

Export potential of Armenia's agro-food sector on the global market

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1. Introduction

Aim of the study

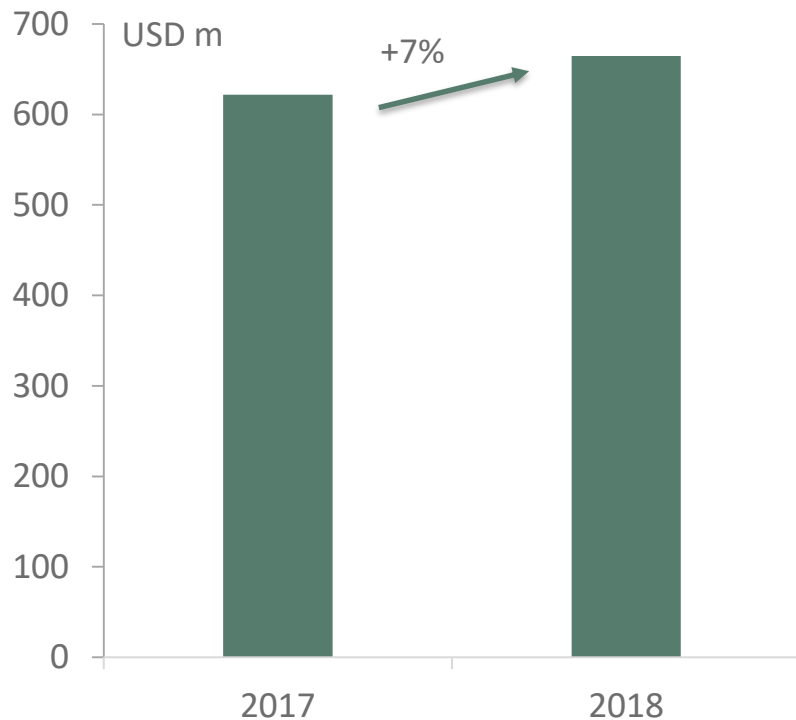
- Export promotion is a key economic objective of the Armenian government
- In this policy briefing, we explore export potential in the agro-food sector
- Time perspective: short- to medium-term, i.e.
 - Focus on products which Armenia already exports
 - Focus on products facing moderate food safety requirements

Key questions

- Which agro-food products have the highest export potential?
- Which destinations have the highest potential?

2. Armenia's exports of agro-food products

ARM exports of agro-food products, 2017-2018

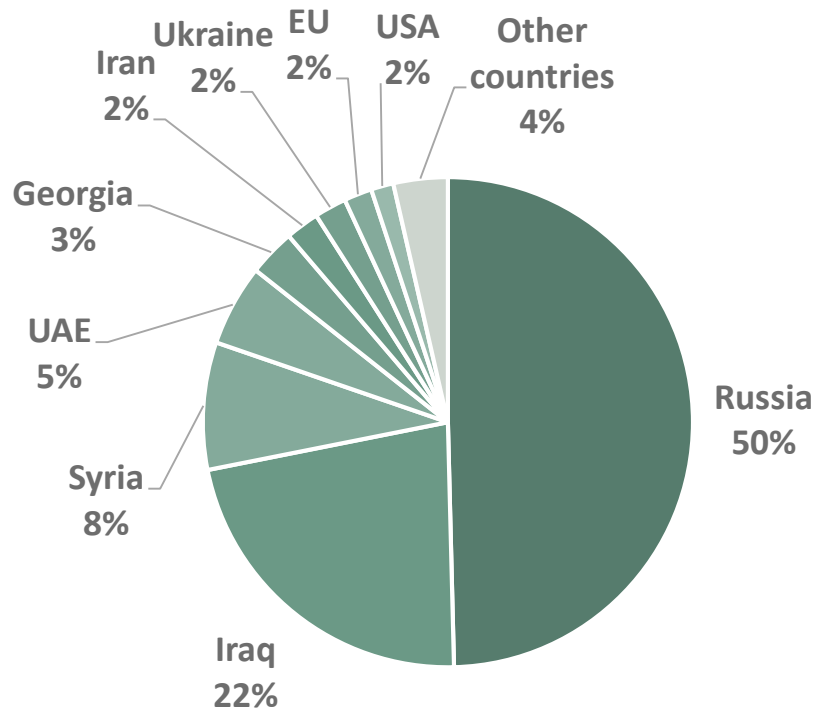


Source: UN Comtrade, own estimates

- ARM agro-food exports, 2018
 - USD 664 m
 - 7% increase compared to 2017
 - 28% of total exports (2017: 29%)
- **Moderate growth of agro-food exports**
- Main export products:
 - Tobacco products (40% of total)
 - Beverages & spirits (34%)
 - Vegetables (4%)
- **High concentration of exports**

Agro-food exports by destinations

Destination of ARM agro-food exports



- ARM agro-food exports, 2018

- EAEU: 51%,
incl. Russia: 50%
- Gulf Countries: 28%
- EU: 2%
- Other countries: 19%

→ **Russia accounts for ca. 1/2 of exports; clear dominance**

Dynamics of exports in 2018 vs. 2017

- EAEU: increase by 6%
- Gulf Countries: +8%
- Other countries: +6%

→ **Positive growth across all key regions**

Source: estimates based on UN Comtrade; 2018

Armenia's market access to global markets

Import duties

- WTO membership: since 2003
- Membership in the Eurasian Economic Union (EAEU): since 2015
- FTAs: Georgia, Moldova, Ukraine, Turkmenistan, CIS FTA 2011, Vietnam (as a member of the EAEU)
- Preferential arrangements: GSP+ (EU), GSP (Canada, Japan, Norway, Switzerland, Turkey, USA)

→ **Preferential access to key neighboring markets**

3. Methodology for export potential assessment

- Export potential assessment is based on the modified International Trade Centre (ITC) methodology
- Three dimensions of export potential assessment; see also Annex 1
 - i. Supply side dimension: export performance of Armenia*
 - ii. Demand side dimension: import performance of potential partners*
 - iii. Trade cost dimension: indicators for costs associated with ARM exports to a particular partner compared to other destinations*
- **Stage I (based on dimension i. and ii. + sector verification)**
 - Identification of top products based on dimensions i. and ii.
 - Verification of the list of top products using sectoral information
 - Selection of top-20 products with the highest export potential
- **Stage II (based on dimension ii. and iii.)**
- Identification of top-10 importing countries for each of top-20 products

Sample of potential agro-products

Criteria	Number of Products
Total agro-food products (HS 01-24)	899
Excluding tobacco products (HS 24) due to very specific global production structure	10
Excluding products for which Armenia's average annual exports (2013-2018) are under USD 5,000	650
Excluding products subject to veterinary control	72
Number of products in remaining sample	167

Note: these figures are the result of sequential exclusion, e.g. there are more products subject to veterinary controls, but only 72 of them remained after exports under USD 5,000 were excluded

- **Out of remaining sample of 167 products, we identify the top-20**

4. Export potential on global markets

Stage I

- Identification of 20 products with the highest potential on global markets (“top-20”)

Stage II

- Identification of top-10 destinations globally for each of top-20 products*

*Note: *Azerbaijan and Turkey are excluded from the sample*

Stage I: top-20 products (1/2)

rank	Composite score (max=100)	HS2012	HS 2012 Product Description	ARM total exports, 2018, USD m	World total imports, 2017, USD m
1	71	220820	Spirits obtained by distilling grape wine or grape marc	199.5	5,546
2	71	200899	Fruit, prepared or preserved: grapes, plums, figs	5.3	3,710
3	70	200819	Nuts and other seeds, incl. mixtures, prepared or preserved	1.9	4,099
4	69	070200	Tomatoes, fresh or chilled	13.4	8,912
5	68	060311	Fresh cut roses and buds	8.8	3,101
6	64	220830	Whiskies	2.2	10,620
7	64	071080	Vegetables, uncooked or cooked by steaming or by boiling in water, frozen	0.1	3,477
8	63	080810	Fresh apples	1.5	7,249
9	63	220890	Ethyl alcohol of an alcoholic strength of < 80% vol, not denatured	3.3	3,669
10	63	200799	Jams, jellies, marmalades	2.1	2,266

Source: own estimates

Stage I: top-20 products (2/2)

rank	Composite score (max=100)	HS2012	HS 2012 Product Description	ARM total exports, 2018, USD m	World total imports, 2017, USD m
11	63	220600	Cider, perry, mead and other fermented beverages	7.8	1,427
12	59	210390	Preparations for sauces and prepared sauces	1.0	8,560
13	59	070690	Fresh or chilled salad beetroot, salsify, celeriac, radishes and similar	0.7	41,940
14	59	220421	Wine of fresh grapes, incl. fortified wines, and grape must	9.8	25,065
15	58	200190	Vegetables, fruit, nuts, prepared or preserved by vinegar or acetic acid	1.5	1,477
16	58	081010	Fresh strawberries	1.2	2,859
17	57	080910	Fresh apricots	1.6	447
18	56	080940	Fresh plums and sloes	1.1	905
19	56	080830	Fresh pears	0.6	2,569
20	56	080610	Fresh grapes	2.7	8,826

Source: own estimates

Stage II: Destinations with highest export potential

Result of Stage II

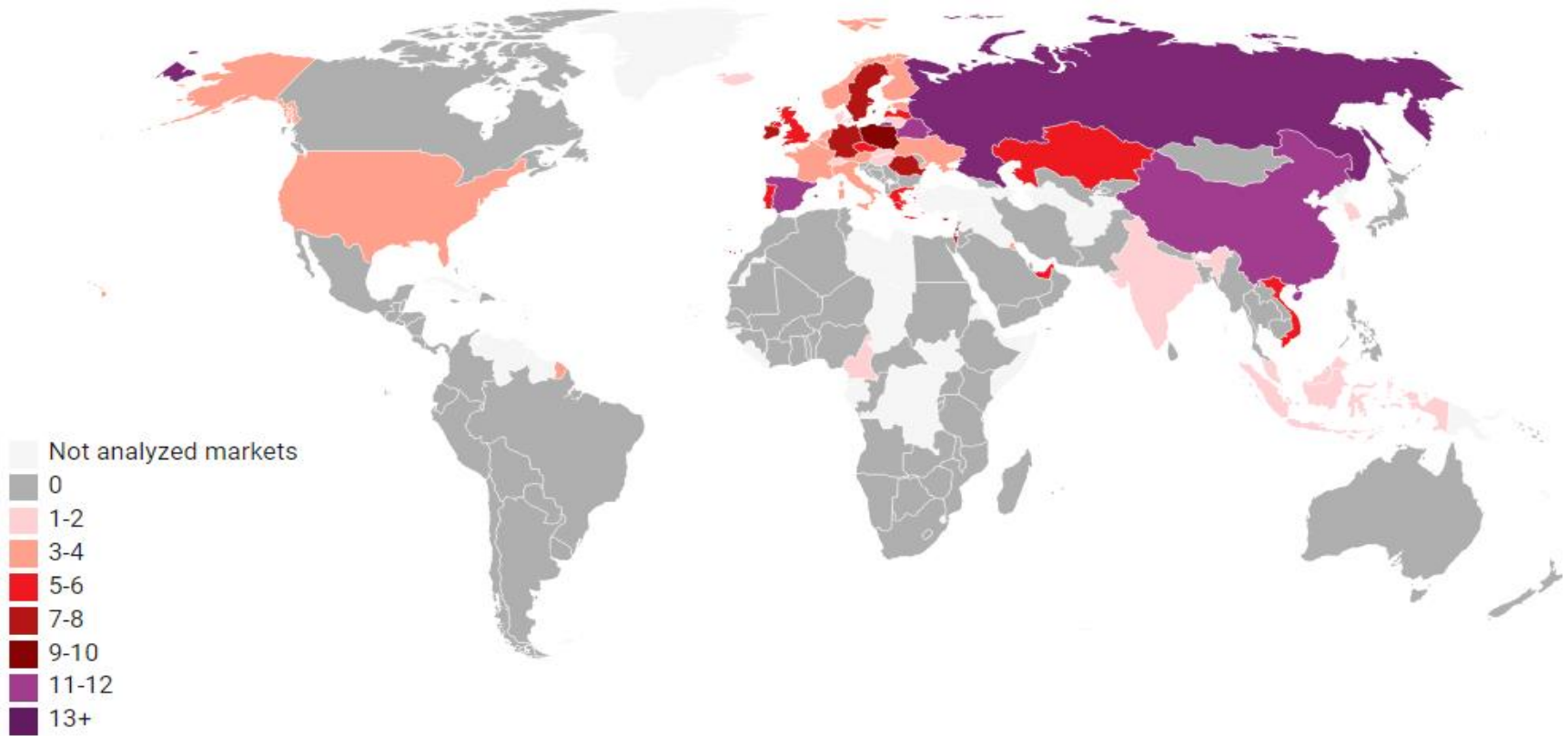
- 20 tables with top-10 countries for each product; see BE_ARM_TN_01_2019
- Here only map with most promising export destinations

Most promising export destinations for top-20 agro-food products of Armenia

Country	Frequency
Russia	13
Belarus, China, Spain	11-12
Poland	9-10
Germany, Romania, Sweden, Cyprus, Ireland, Israel	7-8
Latvia, United Arab Emirates, United Kingdom, Czech Republic, Greece, Kazakhstan, Portugal, Vietnam	5-6
Austria, Belgium, Italy, Netherlands, Norway, USA, Estonia, Finland, France, Kuwait, Ukraine	3-4
Hong Kong, Hungary, Malta, Slovakia, Switzerland, Bahrain, Cameroon, Denmark, Iceland, India, Indonesia, Korea, Lithuania, Malaysia	1-2
Other countries	0

Source: own estimates

Map of the world with the highest export potential for Armenia's agro-food products



Sources: Own estimates

Note: The value assigned to each country refers to how often the country was mentioned in the Top-10 destinations calculated for each of the Top-20 products

5. Conclusions

- The ARM government identified export promotion as a key economic goal
- In order to promote exports, it is necessary to know
 - Which products have a realistic export potential?
 - Which destinations should be targeted for each identified product?
- This policy briefing provides answers to these two questions in the field of agro-food
- Our research confirmed the high potential of the Russian market
- At the same time, a significant potential was identified in other destination, especially in EU member countries and in China
- As such, this research might contribute to
 - Higher agro-food exports
 - Higher diversification of agro-food exports

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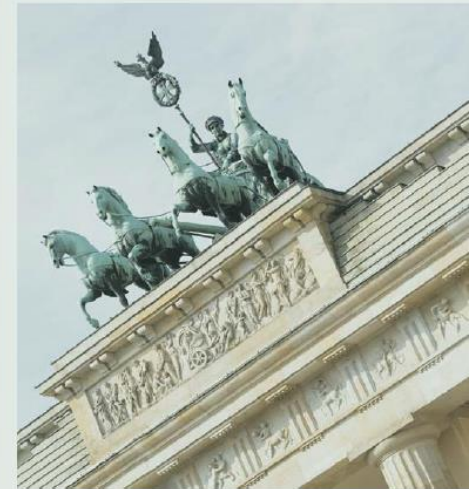
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Annex 1.1: Supply side dimension of methodology

- *Total export value.* The larger the total exports of the country, the greater its potential for expansion
- *World market share.* It is an indicator of the competitiveness of the product. While the total export value is biased towards large industries, the world market share could show the potential of smaller industries
- *Total export growth (in volume).* The faster the export growth, the better it is for export potential
- *Revealed comparative advantage (RCA).* The RCA is traditionally used to evaluate competitiveness of exporters

Annex 1.2: Demand side dimension

- *Total value of imports*. It shows the potential size of the market
- *Import growth (in volume)*. Higher import growth signals a demand expansion and thus could produce more opportunities for the exporter than a stagnant or declining market
- In this analysis, the calculations are done separately for:
 - Target market as a whole (here: world)
 - Individual countries (threshold at USD 1 million is applied to exclude 'shallow' markets)

Annex 1.3: Trade cost dimension

- *Average tariff faced by Armenia.* It allows comparing different markets putting the countries with more liberal tariff regime up
- *Average tariff advantage of Armenia compared to the country's applied average.* It reveals the relative competitiveness of the exporter on the importing market
- *Relative unit value.* It shows whether the exporter can supply to the importing market cheaper than its competitors can. Markets with disadvantageous unit value are excluded from consideration
- *Distance to the country from Armenia.* The distance is an important proxy of transportation costs
- *Distance advantage of Armenia compared to the country's average distance of imports.* It reveals whether Armenia is better off placed than its potential competitors if the distance of shipping is compared

Annex 2: Examples for Stage I scoring

HS 2012 Product Code	220820	200899	200819	070200	060311
HS 2012 Product Description	Spirits obtained by distilling grape wine or grape marc	Fruit, prepared or preserved (grape, plums, figs)	Nuts, incl. mixtures, prepared or preserved	Tomatoes, fresh or chilled	Fresh cut roses and buds
Score_EXP value average 2014-2017	100	96	87	99	95
Score_EXP value 2018	100	95	92	99	96
Score_EXP growth 2017/2014	77	73	78	98	90
Score EXP growth 2018/2017	60	61	87	77	59
score RCA2017	100	93	0	92	95
Score RCA CARG 2017/2013	0	0	0	95	85
Score share in world EXP, 2013-2017	99	93	79	90	93
SUPPLY (max=100)	76	73	61	93	88
Score_IMP value average 2013-2016	87	76	82	92	74
Score_IMP value 2017	85	80	82	92	74
Score_IMP growth 2016/2013	0	73	84	0	0
Score_IMP growth 2017/2016	92	49	70	0	41
DEMAND (max=100)	66	69	79	46	48
COMPOSITE Score, Stage1 (max=100)	71	71	70	69	68
Rank	1	2	3	4	5

Source: own estimates

Annex 3: Examples for Stage II scoring (HS 220820 “Spirits obtained by distilling grape wine”)

	Russia	Latvia	Cyprus	China	United Arab Emirates
Score Unit Value Ratio 2017	56	93	88	0	86
Score Unit Value Ratio 2013-2016	84	88	93	0	96
Score distance	88	77	96	39	84
Score distance advantage	76	0	80	90	94
Score import duty	99	99	99	93	99
Score duty advantage	99	0	0	97	0
INTERCEPT (max=100)	84	59	76	53	77
Score_IMP value average 2013-2016	97	83	61	98	74
Score_IMP value 2017	97	91	64	99	84
Score_IMP growth 2016/2013	0	83	88	78	0
Score_IMP growth 2017/2016	82	88	62	76	93
DEMAND (max=100)	69	86	69	88	63
COMPOSITE Score, Stage 2 (max=100)	77	73	72	70	70
Rank	1	2	3	4	5

Source: own estimates