



Food and Agriculture Organization  
of the United Nations



The European Union  
for Georgia  
EU4Business



**European Bank**  
for Reconstruction and Development

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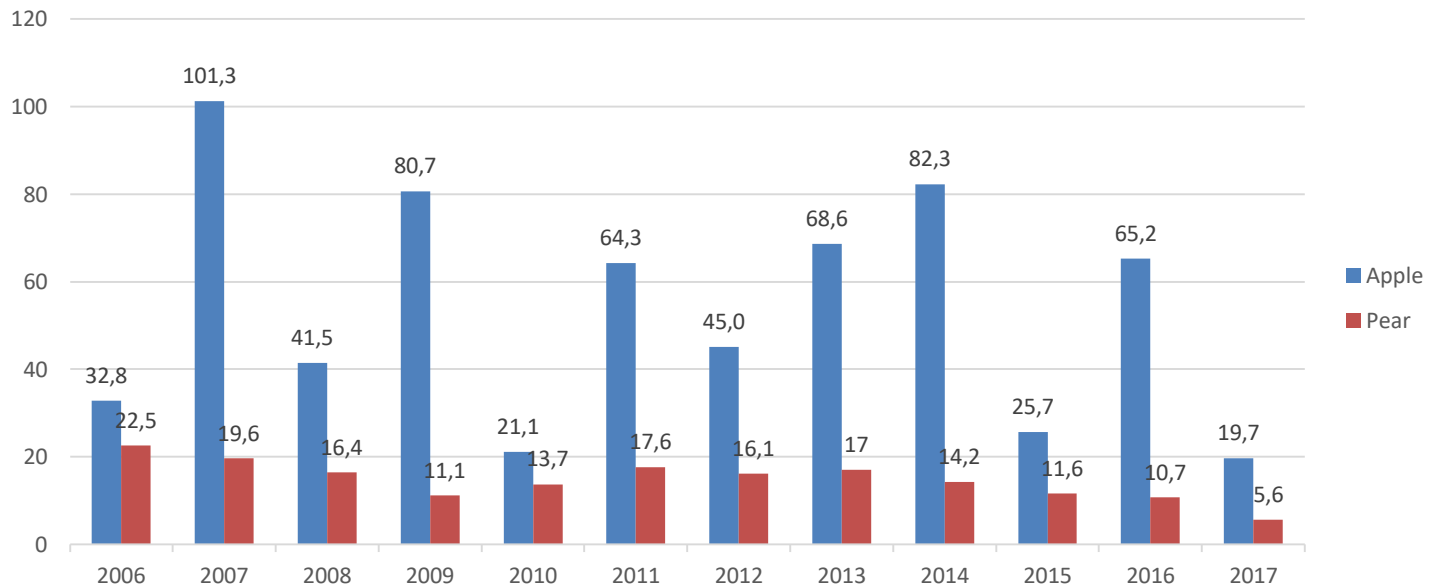
# Apple and Pear Value Chain Analyses in Georgia

FAO/EBRD project  
2019 Tbilisi

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# Apple and Pear Production

Apple and Pear Production 1,000 MT



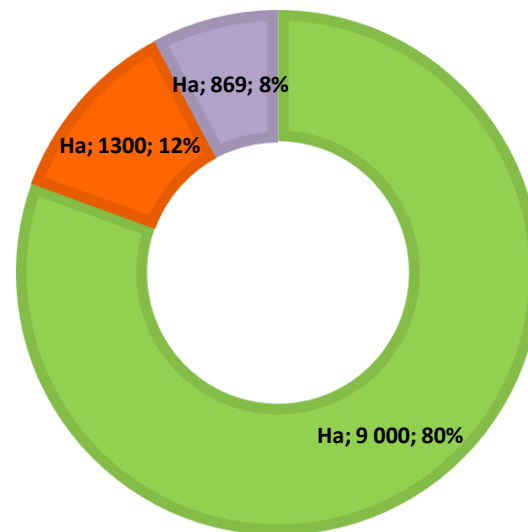
**2018\*** - estimate for apple production is 100,000-120,000 MT. 2018 AJC companies processed 48,000 MT apples. In 2014 AJC producers processed 43,000 MT. Maximum 15-20% growth in production compare to 2014 that was 82,300 MT.

Source: Geostat.ge Production Permanent Crops 2017

# Apple Orchards in Georgia

## ORCHARDS STRUCTURE IN GEORGIA (2019)

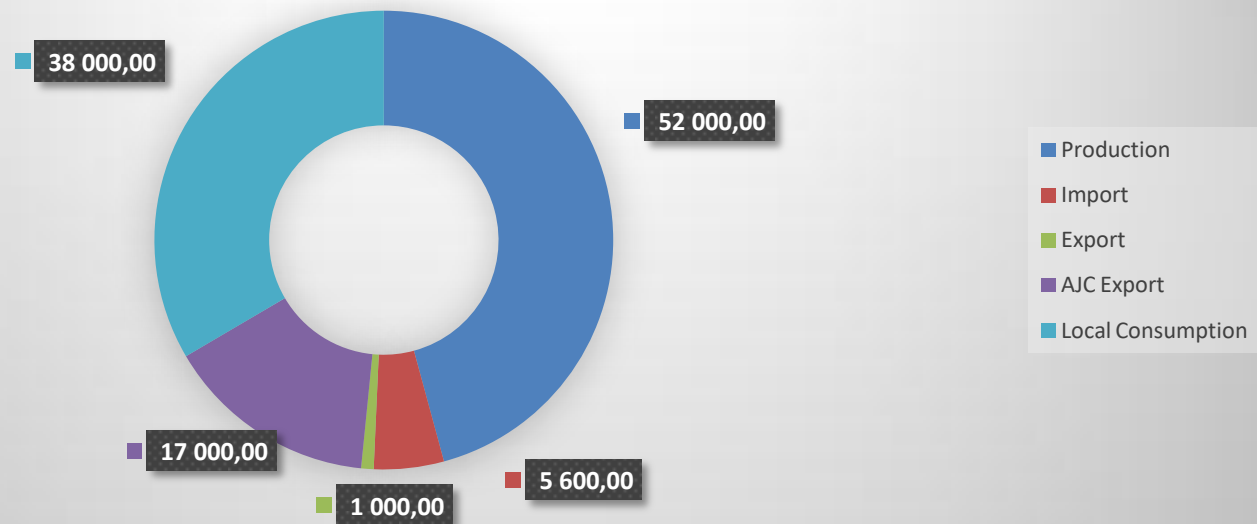
■ Old Orchards   ■ Modern Orchards   ■ Modern Orchards - Plant the Future



Source: Geostat.ge Agriculture Census 2014, APMA Plant the Future Data, Experts Estimations

# 2009 – 2017 Average

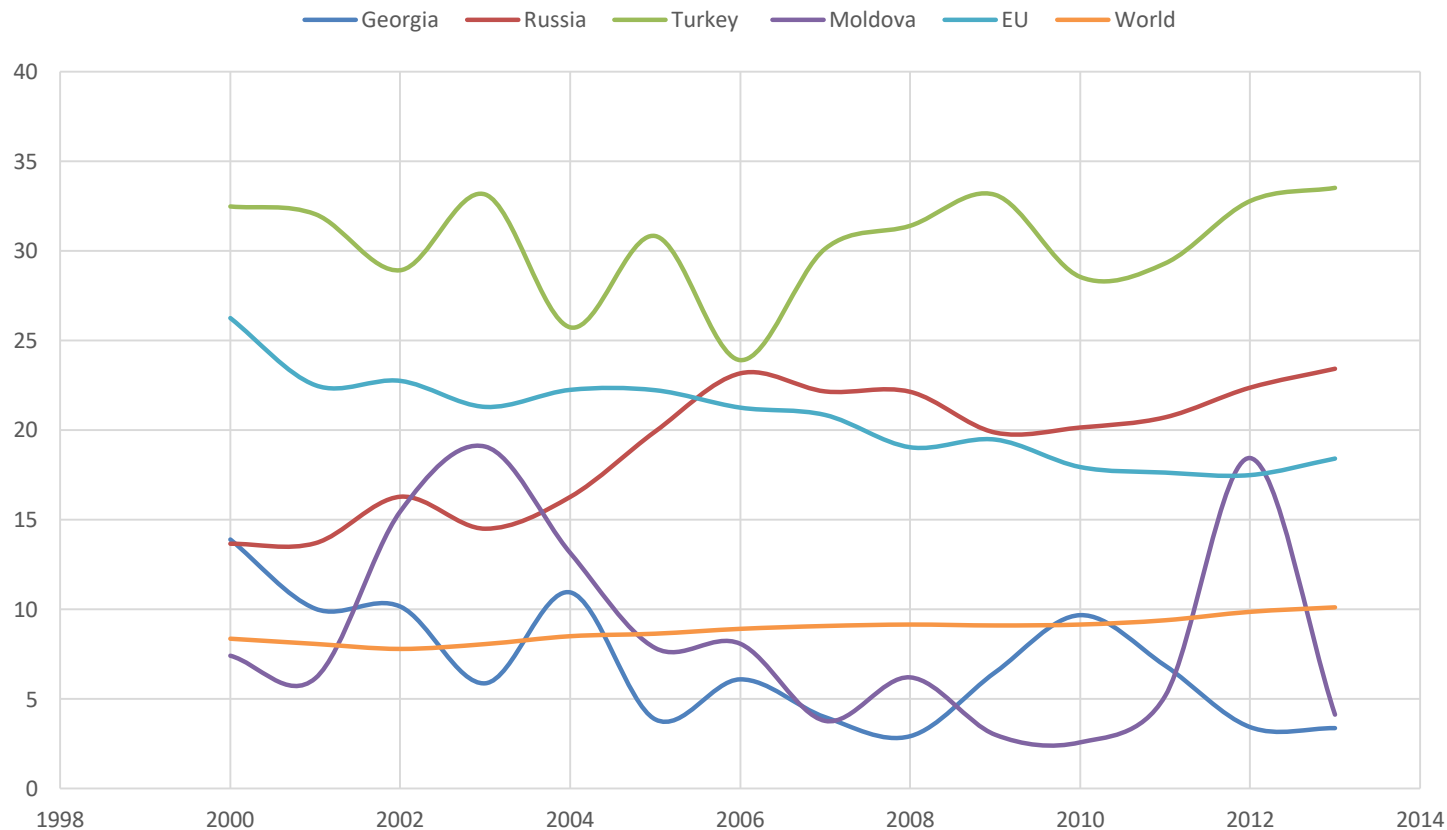
Apple 2009-2017 (MT)



MT of Fresh Apples	2009	2010	2011	2012	2013	2014	2015	2016	2017
Production	80,700.00	21,100.00	64,300.00	45,000.00	68,600.00	82,300.00	25,700.00	65,200.00	19,700.00
Import	1,539	1,314	13,900	2,900	6,100	2,624	5,213	11,562	5,900
Export	155	2,486	295	629	620	1,299	1,211	625	1,600
AJC Export (Fresh Apples)	11,669	30,639	14,301	33,460	8,617	18,725	18,249	3,458	12,579

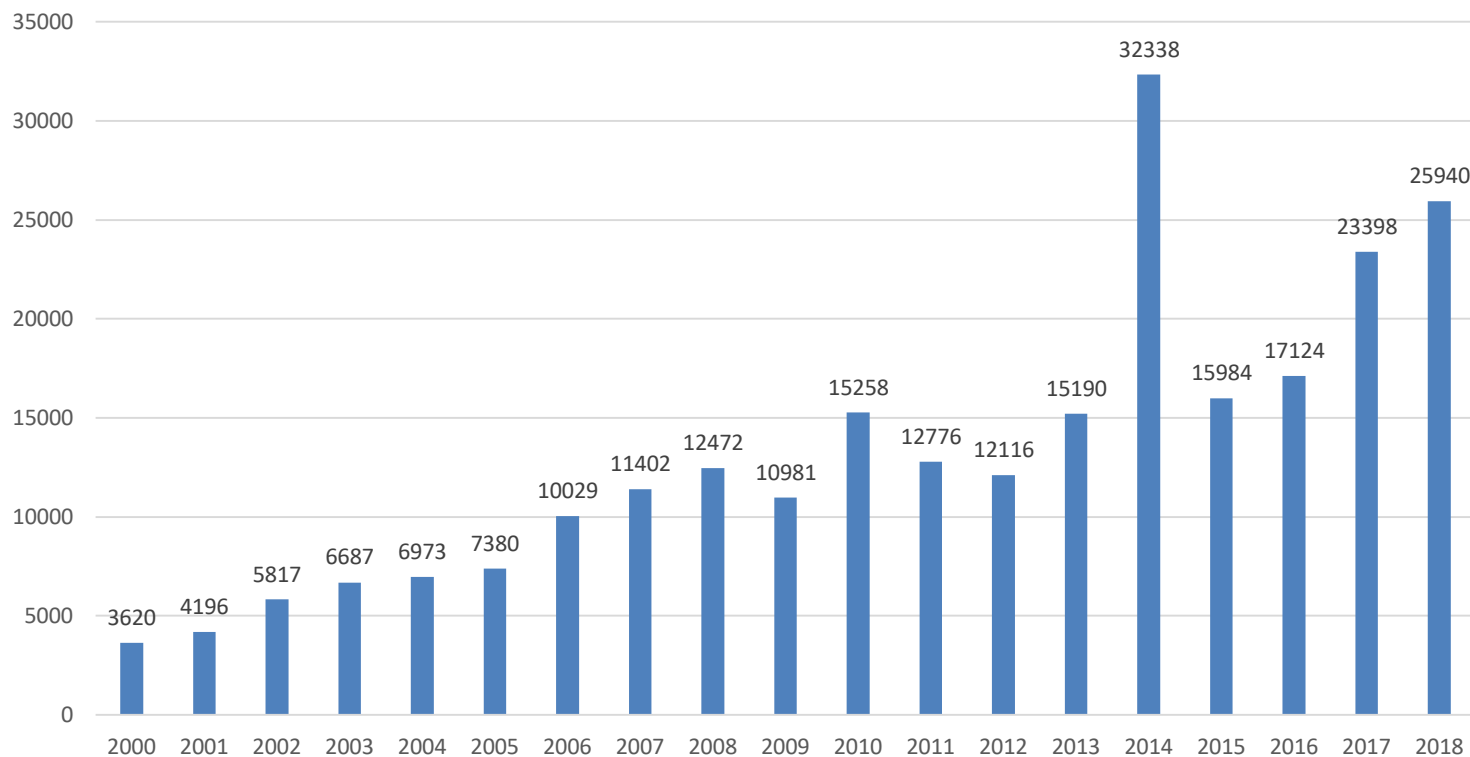
Source: Geostat.ge – Production Permanent Crops 2017, Customs Office – International Trade Data 2018.

## APPLE CONSUMPTION PER CAPITA KG



Source: FAOSTAT Per Capita Consumption of Fresh Apples

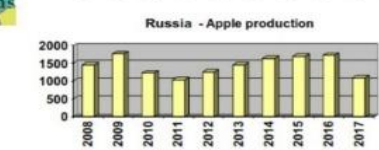
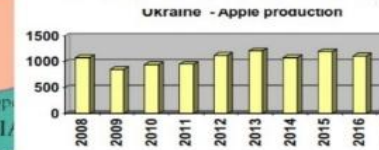
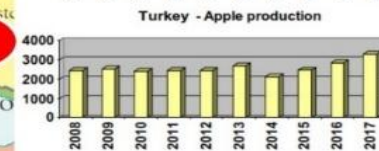
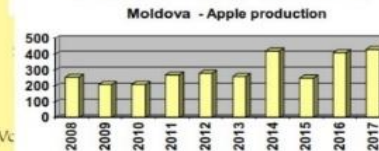
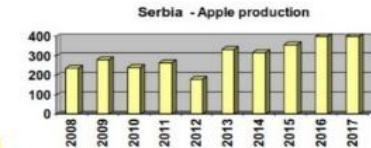
## Banana Import to Georgia MT



Source: Geostat.ge, Customs Office – International Trade Data 2018.

## Apple Production - Black Sea Countries 2017

<p><b>Serbia</b> On-going upwards adjustments of the crop staying today at 400,000 T</p>
<p><b>Moldova</b> Crop at 430.000 T Varieties Idared (115,000 T) and Golden (77,000 T)</p>
<p><b>Turkey</b> Official statistic at &gt; 3 MioT, but other sources estimated will be at 2 Mio T</p>
<p><b>Ukraine</b> At 1 Mio T (-7%), out of which close to 500,000 T to processing</p>
<p><b>Russia</b> Prod at ca 1,1 Mio T Krasnodar (400,000 T) Caucassus &amp; Central Russia (250.000T)</p>

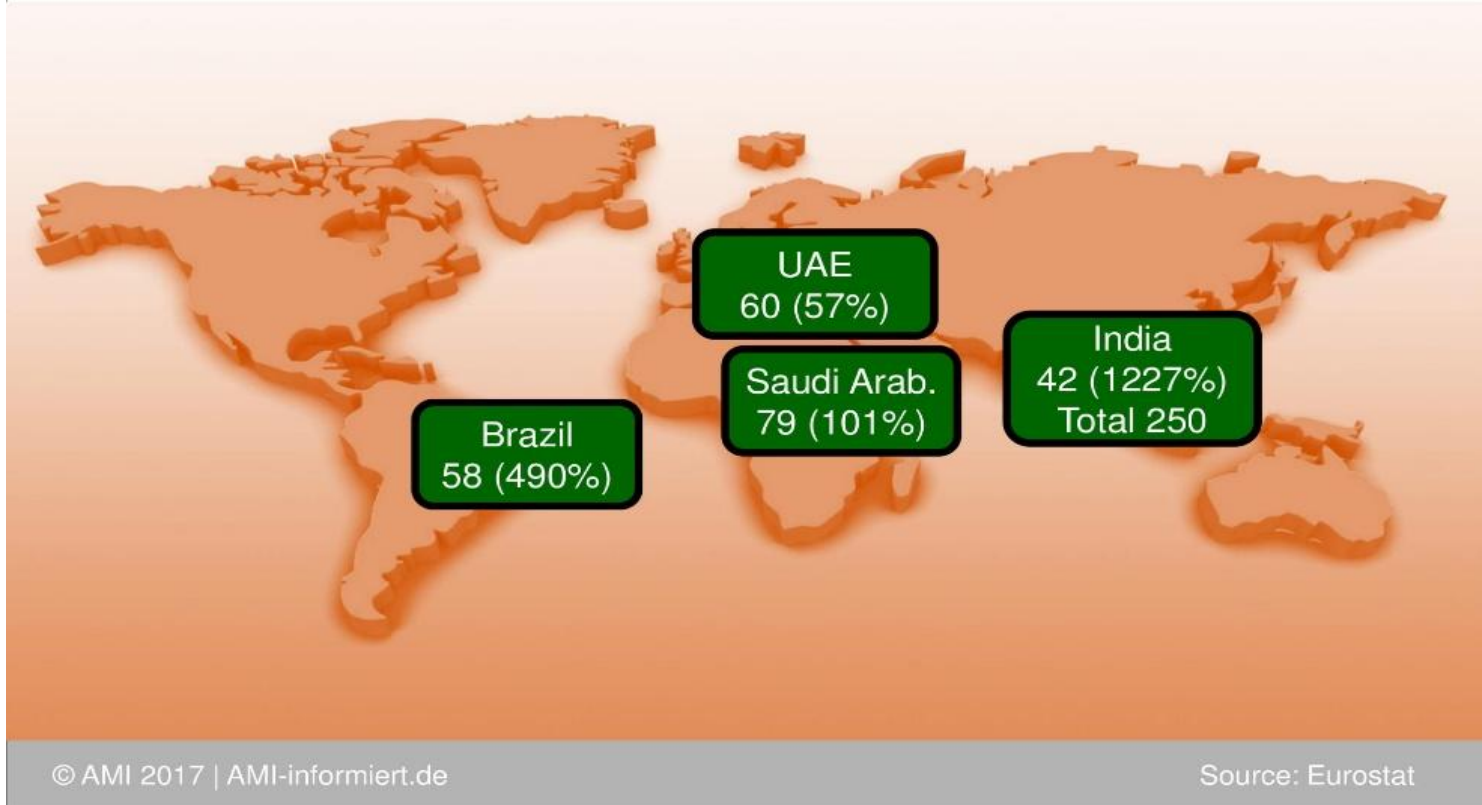


Source: AMI-Informiert.de, Euro Stat 2017.

## Apple markets of the future



EU apple exports – August 2016 till April 2017, in 1.000 t,  
% vs. 2013/14



Source: AMI-Informiert.de, Euro Stat 2017.



### Apple and Pear Import Price in United Arab Emirates (2015)

Variety	Origin	Import Price USD/kg	Size	Packaging
Granny Smith	USA	1.61	138 pcs	Ctn
Kanzi	Holland	2.53	15 kg	Ctn
Pink Rose	New Zealand	3.50	1 kg	
Royal Gala	France	1.53	115 pcs	Ctn
Granny Smith	Italy	2.38	16 kg	Ctn
Fuji Fancy	China	1.27	100 pcs	Ctn
Jazz	New Zealand	3.70	1 kg	
Snow Pear	China	2.20	1 kg	

Source: GAIN Report. Exporter Guide Annual Report for the United Arab Emirates

### India - Fresh Apples Import from Partner Countries (USD)

Partner Country	2015	2016	2017
<b>World</b>	<b>215,268,500</b>	<b>237,949,714</b>	<b>306,911,306</b>
China	30,107,652	103,873,901	121,406,387
United States	115,339,208	55,610,227	96,598,765
Chile	22,395,412	32,907,150	24,558,081
Italy	11,944,192	12,309,490	21,548,012
New Zealand	19,184,428	15,597,481	11,974,864
Belgium	4,505,578	7,778,252	9,168,074
Turkey	70,376	1,181,280	4,360,789
Poland	251,999	1,533,546	4,094,734
France	1,658,821	813,318	3,031,122
Others	9,810,833	6,345,070	10,170,478

Source: Fresh Deciduous Fruit Annual New Delhi India (2018)

# Russian Import Data

Russia Import Trade Matrix for Apples 2012-2017											
2012		2013		2014		2015		2016		2017	
Country	M/T	Country	M/T	Country	M/T	Country	M/T	Country	M/T	Country	M/T
Poland	761,000.00	Poland	545,000.00	Belarus	329,000.00	Belarus	221,892.00	Serbia	201,124.00	Moldova	260,426.00
Moldova	165,000.00	Belarus	166,000.00	Serbia	147,000.00	Serbia	198,892.00	Moldova	167,417.00	China	152,000.00
China	118,000.00	Moldova	165,000.00	China	85,500.00	China	113,923.00	China	87,795.00	Serbia	122,970.00
Azerbaijan	53,000.00	China	93,000.00	Azerbaijan	52,000.00	Moldova	57,206.00	Azerbaijan	70,767.00	Azerbaijan	75,009.00
Belarus	43,000.00	Serbia	69,000.00	Chile	25,000.00	Azerbaijan	32,558.00	Belarus	41,648.00	Iran	61,089.00
Serbia	36,000.00	Azerbaijan	34,000.00	Brazil	23,000.00	Macedonia	32,556.00	Chile	23,160.00	Turkey	47,488.00
Italy	33,000.00	Italy	28,000.00	Poland	22,000.00	Chile	23,606.00	Macedonia	14,248.00	Belarus	39,857.00
Chile	32,000.00	France	22,500.00	Moldova	21,000.00	Bosnia and Hertz	15,356.00	South Africa	13,364.00	Chile	31,316.00
Argentina	28,000.00	Chile	22,000.00	Ukraine	18,000.00	Argentina	14,734.00	Bosnia and Hertz	12,044.00	South Africa	17,924.00
Belgium	20,500.00	Belgium	22,000.00	Macedonia	14,500.00	South Africa	12,032.00	New Zealand	8,891.00	Argentina	17,468.00

Source: Fresh Deciduous Fruit Annual Moscow ATO Russian Federation (2019)

# Apple Grades/Counts per Carton

18 kg Carton Box	mm
72	90
88	85
100	80
113	75
125	72
138	70
150	65
162	62



UAE



Russia, India

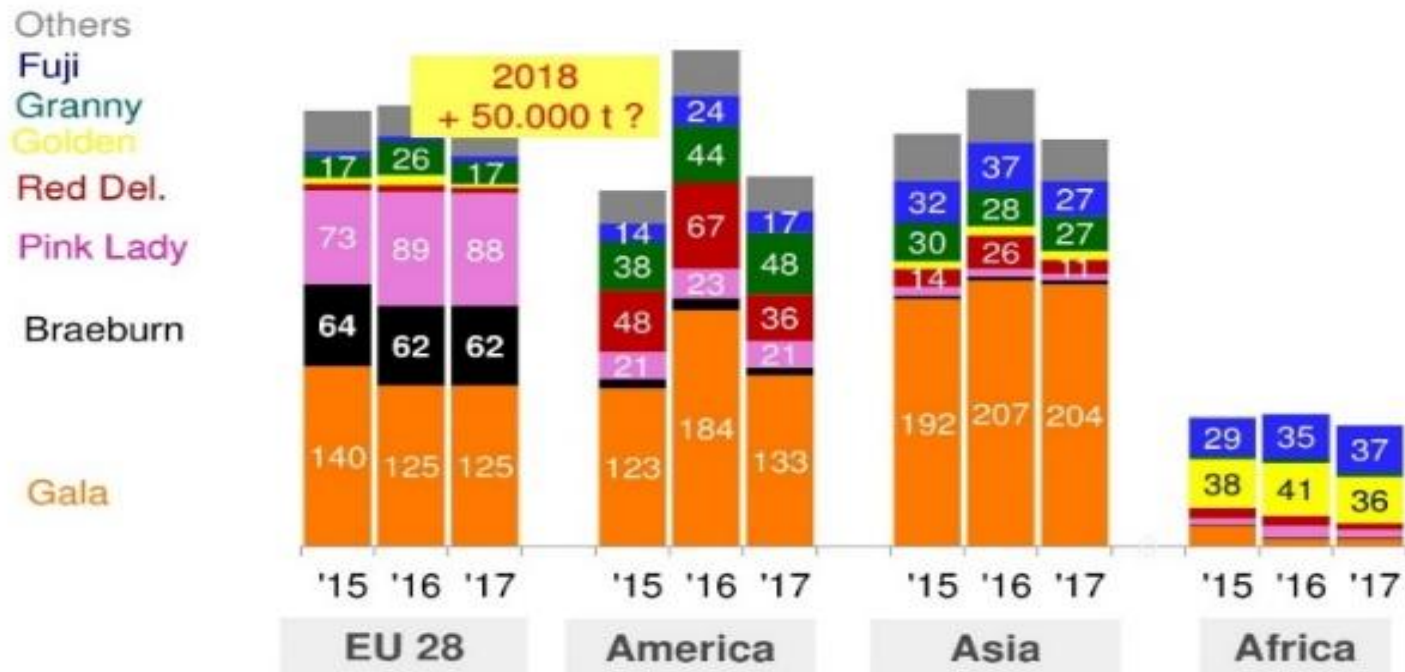


Local Market

Source: [USDA Standard Pack Size – Weight-Count Converter Chart for Fruit](#)

## Global apple markets – Switching Gala

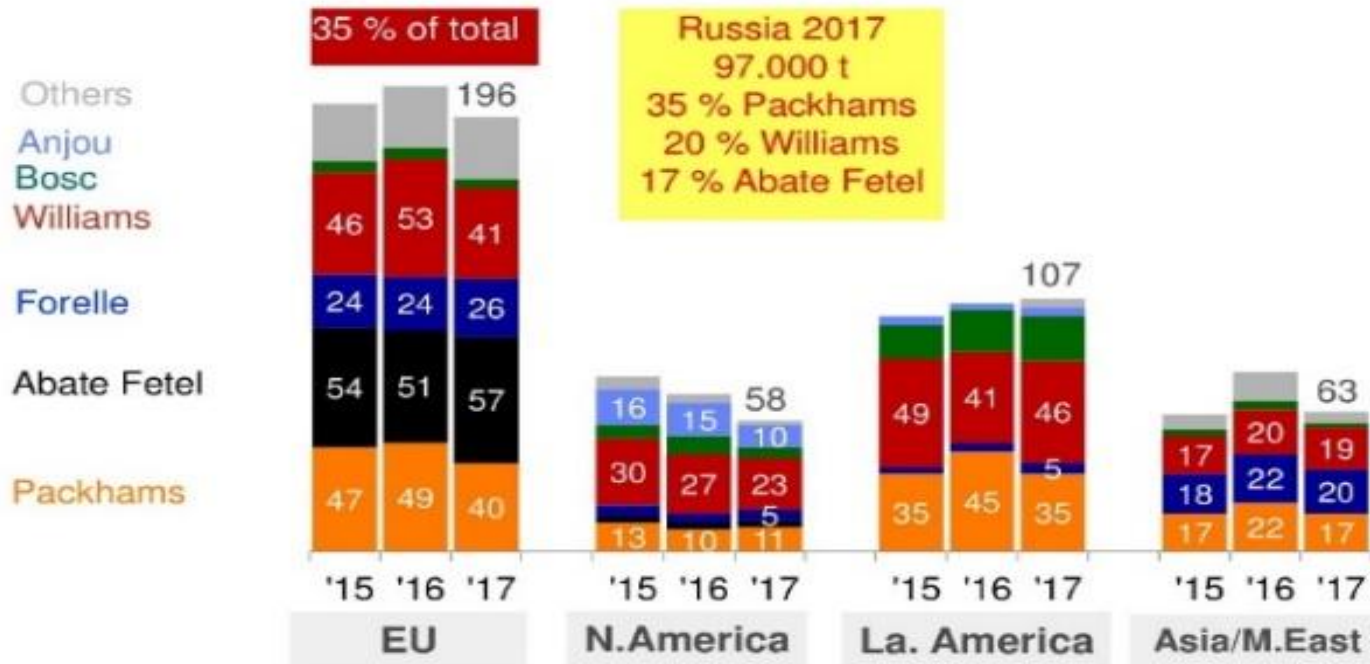
Overseas apples – Global exports until the end of July, in 1.000 t



## Global markets – Abate Fetel only for EU



Overseas pears – Global exports until the end of July, in 1.000 t



Source: AMI-Informiert.de, Euro Stat 2017.



## Key Bottlenecks

- Lack of the market information (both local and export markets)
- Old varieties not suitable for local and export markets
- Lack of modern production and post-harvest technologies (grading, sorting and cold storage)
- Fragmentation of the production and consolidation
- Lack of coordination among the producers (association)



## Risks

- High political risks on the potential export market (Russia)
- Internal risks associated with the moratorium on agriculture land privatization by the foreigners (limited FDI)
- Consolidation of the Wholesale and Retail Operations all around the world
- Lack of Certified Nursery Operations
- Local and Export Markets Saturation





## Opportunities

- Introduction of market oriented varieties (including new and early varieties that have demand on the local market)
- Strong marketing communication on the target markets (story-telling) with attention for the added value of Georgian apples, such as its taste.
- Vertical integration in the value chain using the coops structure (marketing coops)
- Organic certification would have added value as well.



## Recommendation

- Development and update of the market information, including export and local market analyses (using [www.east-fruit.com](http://www.east-fruit.com); [www.freshplaza.com](http://www.freshplaza.com))
- Support with introduction of the new demanded varieties and intensive orchards
- Support farmer groups, marketing coops, contract farming arrangements
- While supporting the primary production (Plant the Future), consolidate efforts on post-harvest handling and storage technologies (it should go in a package with the orchard or be part of the marketing coop).



## Recommendation

- Identification of the export markets and import substitution using proper market segmentation strategies
- Revision of the land privatization moratorium in order to increase the FDI
- Support certification of the nurseries (high quality certified seedlings)



## Recommendation

- Old orchards that need to be renewed - 9,000 ha
- New varieties should be introduced
- Cost of this process on 500 ha a year
  - Dwarf – 19,5 million GEL (USD 7,5 million)
- Cold storage facilities need minimum 14,000 metric tons
- Investment costs – up to 37 million Gel (USD 14 million)



## Apple Orchard and Post-harvest handling Facility Investment and Financials

Investment - USD 368,000

10 hectares of Dwarf Apple Orchard – USD 150,000

Sorting, grading facility and Cold Storage (250)  
facilities – USD 218,000

Investment Period 8 Years

Internal Rate of Return – 30%



**Thank You!**