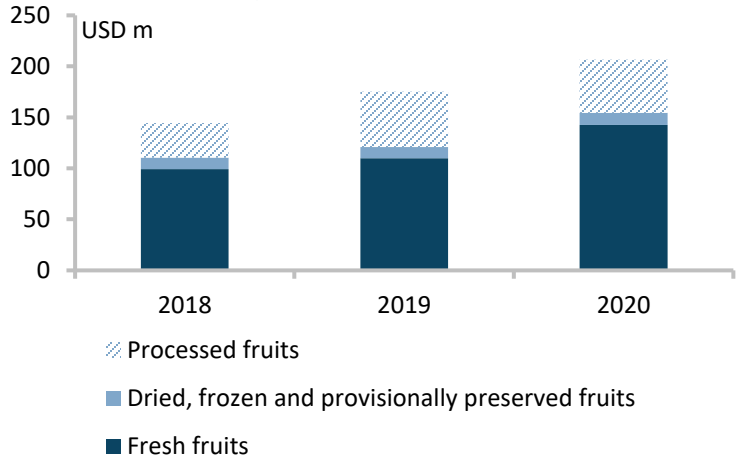
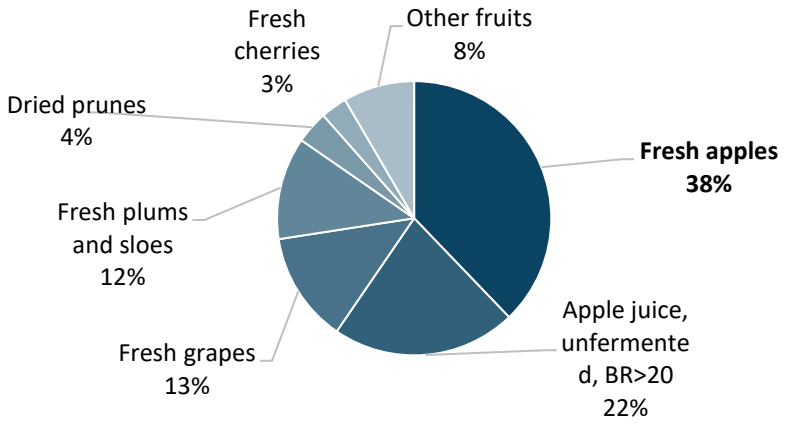
# Annex 1-A: MDA fruits exports

MDA exports of fruits, 2018-2020




Product structure of MDA fruit exports, 2020




*Source: WITS, own estimates; exports without re-exports; note: "Fruits" include Fresh fruits (HS 0803–0810), Dried, frozen and provisionally preserved fruits (HS 0811–0814), and Processed fruits, including jams, juices etc. (HS 2007 – 2009, excluding HS 200811, 200819 and 200891)*



**MDA exports of fruits, 2020:**

- Value: USD 207 m
- Growth, 2020/2019: +18%
- Share of MDA total exports: 11%

➢ **Fruits are a large part of MDA exports**

**Structure of MDA fruit exports, 2020:**

- Fresh fruits: 69%, incl.
  - Fresh apples: 38%
  - Fresh grapes: 13%
  - Fresh plums: 12%
- Dried, frozen, preserved fruits: 6%
- Processed fruits: 25%

➢ **Fresh fruits dominate exports**

# Annex 1-B: Geography of MDA fruit exports

Geography of MDA fruit exports by key partners, 2020

| | Export value, 2020, USD m | Export structure, 2020, % total | % share of export destination for product category | | | |
|---|---|---|---|---|---|---|
| | | | Fresh fruits | incl. fresh apples | Dried, frozen & preserved fruits | Processed fruits |
| **Russia** | 113.4 | 55% | 76% | 98% | 27% | 2% |
| **EU** | 79.5 | 38% | 19% | 1% | 53% | 89% |
| **ROW** | 13.8 | 7% | 5% | 0% | 20% | 8% |
| **Total** | **206.7** | 100% | 100% | 100% | 100% | 100% |

*Source: WITS, own estimates; exports without re-exports*

- RUS is main destination of MDA fruit exports accounting for 55% of total
- Products shipped to RUS and EU are different:
  - Fresh fruits, incl. 98% apples, shipped to RUS
  - Processed fruits, incl. juices, and half of dried & preserved fruits shipped to EU

➢ **MDA exports of apples are most exposed to changes in RUS market**

# Annex 2: Methodology of interviews

**Aim:** identify factors affecting export decisions regarding fresh apples and other fruits, including bottlenecks hampering exports to the EU

**Main source of information**: structured interviews with producers, exporters and sector specialists

**Key topics discussed**:

- Production peculiarities, including varieties, cold chain, use of chemicals, etc.
- Trade structure and barriers
- Certification
- Transport

Disclaimer: We did not aim at a comprehensive analysis of production and trade values chains. Instead, we focused on bottlenecks.