



# Food & Agriculture in Turkey

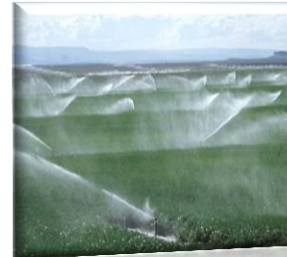
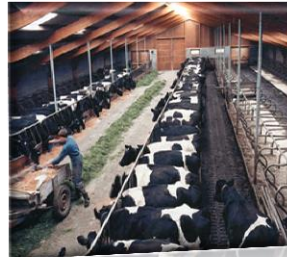
REPUBLIC OF TURKEY PRIME MINISTRY  
INVESTMENT SUPPORT AND  
PROMOTION AGENCY



**YOUR ONE-STOP-SHOP  
IN TURKEY**

[invest.gov.tr](http://invest.gov.tr)

March 2014



## Disclaimer

***McKinsey Danışmanlık Hizmetleri Limited Şirketi*** supported Investment Support and Promotion Agency of Turkey (ISPAT) on the fact base and analysis for this document. The document was prepared within the scope of the Service Procurement Agreement for Strategic Sector Reports signed between ISPAT and ***McKinsey Danışmanlık Hizmetleri Limited Şirketi***.

*ISPAT gives no assurances or guarantees about the information in the report. The report can not be used without the written permission of ISPAT.*



# Executive Summary

- ❖ This report provides insights into agriculture, food and livestock industries and provides information and statistical analysis of Turkey
- ❖ Turkey has a large and growing food and agriculture industry that corresponds to 9% of the overall GVA and 25% of the employment levels in the country
- ❖ With growing exports, Turkish industry has ~5bn USD trade surplus
- ❖ As part of its targets set for agriculture sector, by 2023 Turkey aims to be among top 5 producers globally
- ❖ Turkey has further growth potential due to its large and growing domestic markets
- ❖ This potential positions Turkey to be among the top options for being the regional HQ and supply center of top global players
- ❖ Turkey offers a set of enablers for potential agriculture investors; Turkish government support measures include regulations, tax structure, competitive and low-cost labor force and investment incentives
- ❖ Several agribusiness subsectors potential:
  - Fruits and Vegetables processing
  - Animal Feed
  - Livestock
  - Dairy
  - Functional Food
  - Enablers (e.g. Cold Chain, Greenhouse)



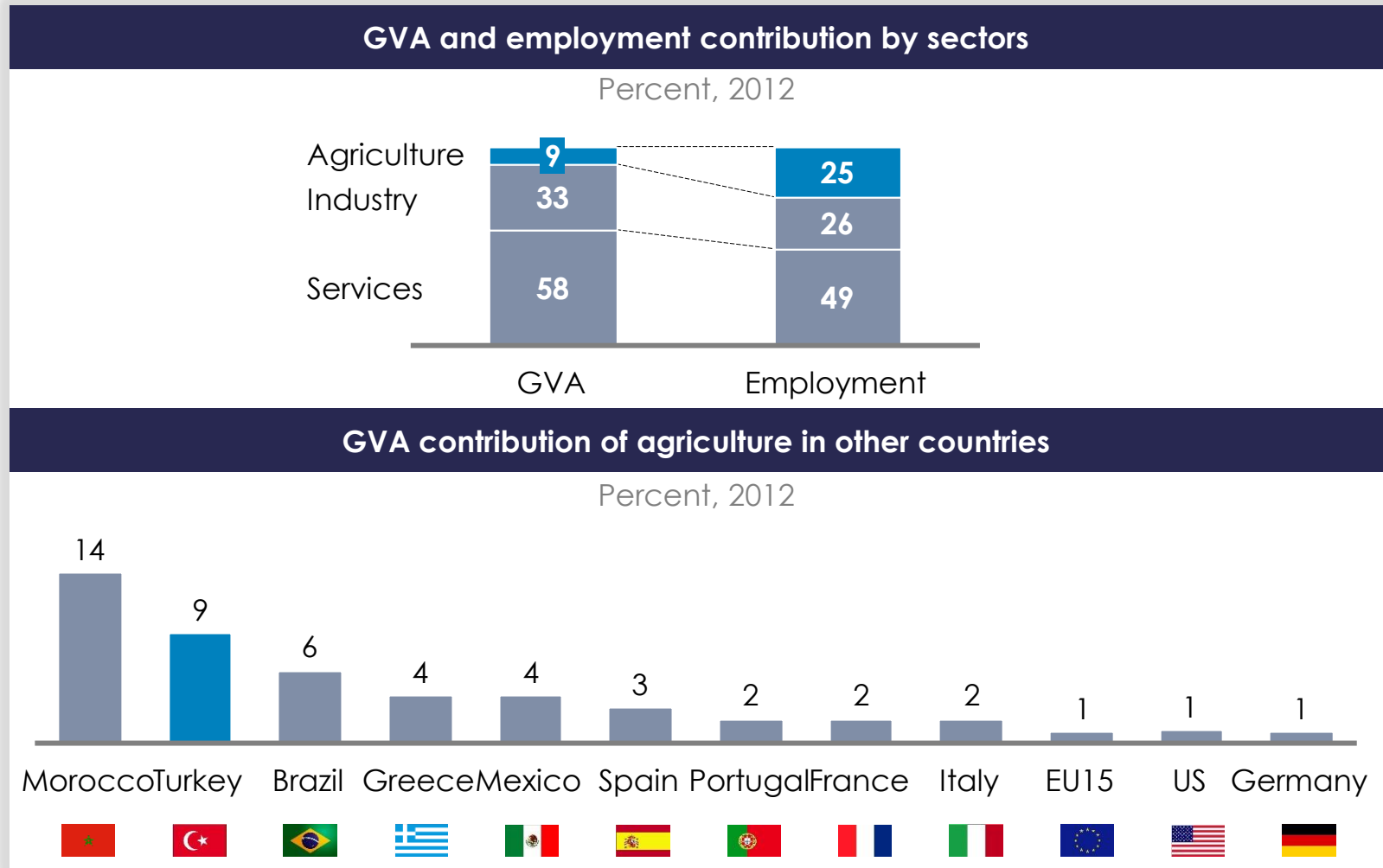
# Contents

## ❖ **General overview**

- ❖ Market status
- ❖ Competitiveness of Turkey
- ❖ Business opportunities in sub-sectors



# Agriculture is a major source of employment in Turkey with high GVA contribution



<sup>1</sup> Services include trade, transport and communication services, business and financial services, other services

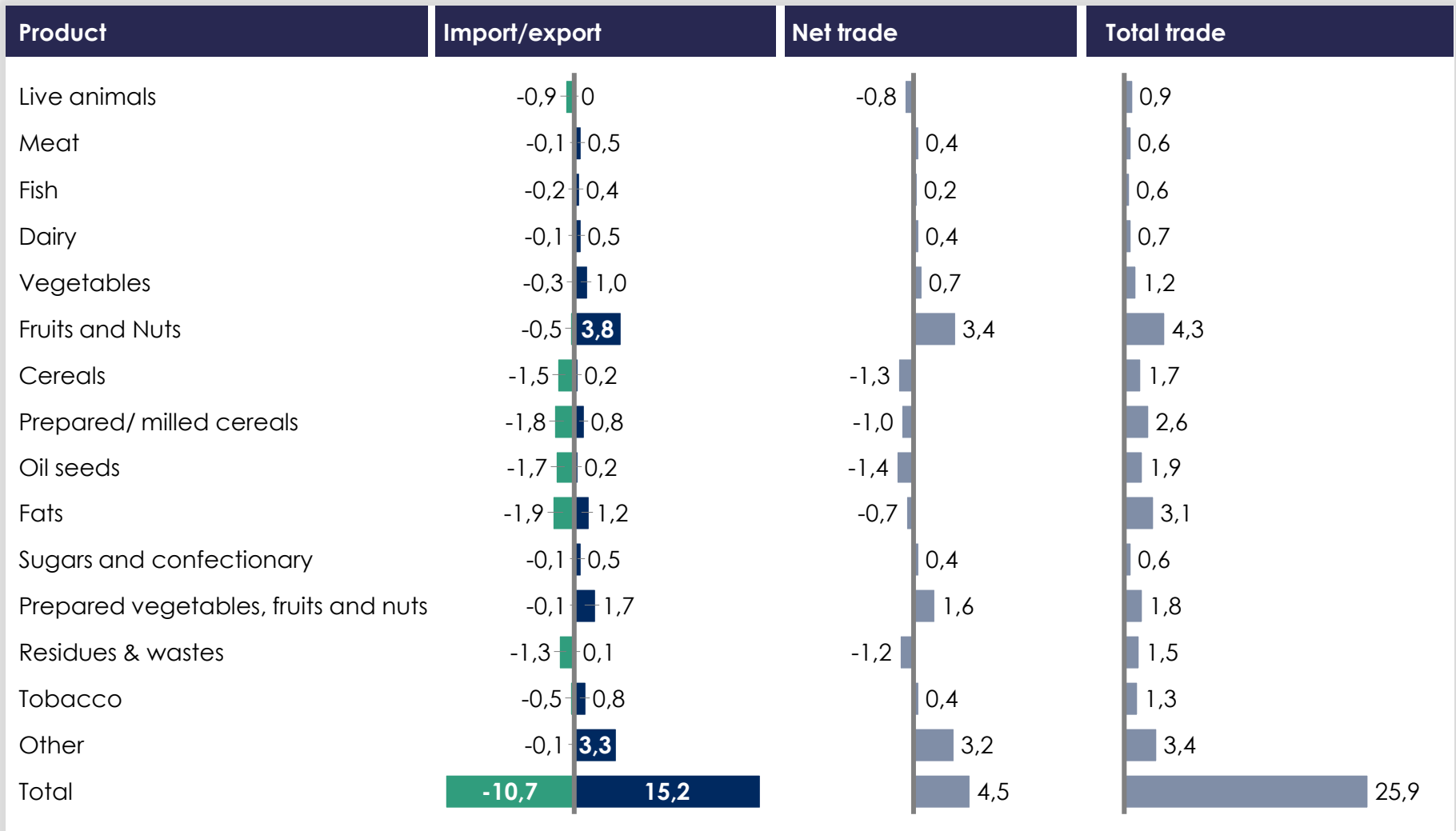
Source: World Bank, Turkstat



# Turkey has positive net trade from agribusiness

USD billions, 2012

■ Import  
■ Export



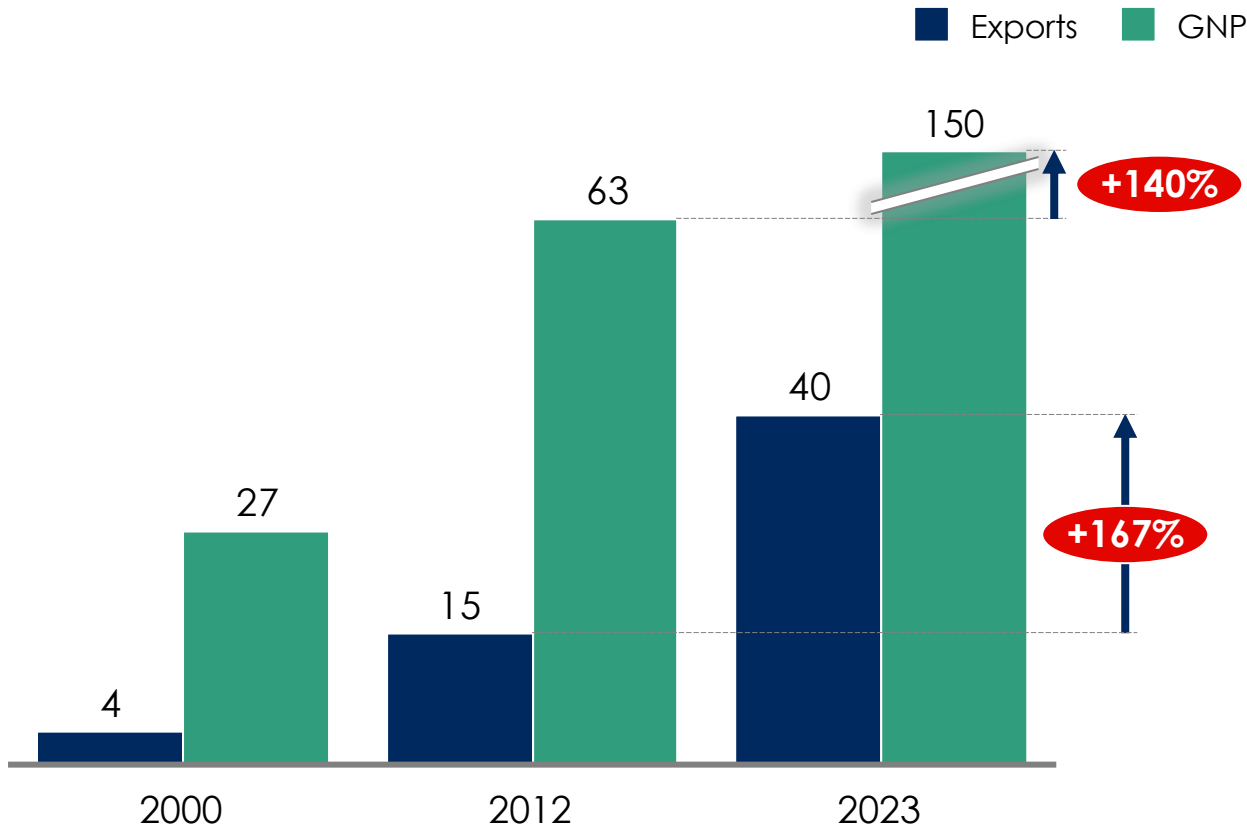
Source: United Nations COMTRADE database, DESA/UNSD

Investment Support and Promotion Agency of Turkey

# As part of its targets set for agriculture sector, by 2023 Turkey aims to be among top 5 producers globally

## GNP and exports of Turkish agriculture sector

USD billions



- ❖ Within 10 years, ~1.5 folds increase in both GNP and exports are targeted
- ❖ Turkish agriculture industry aims to be among top 5 globally



Source: Ministry of Agriculture, Food and Livestock

Investment Support and Promotion Agency of Turkey

# Contents

❖ General overview

❖ **Market status**

❖ Competitiveness of Turkey

❖ Business opportunities in sub-sectors





# Turkey is becoming an important player for food and agriculture in EMEA

## Land and irrigation characteristics

- ❖ Agriculturally self-sufficient with climate suitable for agriculture, large arable lands and sizeable water supplies
- ❖ Southeastern region offers very fertile and well-irrigated lands

## Local and regional demand

- ❖ Food demand grew by 14% p.a. in 2007-2012 and forecasted to maintain growth at 6% over 2012-2017E
- ❖ Sales channels already in place – modern trade at 42% in 2011, keeps rising (expected to be 60% by 2016)
- ❖ Exports to EMEA grew ~4.5x in 2000-2012. For select products (e.g., tomatoes and poultry) Turkey has high share in the regional trade

## Regional HQ and supply center of top global players

- ❖ Becoming a favored HQ location for the region
- ❖ Coca-Cola, Nestle, Danone and Ferrero are among the successful players in Turkey
- ❖ Domestic and foreign investments increasing in food and agriculture



# Overview of Turkish agricultural sector

## Sector evaluation

### Industry dynamics

- ❖ Dominated by subsistence farming but rising **professional enterprises** expected to increase sector **efficiency** & total GVA contribution
- ❖ **Suitable agroclimate conditions** and **fertile lands**

### Growth potential

- ❖ High potential due to **growing population coupled with urbanization**

### Regulatory environment

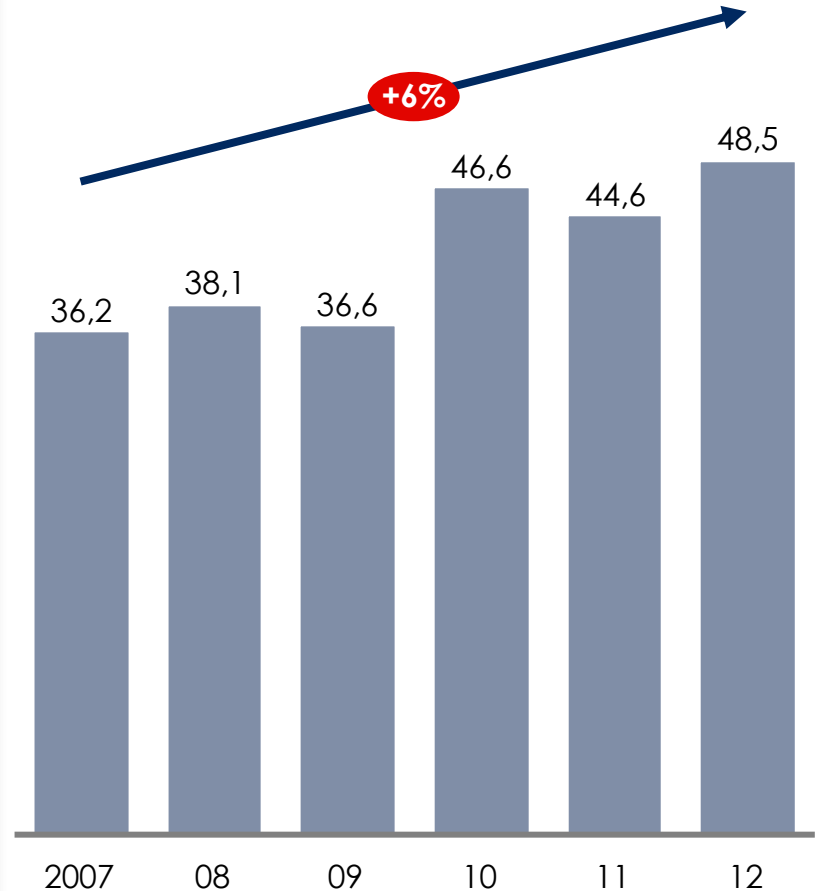
- ❖ Increased regulatory control for **quality and performance improvement**
- ❖ Increasing incentives for efficient and **large scale investments**

### Investment environment

- ❖ Recent sizeable **private sector investments**

## Industry development

### GDP of the industry<sup>1</sup> (nominal) EUR Billion



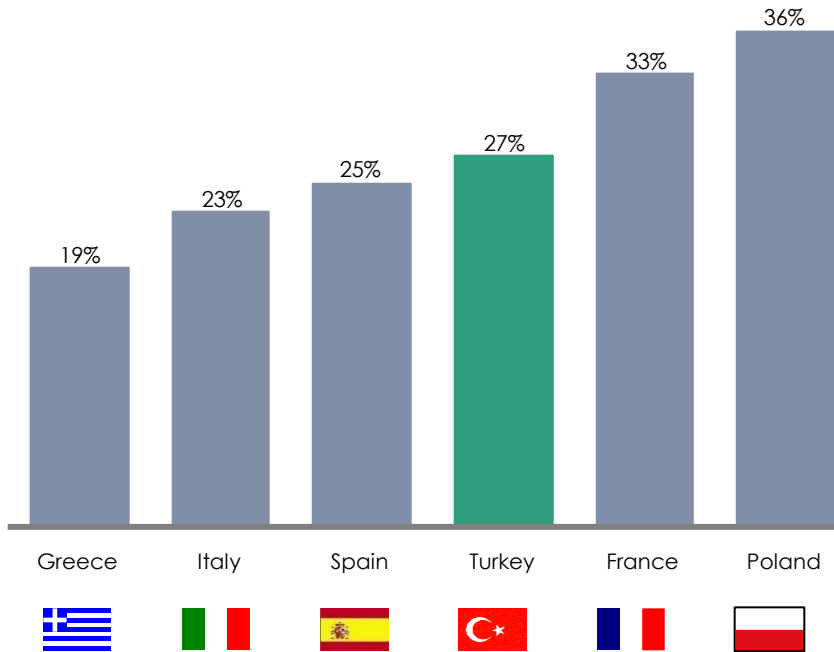
<sup>1</sup> Figures taken from Turkstat, GDP by production method  
Source: Global Insight, press search, Undersecretariat of Marine Affairs



# Land and irrigation conditions for agriculture producers in Turkey

Turkey has a larger share of arable land in comparison to some major European countries

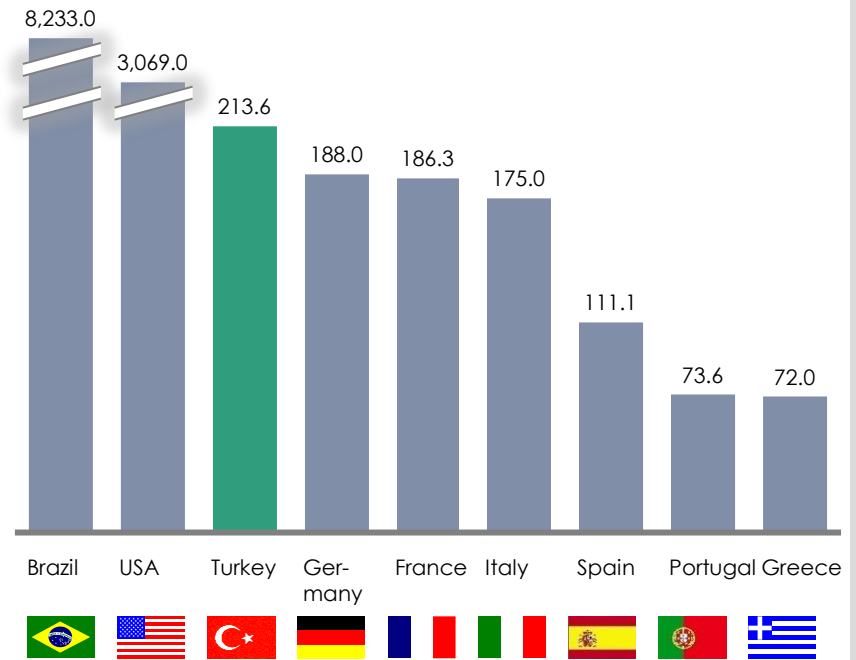
Arable land ratio



Turkey is in a better position in terms of fresh water resources compared to some major European countries

Breakdown of world's fresh water resources<sup>1</sup>

Cu Km



<sup>1</sup> Includes vegetables and land under cultivation

Source: Turkstat



# GAP<sup>1</sup> region offers substantial potential to increasing arable land in Turkey

## GAP: A project to develop fertile lands

### Project description

- ❖ GAP is a project that includes a set of **investments to underdeveloped South East region** of Turkey
- ❖ The investments are largely related to **agribusinesses**
- ❖ 2005 estimates of the project cost is **USD32B**

### Irrigation potential

- ❖ GAP region holds 20% of Turkey's irrigable lands and 28% of Turkey's freshwater resources
- ❖ GAP region holds **1.8K hectares irrigable and high/medium quality arable lands**

### Agriculture opportunities

- ❖ GAP is the largest ever land consolidation<sup>2</sup> project in Turkey with a total of **3.2 million hectares of cultivable land**
- ❖ Very **fertile lands**, carrying opportunities for large investments in areas of oil seeds, fruits and vegetables and organic farming

## GAP Region



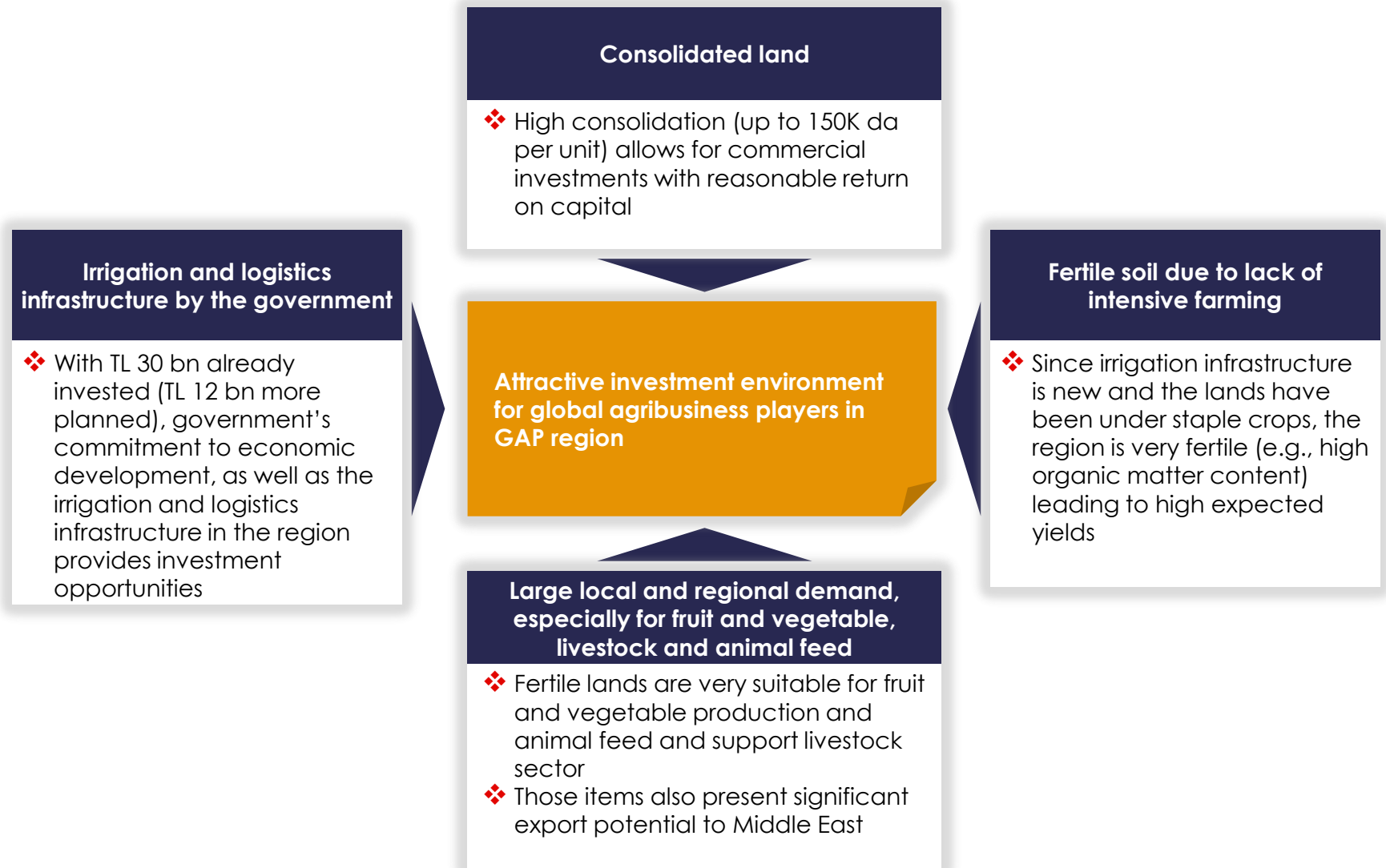
<sup>1</sup> Acronym for South-Eastern Anatolia Project in Turkish, a multi-sector integrated regional development project

<sup>2</sup> Planned readjustment and rearrangement of land parcels and their ownership

Source: GAP BKI



# Potential opportunities offered by GAP<sup>1</sup> for global agri-business players



<sup>1</sup> Acronym for South-Eastern Anatolia Project in Turkish, a multi-sector integrated regional development project

Source: Expert interviews



# Turkey has sizeable and growing food and beverages subsectors

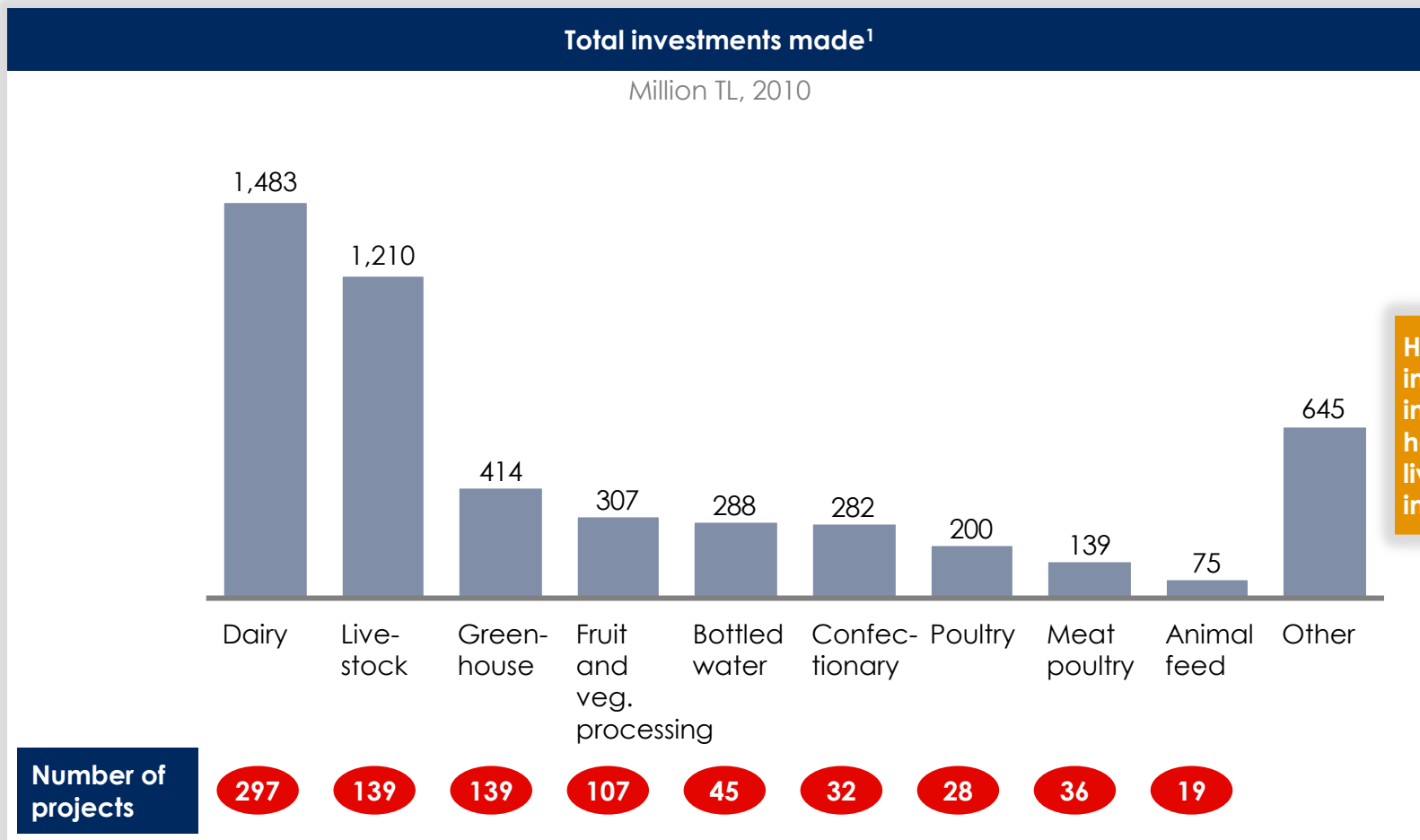


<sup>1</sup> The Euromonitor International data used for this presentation is from the annual research conducted in the first half of 2012 and published in the summer of 2012. A new annual research edition has been published since with 2013 data and analysis

Source: Turkstat, Euromonitor International



# Livestock and Dairy were the top areas in Turkey agriculture, livestock and food investments<sup>1</sup> in 2010

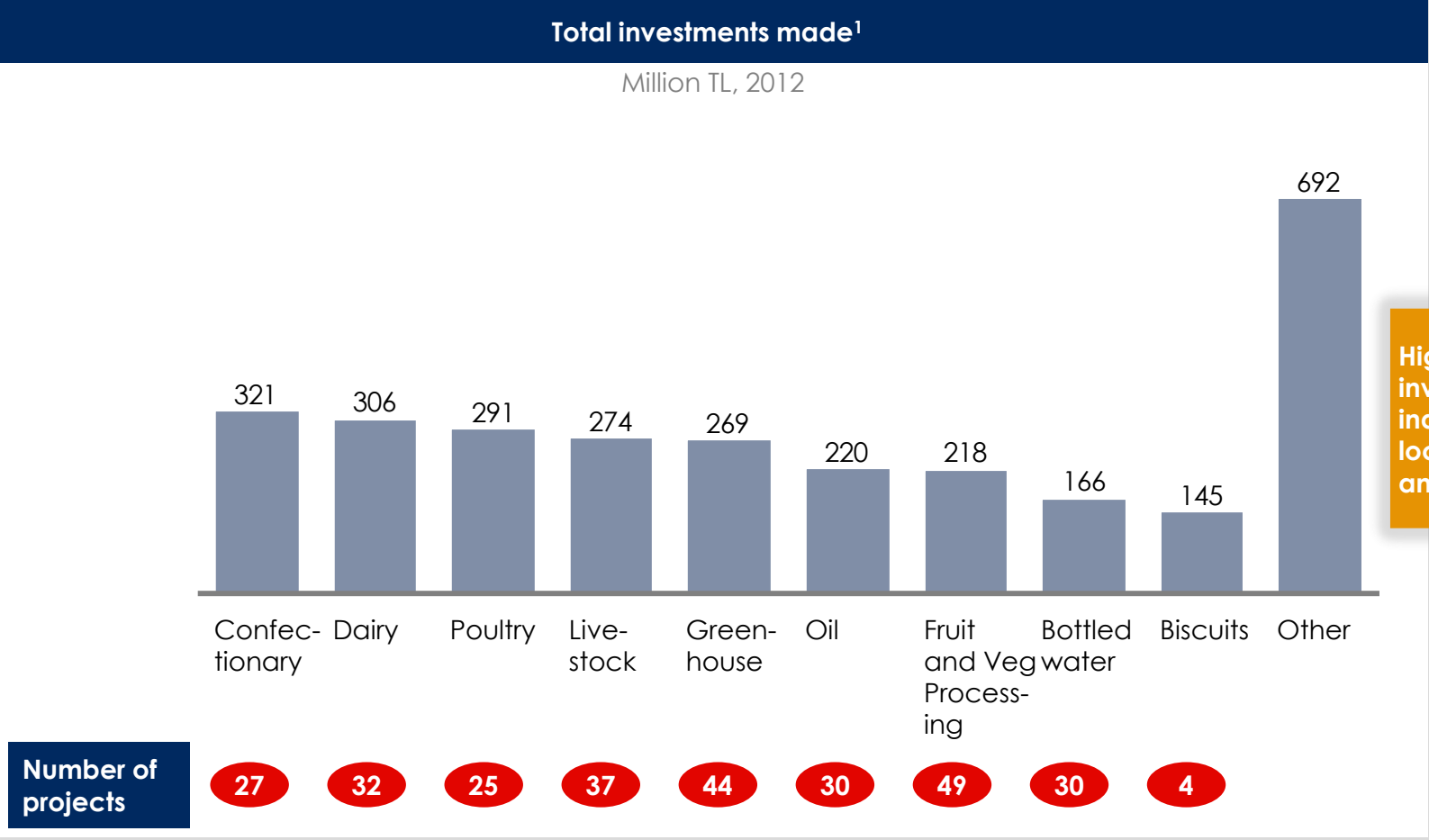


High investment incentives (0% interest credits) have boosted livestock investments

<sup>1</sup> Investments that have received Ministry of Economy supports are accounted  
Source: Ministry of Economy reports



# Investments are diversified into different subsectors in 2012, yet livestock and related sectors are still dominating in Turkey agriculture, livestock and food investments<sup>1</sup>



High livestock investments indicate growing local interest for animal products

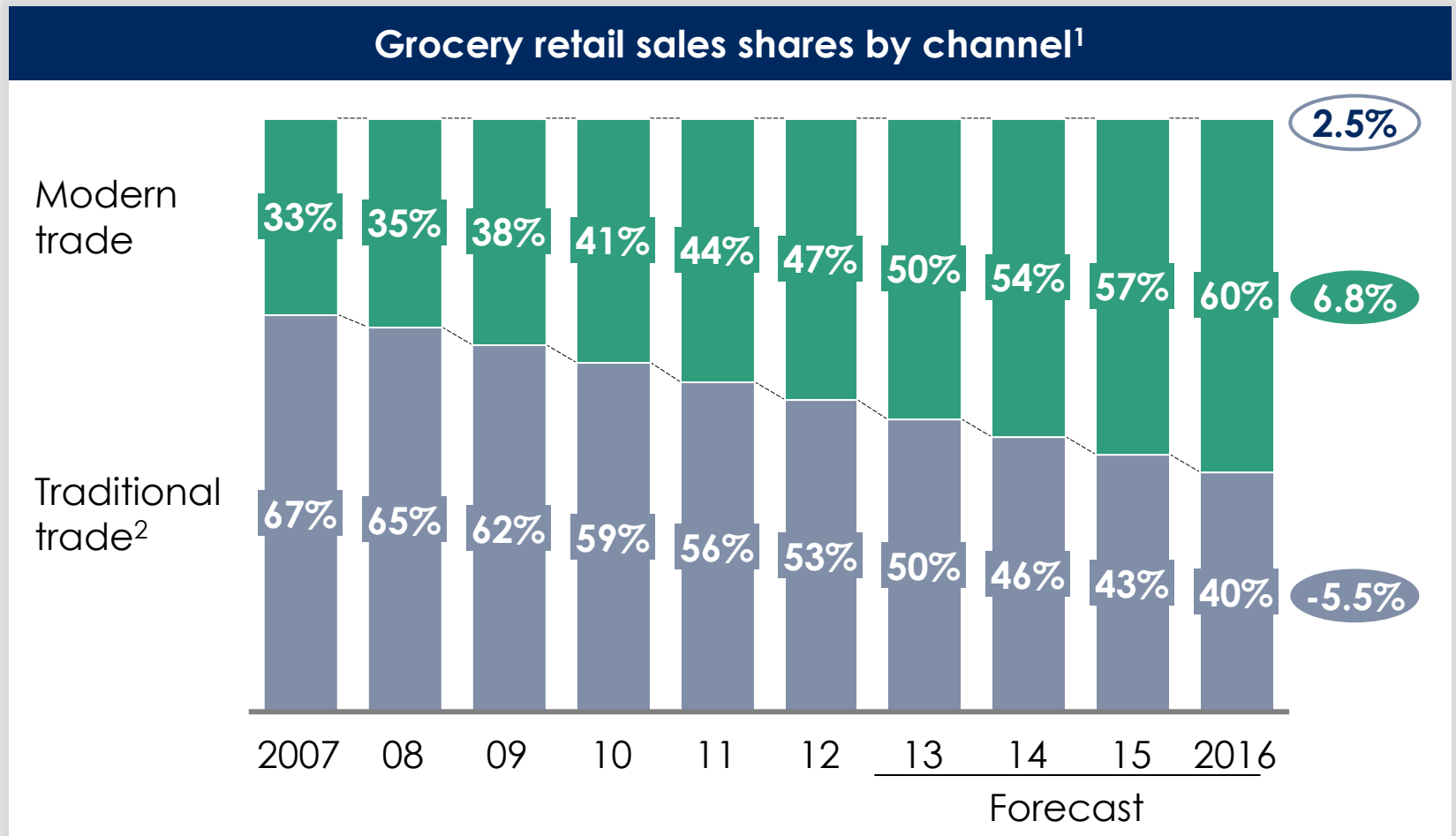
**Number of projects**



<sup>1</sup> Investments that have received Ministry of Economy supports are accounted  
Source: Ministry of Economy reports



# Modern trade is growing share in retail, XX CAGR 2007-16% providing large scale channels for food companies



<sup>1</sup> The Euromonitor International data used for this presentation is from the annual research conducted in the first half of 2012 and published in the summer of 2012. A new annual research edition has been published since with 2013 data and analysis

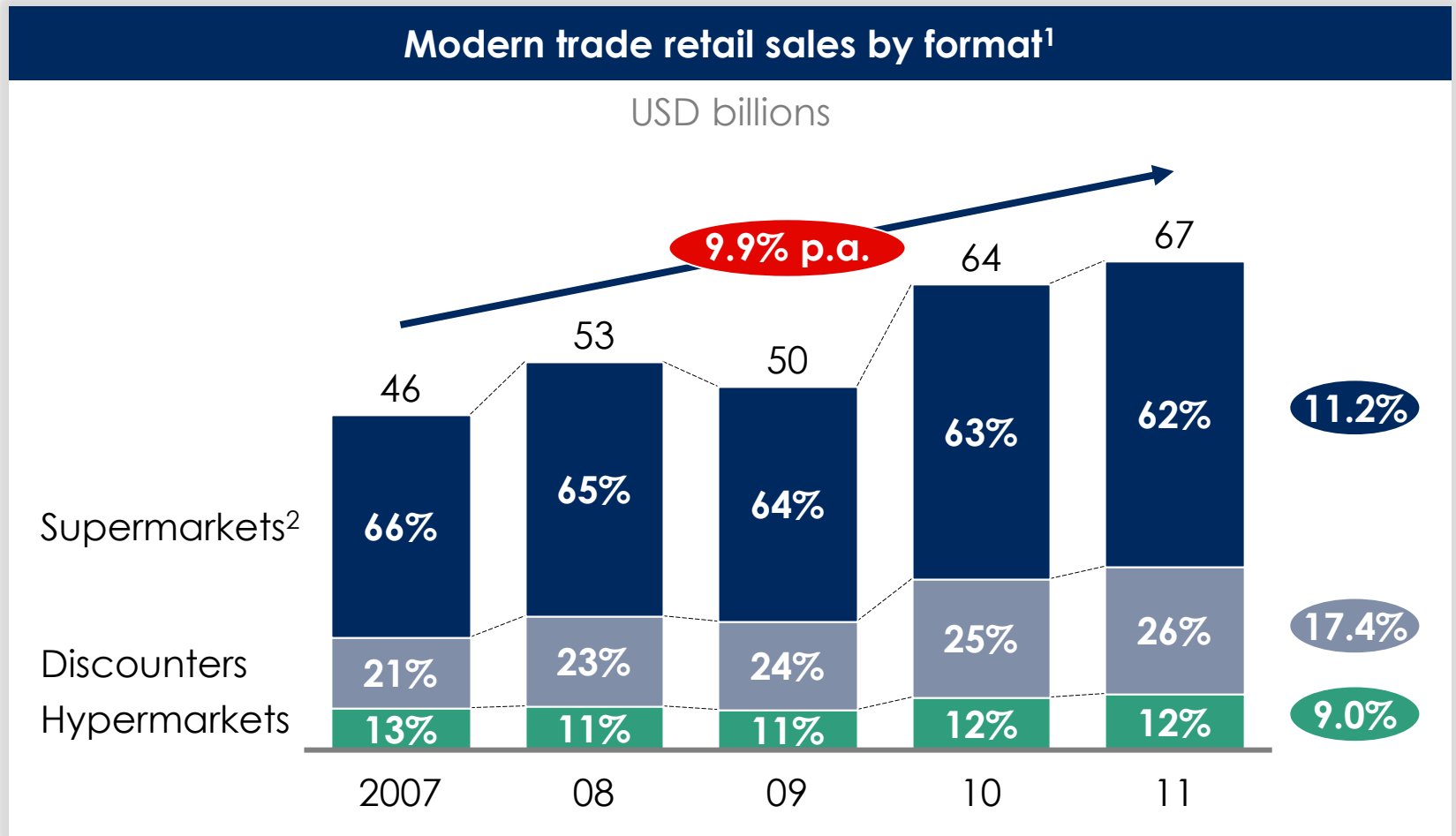
<sup>2</sup> Includes stand alone formats such as mom and pop shops

Source: EIU; Euromonitor International



# Supermarkets and discounter stores are the main drivers of growth in modern trade

XX CAGR 2007-11 %



<sup>1</sup> The Euromonitor International data used for this presentation is from the annual research conducted in the first half of 2012 and published in the summer of 2012. A new annual research edition has been published since with 2013 data and analysis

<sup>2</sup> Including superstores

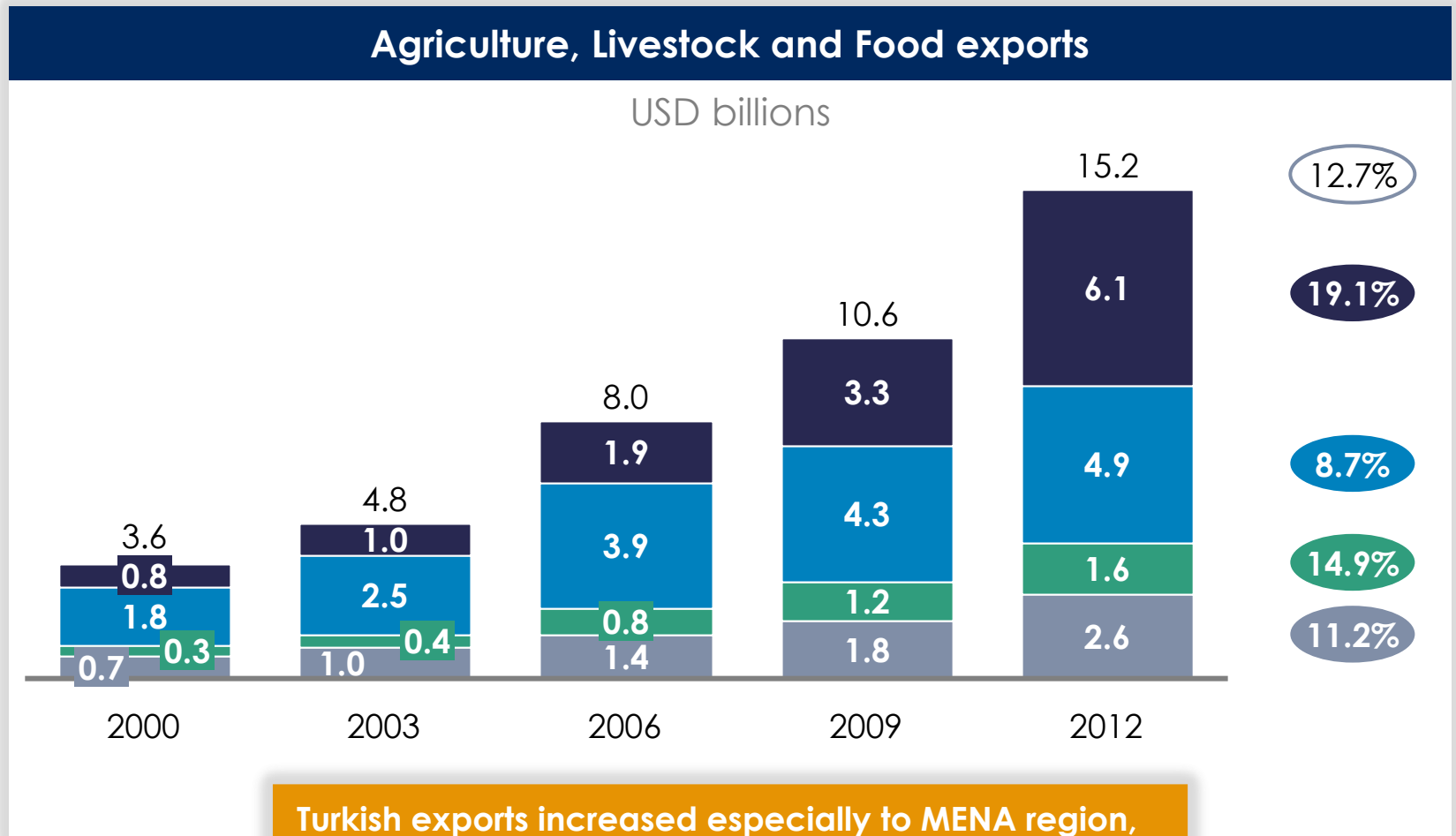
Source: Euromonitor International



# Turkish agriculture, livestock, and food exports are growing

XX CAGR 2000-12%

■ MENA ■ EU ■ CIS ■ Other



Turkish exports increased especially to MENA region, where Turkey is becoming a regional supply center

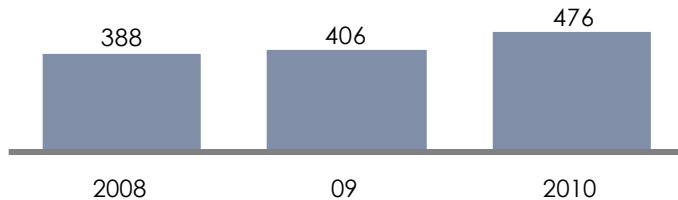


Source: Turkstat; United Nations COMTRADE database, DESA/UNSD

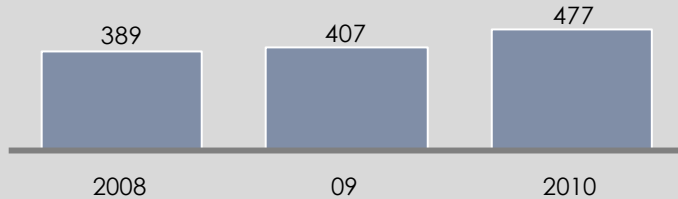
# Turkey is an important fruit and vegetable producer and leads trade of tomatoes in some regional markets

## Turkey has positive net trade and growing exports in tomatoes ...

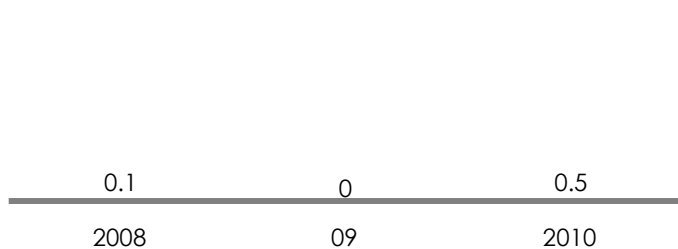
### Net trade USD million



### Exports USD million



### Imports USD million



## ... and is the leading exporter to its prime markets in its region

2010, millions USD, percent



### Top Exporters

Export, USD mln

Share in imports

Unit price, USD/kg

#### Russia

Country	Export (USD mln)	Share in imports (%)	Unit price (USD/kg)
Turkey	248.0	47%	0.82
Lithuania	54.7	10%	1.83
Ukraine	37.4	7%	0.69
Other	187.3	36%	

#### Bulgaria

Country	Export (USD mln)	Share in imports (%)	Unit price (USD/kg)
Turkey	65.1	86%	0.99
TFYR of Macedonia	3.4	5%	0.36
Jordan	2.9	4%	1.41
Other	4.6	6%	

#### Romania

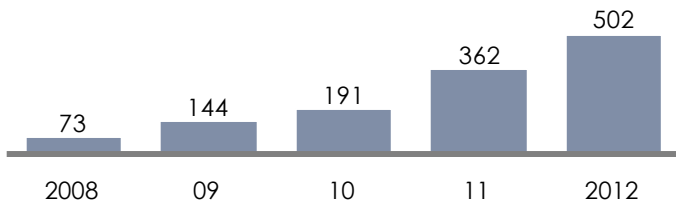
Country	Export (USD mln)	Share in imports (%)	Unit price (USD/kg)
Turkey	42.5	61%	0.95
Italy	7.7	11%	1.15
Jordan	6.0	9%	1.41
Other	13.7	20%	

Source: United Nations COMTRADE database, DESA/UNSD

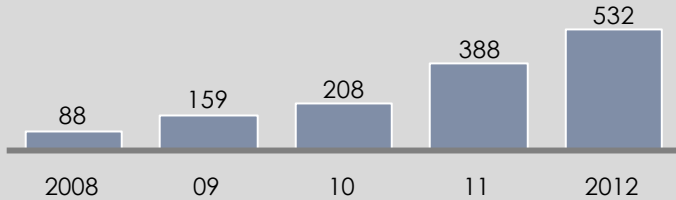
# Turkey is one of the leading exporters of poultry to important Middle East and North African markets

## Turkey has a significant trade surplus in poultry...

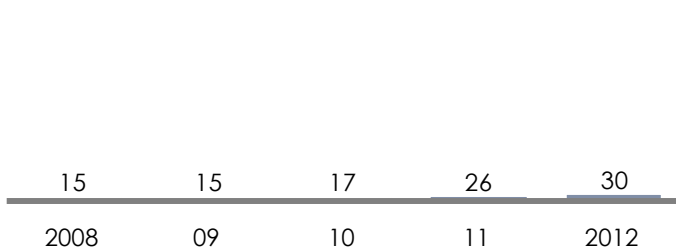
Net trade  
USD million



Exports  
USD million

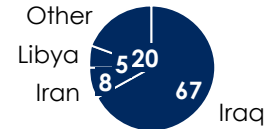


Imports  
USD million



## ... and is already competing with global poultry producers in target markets

2012, millions  
USD, percent



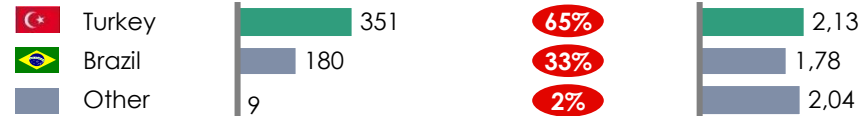
### Top Exporters

### Export value

### Share in total imports

### Unit price, USD/kg

#### Iraq



#### Iran

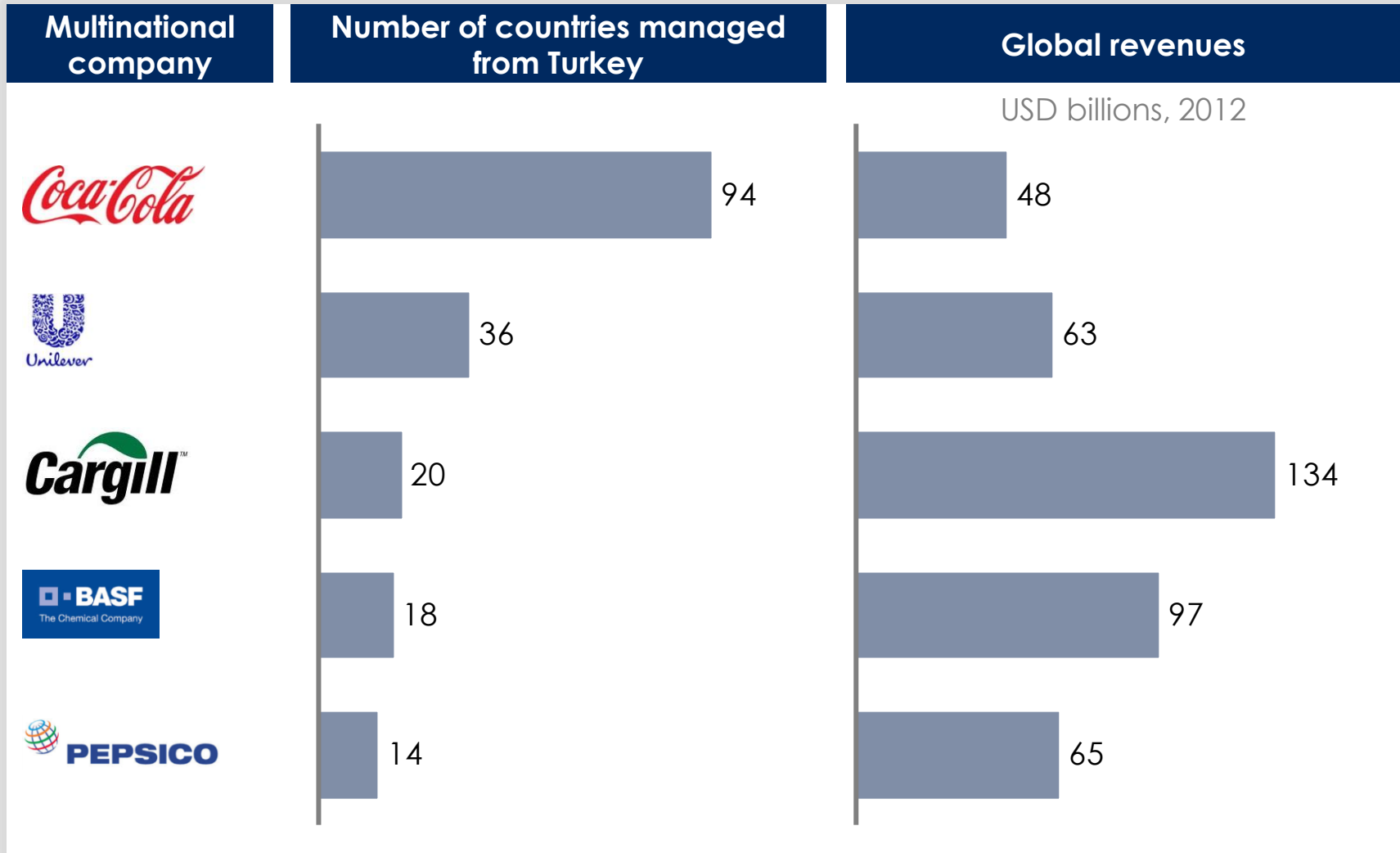


#### Libya






Source: United Nations COMTRADE database, DESA/UNSD

# Turkey serves as the regional HQ for some key global agriculture and food players



Source: Company websites




## There are several examples of international players investing into Turkish food and beverages sector

	Description	Key facts/Comments
	<ul style="list-style-type: none"> <li>❖ UK-based spirits giant Diageo has acquired Turkish Mey İçki Sanayii, top Turkish spirits company</li> <li>❖ Mey İçki has privatized Tekel, the spirits state monopoly, which has brought the legacy and 80% market share</li> </ul>	<ul style="list-style-type: none"> <li>❖ \$2.1B investment for Turkish market, which Diageo was present only through distribution</li> <li>❖ The acquisition was part of Diageo's growth strategy on developing economies</li> </ul>
	<ul style="list-style-type: none"> <li>❖ World-class chocolate company Ferrero has made a greenfield investment in chocolate and sugar confectionary</li> <li>❖ The company has invested in an organized industrial zone in Manisa, near Izmir harbor</li> </ul>	<ul style="list-style-type: none"> <li>❖ Ferrero has invested EUR 95M for production in Turkish market; however investments are planned to be expanded in order to start production for exports</li> </ul>
	<ul style="list-style-type: none"> <li>❖ Leading global agribusiness company Olam has acquired Turkish hazelnut company Progida Group</li> <li>❖ Olam will process Turkish hazelnuts, which provides 75% of world consumption</li> </ul>	<ul style="list-style-type: none"> <li>❖ Olam has expanded their lines of nut businesses in Turkey, namely walnuts and almonds, with this deal of \$37M value</li> <li>❖ Olam has further plans to invest in cotton and pasta production</li> </ul>



Source: Capital magazine, press search, expert interviews

## Several large scale investments by local players indicate growing private sector interest in agriculture

	Description	Key facts/Comments
	<ul style="list-style-type: none"> <li>❖ Initiated as a project in 2012, Pinar Sut has invested in Sanliurfa in GAP<sup>1</sup> region and opened a dairy production facility in 2013</li> <li>❖ The company aims to produce milk, and also produce milk products, yoghurt, ayran and fruit juice</li> </ul>	<ul style="list-style-type: none"> <li>❖ ~100M TL investment aims at producing 180 million liters of milk/year</li> <li>❖ Initially production will be for local market, but due to its proximity exports to Middle East markets are part of the plan</li> </ul>
	<ul style="list-style-type: none"> <li>❖ Keskinoglu, one of the top poultry companies in Turkey, has invested in slaughterhouse facility for 18M TL in February 2013 in Akhisar Manisa</li> <li>❖ The facility is expected to rise production of Keskinoglu by 30%</li> </ul>	<ul style="list-style-type: none"> <li>❖ Keskinoglu has been unable to supply the fast rising demand for Keskinoglu</li> <li>❖ The investment is aimed to address both growing local market and exports in Africa</li> </ul>
	<ul style="list-style-type: none"> <li>❖ Joint venture by Anadolu, Ozgorkey and Brazilian Cutrale Groups, in fruit plantations and fruit concentrates production in 2009</li> <li>❖ The project extends over a large geography, including Adana, Sanliurfa, Canakkale, Mersin, Balikesir, Antalya</li> </ul>	<ul style="list-style-type: none"> <li>❖ With an initial investment of 90M USD, Anadolu Etap acquired ~900 ha and operates the largest dedicated fruit plantations in Turkey</li> <li>❖ The JV supplies various fruit juice producers, including Coca Cola, and plans capacity investments of ~500M USD over the next 10 years</li> </ul>

<sup>1</sup> Acronym for South-Eastern Anatolia Project in Turkish, a multi-sector integrated regional development project

Source: Capital magazine, press search, expert interviews



# Contents

- ❖ General overview
- ❖ Market status
- ❖ **Competitiveness of Turkey**
- ❖ Business opportunities in sub-sectors



# Enablers offered by Turkey for potential investors

- ❖ Turkey has regulations aimed to enhance business environment
  - Turkey has improved its "doing business" rankings
  - Turkey has decreased number of days to setup a business to 6 days in 2012 from 38 in 2003
- ❖ Turkey has 20% corporate tax regime, lower compared to global benchmarks often ranging between 25% and 35%
- ❖ Turkey provides large labor force and competitive labor environment for companies
  - Labor force is expected to increase from 23M in 2005 to 30M in 2017
  - Turkey has lower labor costs especially when compared to European and Global agriculture, livestock and food benchmarks (around 70-80% lower). Only Middle East countries have more competitive labor costs
  - Skilled and efficient workforce
- ❖ Turkey provides incentives for investments that are competitive on a global scale
  - Turkey offers higher agriculture supports when compared to OECD, EU averages and USA
  - Also, product-based incentives are in-place to support production per unit
  - There are large investment incentives supported through the Ministry of Economy, Ministry of Agriculture and EU-IPARD<sup>1</sup>

<sup>1</sup> IPARD - Instrument for Pre-Accession Assistance in Rural Development

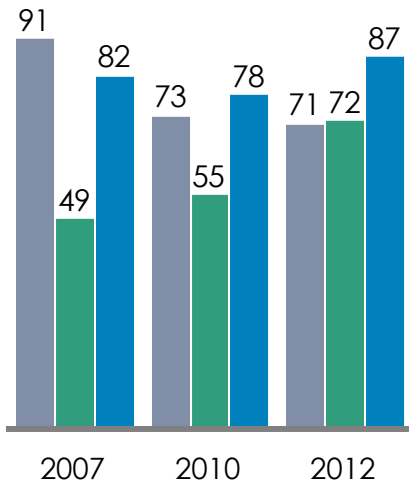
Source: World Economic Forum; World Bank; Eurostat; Turkstat; OECD; Ministry of Economy; Ministry of Agriculture, Food and Livestock









# Business environment

## Global rank in ease of doing business

■ Turkey
 ■ Italy
   
■ Romania



## Global rank in ease of doing business criteria, 2012

	 Turkey	 Romania	 China	 Brazil	 Poland	 Czech Republic	 Italy
<b>Ease of doing business</b>	71	72	91	126	62	64	87
<b>Registering property</b>	44	70	40	114	89	34	84
<b>Enforcing contracts</b>	51	56	16	118	68	78	158
<b>Protecting investors</b>	65	46	97	79	46	97	65

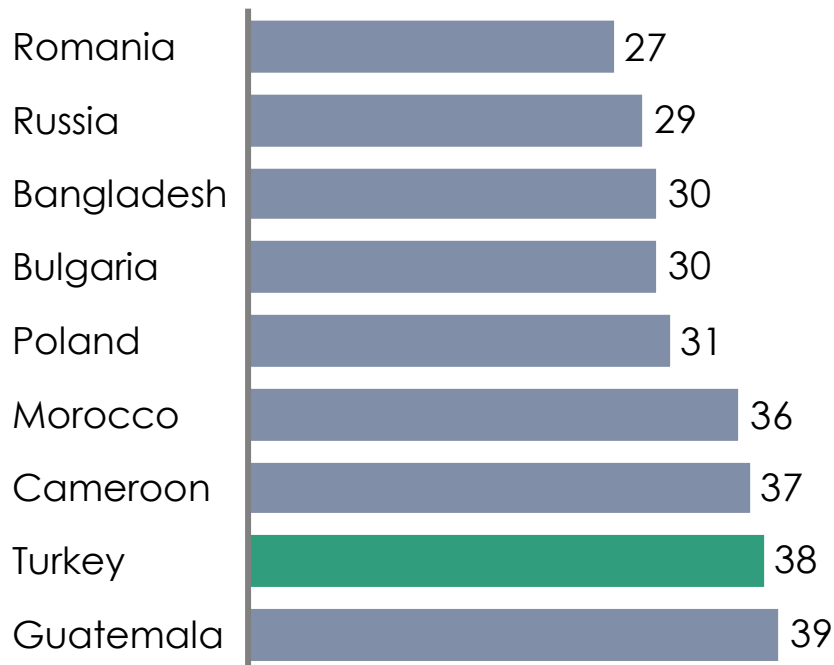


Source: World Economic Forum; World Bank

# Number of days required to set-up a company

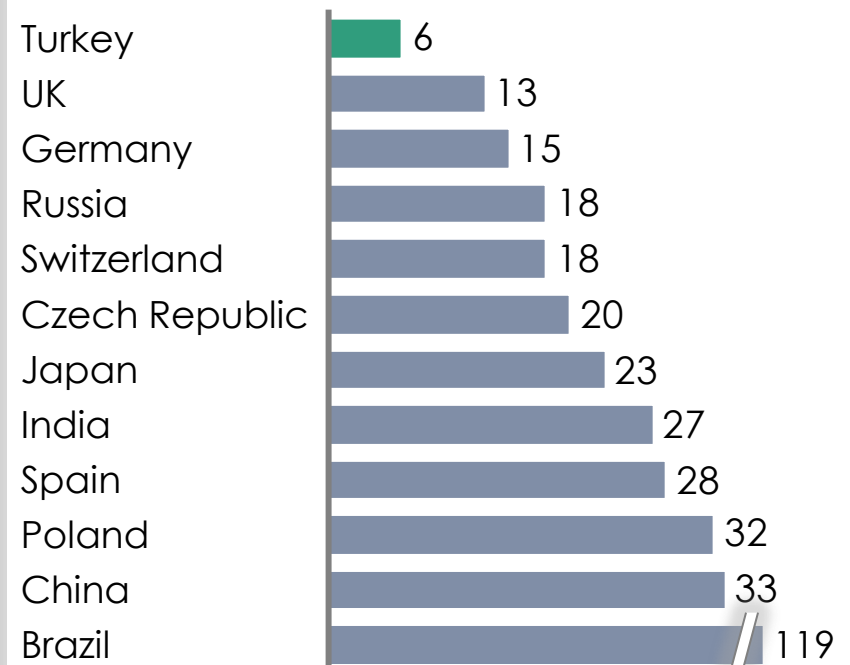
Time required to set-up a company was 38 days in Turkey in 2003 ...

Number of days to set up a business, 2003



... with reforms, it decreased to 6 days in 2012

Number of days to set up a business, 2012

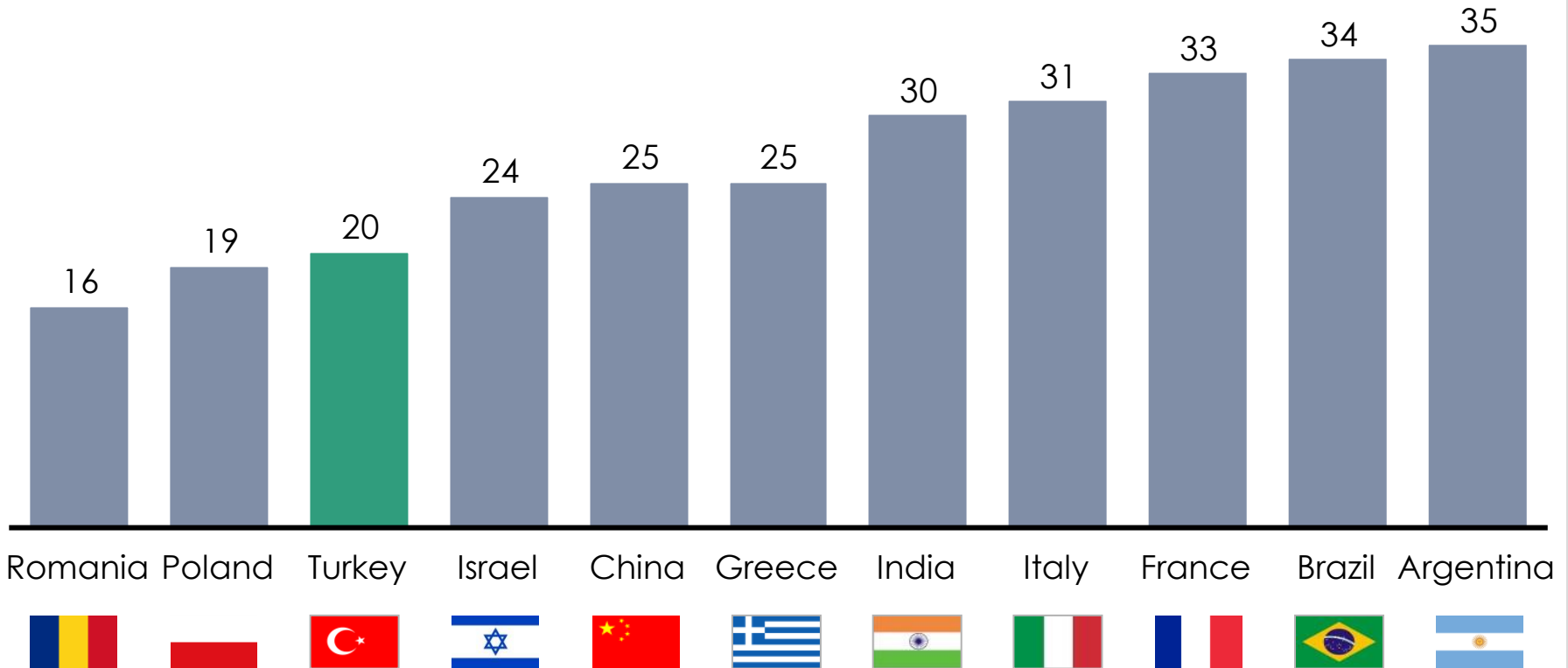


Source: World Bank

# Corporate taxes

## Corporate taxes by country

Percent



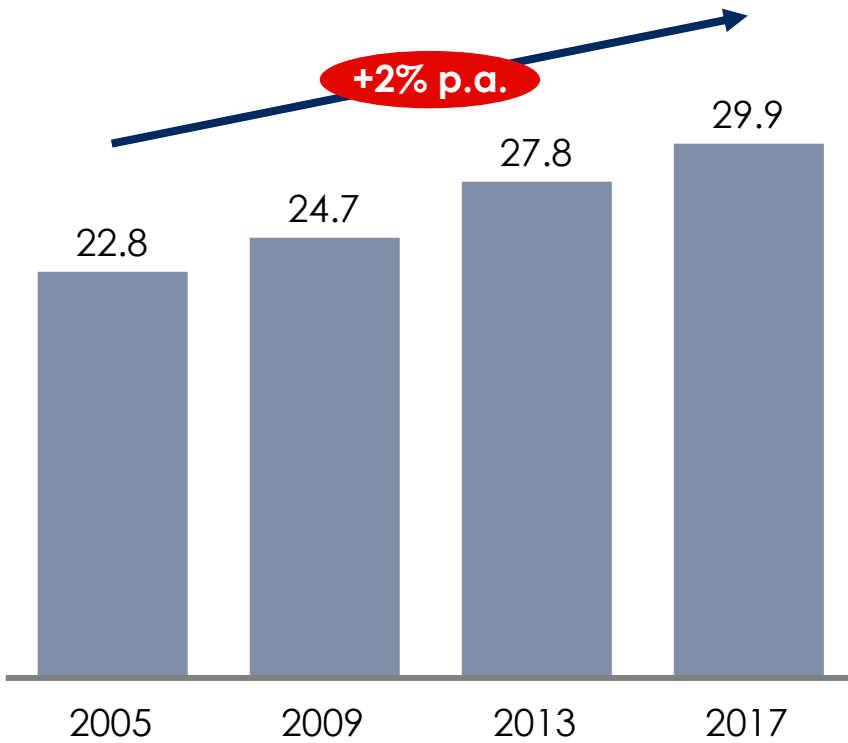
Source: EIU

Investment Support and Promotion Agency of Turkey

# Labor force details

## Labor force

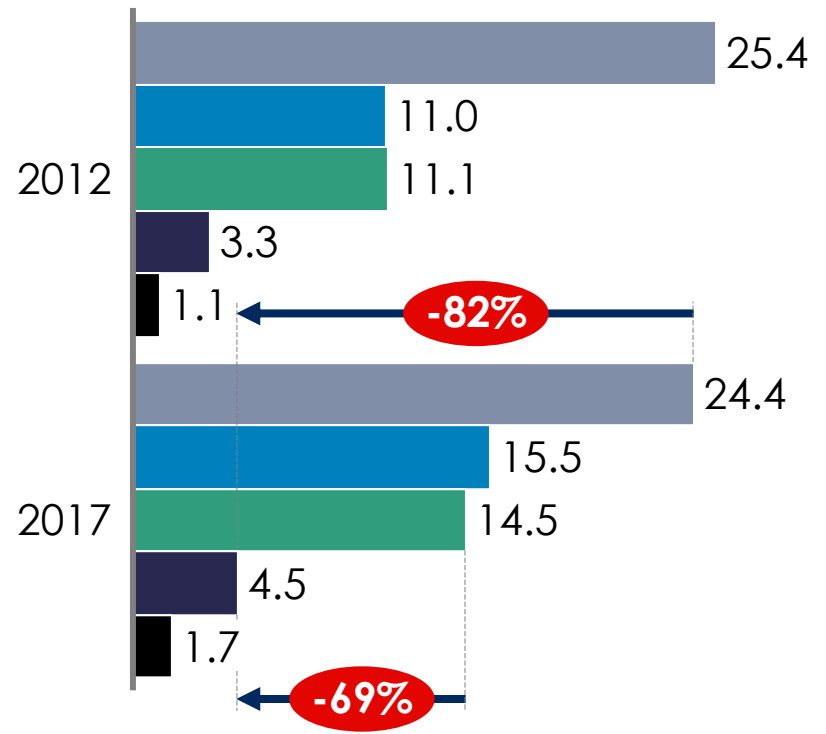
Thousand people



## Labor costs

USD/h

- Spain
- Brazil
- Egypt
- Poland
- Turkey

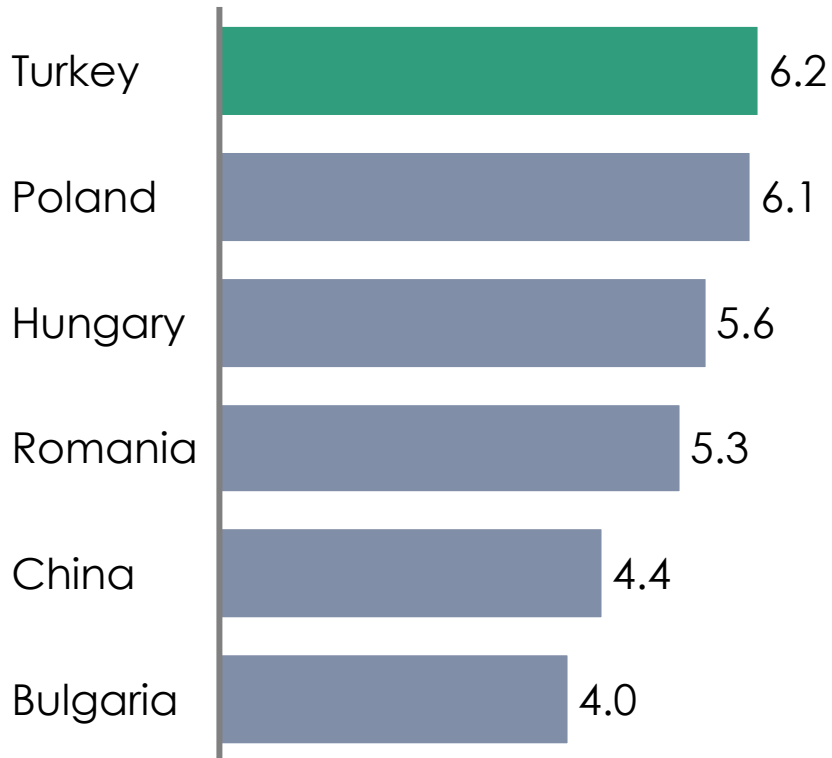


Source: Turkstat, EIU

# Availability of skilled labor and work rates

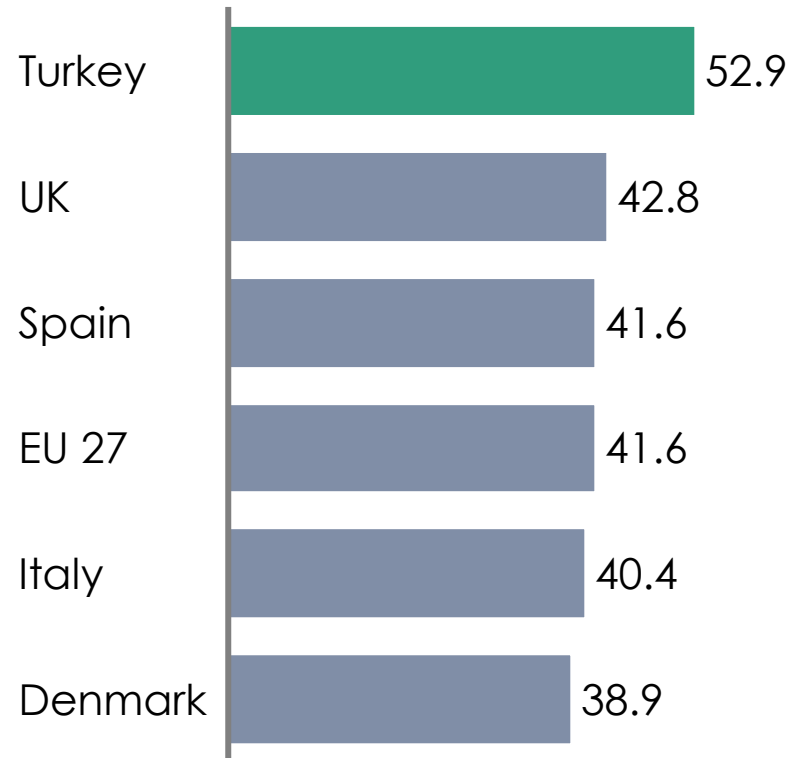
## Availability of skilled labor force

Index of 0 to 10, 10 being highest, 2012



## Hours worked per week of FTE

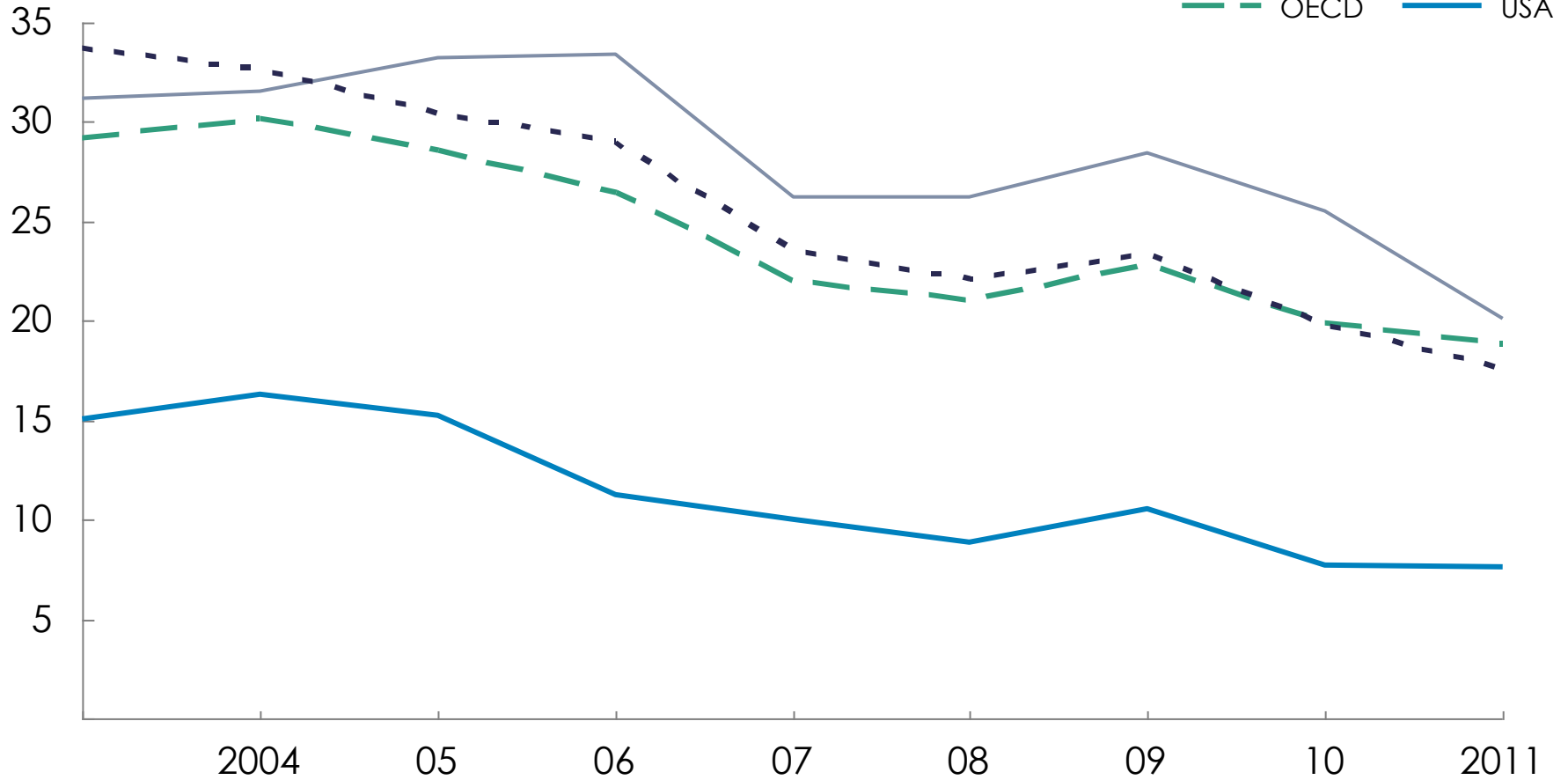
Hours, annual average, 2011



Source: IMD, Eurostat

# Government policy support to agriculture sector

Agricultural support estimate, percent<sup>1</sup>



<sup>1</sup> Percentage provider support estimate is the annual monetary value of gross transfers arising from policy measures supporting agriculture, as a share of gross farm receipts

Source: OECD





# There are various supports both for existing producers and investors

	Provider of the support	Target group	Production based supports	Investment based supports <sup>1</sup>
<b>A Agriculture supports</b>				
Agricultural basin model	Ministry of Agriculture	All (small and large farmers/investors)	✓	✗
Livestock breeding			✓	✗
Certified seed and seedling			✓	✗
Organic farming			✓	✗
Farm advisory services			✓	✗
Soil analysis, duel and fertilizer			✓	✗
More efficient fight against animal disease			✓	✗
<b>B Investment incentives<sup>2</sup></b>				
General incentives	Ministry of Economy	Medium/large size investors	✗	✓
Regional incentives	Ministry of Agriculture		✗	✓
Agricultural credits			✓	✓
GAP <sup>3</sup> DAP programme			✗	✓
<b>C EU-IPARD<sup>4</sup></b>				
	Ministry of Agriculture	Medium/large size investors	✗	✓
<b>D Rural development support</b>				
	Ministry of Agriculture	Small farmers and investors	✓	✓

<sup>1</sup> Investors can only utilize supports if they do not utilize from incentives for the same item in the same year; <sup>2</sup> Investors must choose one of the incentives, for the same item only 1 incentive can be taken; <sup>3</sup> Acronym for South-Eastern Anatolia Project in Turkish, a multi-sector integrated regional development project

<sup>4</sup> Instrument for Pre-Accession Assistance Rural Development Programme

Source: Ministry of Economy, Ministry of Agriculture, Food and Livestock



# A Agriculture price supports are mainly used by producers

	Content	Amount	
Basin model supports <sup>1</sup>	❖ Marginal payment of 11 products in 30 basins of Turkey	K₺ per kg ❖ Tea: 12 ❖ Olive oil: 60 ❖ Soy bean: 50	
Livestock breeding	❖ Payments per unit of livestock production ❖ 50% higher payment for organic livestock breeding	TL per head ❖ Cattle: 350 ❖ Goat/sheep: 20 ❖ Sea bream/sea bass: 0.85	
Certified seed and seedling	❖ Payments for seedling and seed production Supports has started in 2005	TL per decare – Seedling ❖ Potato: 40 ❖ Soy: 20	TL per kg-Seed production ❖ Soy: 0.35 ❖ Clover: 1.50
Organic farming	❖ Payments for producers who are registered in farmers register system done for per unit of production	TL per decare ❖ Fruit/vegetable: 50 ❖ Field crops: 10	TL per head ❖ Cattle: 150 ❖ Goat 10
Farm advisory services	❖ Ministry of Agriculture pays agricultural producers for the advisory services	❖ 600 TL for 1 time	
Soil analysis, fuel and fertilizer	❖ Farmers having agricultural land more than 5 hectares are obliged	TL per decare	❖ TL 4 for fertilizer ❖ TL 2.9 for fuel
More efficient fight against animal diseases	❖ Payments are varied for biotechnical and biologic fight	TL per decare	❖ TL 430 for greenhouse ❖ TL 60 for open area

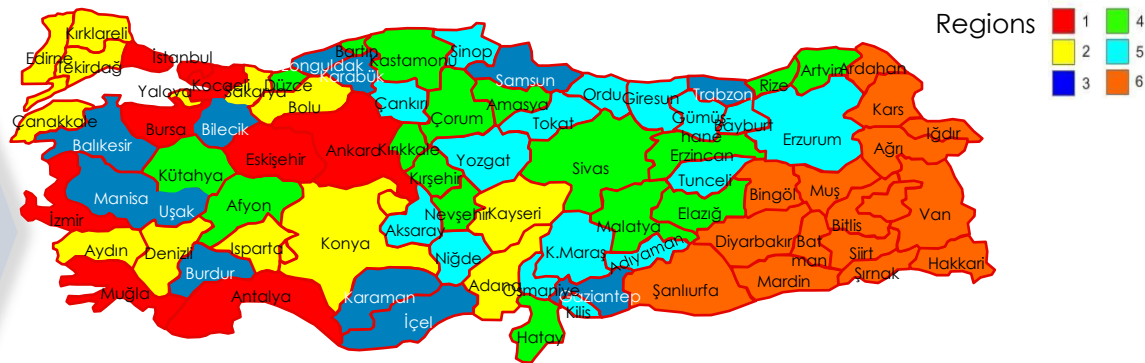
<sup>1</sup> Formed to plan and increase production in the regions where certain products are most efficiently produced

Source: Ministry of Agriculture, Food and Livestock



## B New investment scheme is sector-independent and provides support to all investors

**For all regions,** VAT exemption, customs duty exemption for machinery and equipment purchase and 49 year of land allocation incentives are implied with the condition of minimum investment amount being TL 1 million in the 1<sup>st</sup> and 2<sup>nd</sup> regions, TL 0.5 million in other regions



Corporate and income Incentives		Regions	I	II	III	IV	V	VI
Tax reduction <sup>1</sup>			15	20	25	30	40	50
Social security premiums employer support	non-organized industrial zone		10%	15%	20%	25%	35%	50%
	organized industrial zone		2 years	3 years	5 years	6 years	7 years	10 years
Social security premiums employee support <sup>3</sup>	Duration		10%	15%	20%	25%	35%	50%
			3 years	5 years	6 years	7 years	10 years	12 years
Interest support <sup>2</sup>			No	No	3 points (TL)	4 points (TL)	5 points (TL)	6 points (TL)
Support on income tax withholding <sup>3</sup> for employees			No	No	No	No	No	10 years up to 113 TL per employee

<sup>1</sup> Applied to corporate or income revenues earned from the investment project which obtained approval for support measures; <sup>2</sup> Given for TL and FX loans with at least 1 year maturity; <sup>3</sup> Only minimum wage level is paid by government

Source: Ministry of Economy



## B Agricultural credits

Animal production topics					Plant production topics				
Production subjects		Discount rate		Max limit TL	Production subjects		Discount rate		Max limit TL
		Investment period	Operating period				Investment period	Operating period	
Breed dairy cattle raising	Up to 750,000 TL	100	50	20,000,000	Controlled greenhouse agriculture	Up to 750,000 TL	50	50	10,000,000
	750,001-5,000,000 TL	75	50			750,001-5,000,000 TL	50	25	
	5,000,001-20,000,000 TL	50	25			5,000,001-20,000,000 TL	25	25	
Common animal production	Up to 70,000 TL	50	50	500,000	Common plant production	Up to 70,000 TL	50	50	500,000
	50,001-500,000 TL	25	25			50,001-500,000 TL	25	25	
Breeding	Meat cattle breeding	100	100	7,500,000	Multi-year fodder plantation				1,500,000
	Heifer breeding	100	100	7,500,000					
Stock	Breeding	50	25	3,000,000	Domestic licensed seed, seedling, sapling production				10,000,000
	Stockfarming	50	50	3,000,000					
Ovine	Breeding	100	100	5,000,000	Domestic licensed seed and seedling utilization				1,000,000
	Stockfarming	100	50	1,500,000					
Beekeeping		50	50	1,500,000	Domestic licensed sapling utilization				5,000,000
Poultry		50	25	3,000,000					
Winged sector breeding		100	100	7,500,000	Good slope/organic farming practices				5,000,000
Aqua culture products	Aqua culture producing	100	50	5,000,000					
	Fisheries hunting	50	25	1,500,000					

Source: Ministry of Agriculture, Food and Livestock

## © IPARD<sup>1</sup> supports<sup>2</sup> are granted mostly in livestock sector

	Target of the support	Support items	Support ratio	Size of eligible investment K EUR
<ul style="list-style-type: none"> <li>❖ Fund is given by EU and Turkey (75% EU, 35% Turkey)</li> <li>❖ Total support is <b>EUR 1,165 mln</b></li> <li>❖ <b>EUR 940 mln</b> of this fund is not used yet</li> <li>❖ <b>EUR 213 mln</b> of the fund will be spent in 2013</li> <li>❖ Average approval duration of funds is 3 months</li> </ul>	<i>Priority axis 1</i>			
	❖ Restructuring agricultural holdings & agro-firms	❖ Dairy products and meat	50-65% <sup>3</sup>	<ul style="list-style-type: none"> <li>❖ Min 15</li> <li>❖ Max 1,000</li> </ul>
	❖ Investments in the processing and marketing of agriculture and fishery products	<ul style="list-style-type: none"> <li>❖ Dairy products</li> <li>❖ Meat</li> <li>❖ Aquaculture</li> <li>❖ Fruit and vegetables</li> </ul>	50%	<ul style="list-style-type: none"> <li>❖ Min 15</li> <li>❖ Max 1,000</li> </ul>

**Priority axis 2 is for regulators and ministries**  
**Priority axis 3 is service sector focused**

<sup>1</sup> IPARD - Instrument for Pre-Accession Assistance in Rural Development  
<sup>2</sup> 20 provinces in the 1st phase, 22 provinces in the 2nd phase of the programme  
<sup>3</sup> If investor is under 40 years of 65% support is implied  
Source: Ministry of Agriculture, Food and Livestock








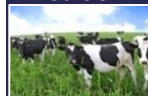
# Contents

- ❖ General overview
- ❖ Market status
- ❖ Competitiveness of Turkey
- ❖ **Business opportunities in sub-sectors**



# Agriculture, livestock and food in Turkey (1/3)





- Market size<sup>1</sup> (TL millions, 2011)
- Export (USD millions, 2012)
- Import (USD millions, 2012)
- X CAGR of market size (percent, 2007-11)

		Key facts	Top investment rationale	
<b>Fruit and vegetable processing</b> 		<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> 2,600</li> <li><span style="color: green;">■</span> 2,900 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">7</span></li> <li><span style="color: blue;">■</span> 300</li> </ul>	<ul style="list-style-type: none"> <li>❖ Turkey has competitive production of fruits and vegetables, top 10 producer in almost all fruits and vegetables</li> <li>❖ Developed fruit and vegetable processing sectors are existent</li> <li>❖ Especially, Middle East and North Africa markets, with low fruit and vegetable production, are key export locations for Turkish products that are not penetrated</li> <li>❖ Top investment subsectors are tomato sauce, fruit juice/concentrate, and frozen vegetable and fruit</li> </ul>	
	<b>Animal feed</b> 		<ul style="list-style-type: none"> <li>N/A</li> <li>100</li> <li><span style="color: blue;">■</span> 2,500</li> </ul>	<ul style="list-style-type: none"> <li>❖ Growing meat and milk demand (4% and 5% p.a. respectively over 2007-11)</li> <li>❖ Large domestic internal market with insufficient capacity leading to rising prices</li> <li>❖ Fragmented (5-10 tons/hour production) and 95% capacity utilization overall</li> <li>❖ Large-scale fodder production and compound feed production are clear opportunities</li> </ul>
	<b>Live-stock</b> <b>Aqua-culture</b> 		<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> 830</li> <li><span style="color: green;">■</span> 410 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">29</span></li> <li><span style="color: blue;">■</span> 170</li> </ul>	<ul style="list-style-type: none"> <li>❖ Fast growing market globally (6.4% growth p.a. over 2005-11)</li> <li>❖ Turkey has a sizeable yet one of the fastest growing markets of Europe (7.2% market share and 8% growth)</li> <li>❖ Turkey offers low-cost production to serve key European markets especially in seabass/seabream</li> <li>❖ New high value-add species are also available for Turkey (e.g. Flatfish, Bluefin tuna)</li> </ul>
 <b>Poultry</b> 		<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> 5,300</li> <li>530 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">16</span></li> <li>30</li> </ul>	<ul style="list-style-type: none"> <li>❖ Globally attractive industry due to fast growth and increasing prices</li> <li>❖ Strong local and especially regional demand growth</li> <li>❖ Potential to export to Middle East markets (e.g. Saudi Arabia, UAE, ...)</li> <li>❖ Investment opportunity for global players to leverage vertically integrated Turkish players through M&amp;A</li> </ul>	
<b>Ovine/bovine livestock</b> 		<ul style="list-style-type: none"> <li><span style="color: blue;">■</span> 4,100</li> <li>10 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">23</span></li> <li>920</li> </ul>	<ul style="list-style-type: none"> <li>❖ Large and growing local market with increasing animal product needs</li> <li>❖ Fragmented and inefficient structure of current livestock producers</li> <li>❖ Breed optimization and animal feed are key factors to be solved for sustainable livestock investment</li> </ul>	

<sup>1</sup> The Euromonitor International data used for this presentation is from the annual research conducted in the first half of 2012 and published in the summer of 2012. A new annual research edition has been published since with 2013 data and analysis

Source: Euromonitor International; Turkstat; FAOStat

# Agriculture, livestock and food in Turkey (2/3)

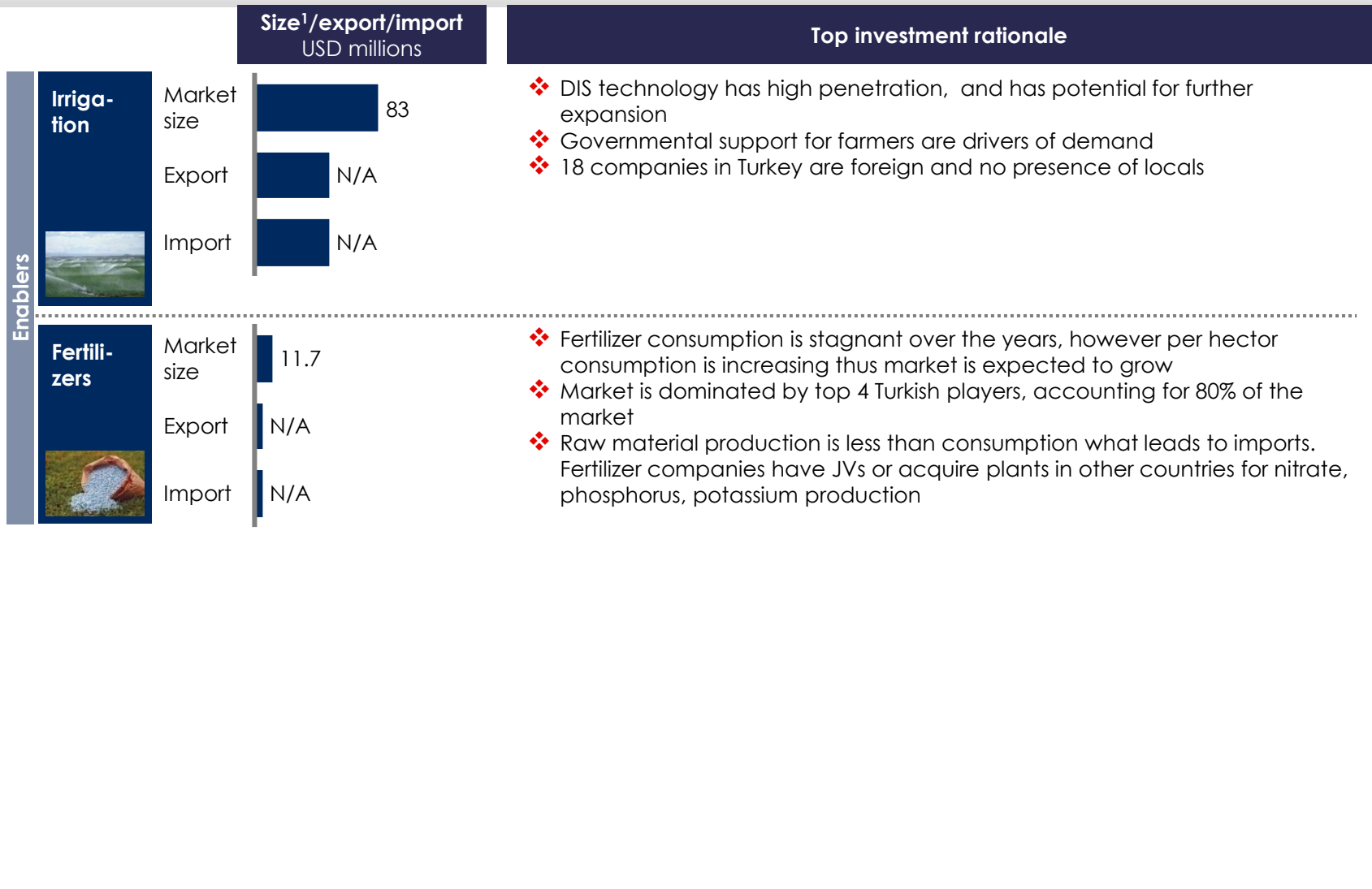
		Size <sup>1</sup> /export/import USD millions	Top investment rationale
<b>Dairy</b> 	Retail value	1,774	<ul style="list-style-type: none"> <li>❖ Milk prices are expected to rise further, however are competitive in absolute terms</li> <li>❖ Recent regulatory changes on milk exports may effect market positively</li> </ul>
	Export	189	
	Import	102	
<b>Functional food</b> 	Retail value	987	<ul style="list-style-type: none"> <li>❖ Large market with moderate growth</li> <li>❖ According to players, baby milk formula, dairy based yoghurt, and breakfast cereals are categories for growth</li> </ul>
	Export	N/A	
	Import	N/A	
<b>Enablers</b> <b>Cold chain</b> 	Retail value	N/A	<ul style="list-style-type: none"> <li>❖ Demand is expected to increase due to high fresh food consumption and new regulation environment for food safety</li> <li>❖ No national supplier of logistics leading to potential of market entrance</li> <li>❖ High value added parts producing companies are limited</li> </ul>
	Export	N/A	
	Import	N/A	
<b>Green-house</b> 	Retail value	N/A	<ul style="list-style-type: none"> <li>❖ Increase in market size due to intense investments, still potential due to low penetration of modern greenhouses</li> <li>❖ High geothermal potential to compensate high heating costs</li> <li>❖ Horticulture equipment is mostly imported and few construction companies exist in Turkey</li> </ul>
	Export	N/A	
	Import	N/A	

<sup>1</sup> The Euromonitor International data used for this presentation is from the annual research conducted in the first half of 2012 and published in the summer of 2012. A new annual research edition has been published since with 2013 data and analysis

Source: Euromonitor International; Turkstat; FAOStat



# Agriculture, livestock and food in Turkey (3/3)



<sup>1</sup> The Euromonitor International data used for this presentation is from the annual research conducted in the first half of 2012 and published in the summer of 2012. A new annual research edition has been published since with 2013 data and analysis

Source: Euromonitor International; Turkstat; FAOStat

# Fruit and vegetable processing market overview

## Fruits and vegetables demand

- ❖ Turkey is among Top 10 in fruits and vegetables producers globally
- ❖ Turkey offers competitive yields due to suitable agro-climate
- ❖ Sector is growing due to growing regional trade (26% growth p.a. in tomatoes over 2000-2010)

## Processed fruits and vegetables demand

- ❖ Sizeable domestic market in Juices (~23%) and in tomato products (~USD 300-400m)
- ❖ Turkey is a major exporter in processed F&V categories (#5 in canned F&V, #1 in jams, #4 in dried fruits and vegetables)
- ❖ Export rankings are lower in Tomato sauces/ketchups, fruit juice/concentrate and frozen fruit and vegetables



# Animal feed market overview

## Demand

- ❖ Grazing land limited, therefore animal feed manufacturing is key for local producers - USD 2.4B of imports in 2012
- ❖ Meat and dairy consumption per capita is below developed market consumption levels
- ❖ Also feed consumption will grow in parallel to growing poultry sector and industrializing cattle production

## Market structure

- ❖ Compound feed producers are at 95% capacity, sector needs capacity increase
- ❖ Sector is fragmented (Top 5 with only 23% of production) with small inefficient players



# Ovine and bovine livestock market overview

## Demand

- ❖ Meat consumption is at 6,2 kg, whereas milk consumption is at 143 kg per capita
- ❖ Levels of consumption is much lower when compared to EU or USA (~90% lower for meat, ~45% lower for milk from USA)
- ❖ There exists nearby markets for exports (e.g. Algeria with \$1,248M total imports of meat and milk)
- ❖ Government provides investment incentives for the local industry to develop (and to make meat more affordable)

## Market structure

- ❖ Turkey has small-sized livestock farms, especially when compared to European countries (50+ head farms have 0.8% share in Turkey, whereas 66% in Netherlands)
- ❖ Turkish livestock is fed below industry standards (1/2 of fodder, 1/3 of compound feed of industry standards) with high feed prices
- ❖ 37% EBITDA<sup>1</sup> margins can be realized with these precautions taken into account for a large-scale investment

<sup>1</sup> Earning before interest, taxes, depreciation and amortization

Source: FAOStat; United Nations COMTRADE database, DESA/UNSD; Ministry of Agriculture, Food and Livestock; Turkstat; sourceworld



# Poultry market overview

## Global market

- ❖ Poultry to become the largest meat sector globally (surpassing swine meat) by 2020 (CAGR of 2.2%)
- ❖ Prices increased due to strong demand growth (5% p.a. over 2008-12)

## Demand

- ❖ Domestic market growth at 18% p.a. over 2005-09 mostly sourced by local production
- ❖ 60% p.a. growth in exports in 2008-12 to regional export markets
- ❖ Exports to Saudi Arabia (2nd largest import markets globally) can be possible via "Halal food" certified products
- ❖ Turkish players are global best practices with their vertically integrated structures



# Dairy market overview

## Demand

- ❖ One of the Top 10 milk producers globally
- ❖ Milk and dairy market grew 7% and 8%, respectively over 2008-12, especially cheese and drinking milk categories are growing faster
- ❖ Important dairy exporter in the region (exports growing with CAGR 24% over 2008-12)
- ❖ Further growth expected due to
  - Local per capita demand below developed country levels
  - Growing population
  - EU bans lifted – now Turkey can target many markets in Europe
  - Raw milk costs expected to go down due to growing capacity into the sector

## Market structure

- ❖ Protected local market with %150 import taxes and ban against China
- ❖ Global players such as Danone, Nestle and Ferrero are present in local market



# Aquaculture market overview

- ❖ Aquaculture is a growing market (6.4% growth p.a. in 2005-11) with Asia countries dominating production (85% market share<sup>1</sup>)
- ❖ Turkey is one of the sizeable and growing markets in European Aquaculture with 7.2% market share<sup>1</sup> and 8% annual growth<sup>1</sup> (4th largest producer in Europe)
  - Turkish market is largely dominated two fish species: trout and seabass/seabream (holding 13% European seabass/seabream market) which is the 2<sup>nd</sup> fastest growing segment in EU (6% p.a.)
  - Also Turkish aquaculture is supported by growing local market
- ❖ Turkey offers low-cost production for especially for seabass/seabream
  - Aquaculture investments are supported by the state as it is a significant contributor in exports
  - Low cost of production
  - Turkish coasts and regulations allow for large-scale farms
  - In Turkey, introducing new and higher value species are feasible for both domestic and international markets (such as bluefin tuna, flatfish, sturgeon, white grouper, caviar and etc.)

<sup>1</sup> In production volume

Source: FAOStat; MedAquaMarket national country reports; expert interviews



# Functional food industry outlook

## Global market

- ❖ Globally, functional food industry is a large market (~246 USD billions), growing fast (~8% p.p.), and global CPG companies are shaping their portfolios according to the consumptions requested by customers
- ❖ Worldwide growing categories are soft drinks, dairy and baby food

## Demand

- ❖ For Turkey, softdrinks, baby food and bakery categories are growing and sizeable
- ❖ Looking into sub-categories of highlighted four, baby milk formula, breakfast cereals, energy drinks and sports drinks are most promising categories with growing internal demand; for yoghurt and flavoured milk drinks internal demand does not exist

## Market structure

- ❖ All of categories have very consolidated structure and there is one or two global players almost in all of the categories. For all categories other global players attempted to invest, however left the market shortly.
- ❖ World's largest companies have limited presence in Turkey for categories yoghurt and no players in flavoured milk products



# Cold chain industry outlook

## Demand

- ❖ Domestic end-use segments are growing, (e.g., meat grew by 13% p.a. over 2008-11)
- ❖ Exports are growing (dairy by 19%, fruits and vegetables by 6%, fish and meat by 19% p.a. in 2008-12)
- ❖ Cold chain use and penetration is lower than developed country standards (in storage and trucking)

## Market structure

- ❖ Food companies operate their own cold chain – inefficient and noncore – therefore are willing to outsource to cold chain operators
- ❖ Logistics players fragmented with subscale and substandard offerings
- ❖ Incentives by the government in cold chain investments (e.g., development infrastructure for agriculture)



# Overview of incentives

- ❖ As infrastructure for agricultural development cold chain construction is incentivized as regional sectors with prerequisites
  - 1st, 2nd, 3rd regions with storages not less than 1,000 sq.m
  - 4th, 5th, 6th regions for storages not less than 500 sq.m
- ❖ Incentives that are provided are tariff tax exemption, VAT exemption, and tax discount



# Greenhouse industry outlook

## Demand

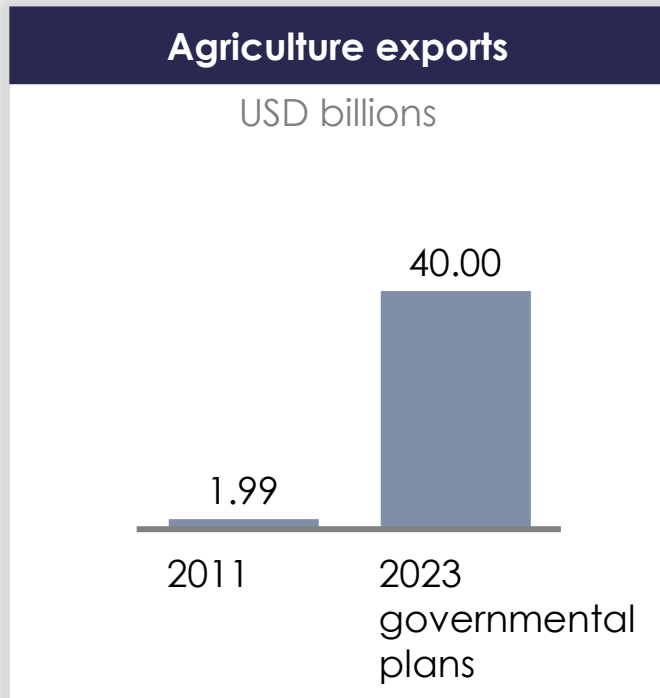
- ❖ Sector forecasted to be ~USD 700 million in 2012 and is expected to grow
  - Fruit and vegetables sector to grow by 6% in 2006-12, leading Greenhouse demand
  - Current modern Greenhouse penetration is limited (only 2% of all Greenhouse) with high (~45%) plastic penetration
  - Increasing geothermal potential (estimated to grow 11,7% in 2012-20)
  - Government incentives to drive glass structures with large scales
  - Soilless agriculture still at low share and expected to reach higher levels

## Market structure

- ❖ No domestic presence in value-added equipments such as ventilation, fogging, soilless technologies – plain players field for global vendors



# Government has ambitious targets for the agriculture sector and provides incentives for greenhouse



## Incentives to farmers

- ❖ For at least 1 decar size producers **25%-50% discounted loans** are provided
- ❖ For projects with **geothermal and solar energy usage** up until same limit 50% grant is provided
- ❖ For projects in high-tech and geothermal greenhouses governmental fixed assets are landed
- ❖ If registered to "covered areas registration system" supports are
  - Fuel: 4,00 TL/da
  - Fertilizers: 5,00 TL/da
  - Field analysis: 2.5 TL/da
  - Covered good agriculture: 100TL/da
  - Greenhouse insurance: 50% discount
  - Bambus bee support (two per decar a year): 60 TL/da
  - Biological and biotechnological campaign in under cover agriculture: 430 TL/da



# Irrigation industry outlook

## Demand

- ❖ **Turkey irrigation market size is 83 USD millions** in 2011, growing with ~12% and expected to reach **279 USD millions by 2017**
- ❖ **Turkey DIS penetration is high**, while SIS technology is not that high in the penetration
- ❖ **In DIS, Product mix is expected to change** (thin wall products are expected to increase its share) decreasing the average prices further by 2017
- ❖ Turkey support level is below the average however is expected to increase
- ❖ **Turkey DIS penetration is 18% creating a potential for increase** and expected duration for the adaption is one year for Turkey which is lower than some European countries

## Market structure

- ❖ **With potential DIS investments in Turkey 20% increase is expected in yields what justifies the initial cost**, however upfront costs are still high and that may slow down the pace of investments
- ❖ International companies are already present with distribution network in Turkey such as Netafim, John Deere, Jain and Eurodrip; however only few of them has production facilities in Turkey



# Fertilizer industry outlook

## Global market

- ❖ Fertilizer value chain consist of 4 **steps, starting with raw materials, formulation and process, distribution and customer relations**, where specialty fertilizers act mostly as "formulators"
- ❖ World's **raw material and fertilizer production is mostly concentrated in China, Russia, Canada and USA**
- ❖ World's **fertilizer trade is ~19 USD billions in 2012** and biggest exporters are Russia, USA and China; while India is biggest importer

## Demand

- ❖ **Turkish fertilizer consumption per hectare has increased** over years to 232 kg per hectares in 2010
- ❖ Following increasing consumption, Turkey fertilizer imports have also increased, **mostly supplying from Russia, Lithuania and Tunisia**
- ❖ **Turkey lacks local raw material supply in all three raw material categories (Nitrate, Phosphorus and Pottasium) and thus imports from few international companies**, despite raw materials (nitrate, natural gas, potash, phosphate) creating most of the value and margins in value chain

## Market structure

- ❖ In formulation and process **Turkish market is consolidated with 4 players accounting for 80% of the market**, still integrated players are missing thus raw material prices are effecting profitability of players
- ❖ Turkey receive **few investments in organic/natural fertilizers and regular fertilizers** while **fertilizer trading is the biggest category** receiving investments

Source: Expert interviews; ICIS/IIFA Interntational Trade Flow Map 2013; United Nations COMTRADE database, DESA/UNSD; Turkstat, Ministry of Agriculture, Food and Livestock

# ISPAT Worldwide

## CANADA

Murat ÖZDEMİR  
ozdemir.murat@invest.gov.tr

## CHINA

Hui ZHAO  
zhao.hui@invest.gov.tr

## FRANCE

Utku BAYRAMOĞLU  
bayramoglu.utku@invest.gov.tr  
Selçuk ÖNDER  
onder.selcuk@invest.gov.tr

## GERMANY

Kemal KAFADAR  
kkafadar@invest.gov.tr  
Ole Von BEUST  
Rezzo SCHLAUCH  
Wolf Ruthart BORN

## INDIA

Sanjeev KATHPALIA  
kathpalia.sanjeev@invest.gov.tr  
Fariha ANSARI  
ansari.fariha@invest.gov.tr

## JAPAN

Hitoshi SEKI  
seki.hitoshi@invest.gov.tr  
Saya ASHIBE  
ashibe.saya@invest.gov.tr

## RUSSIA

Eduard ZUBAIROV  
zubairov.eduard@invest.gov.tr

## SOUTH KOREA

Veyis TOPRAK  
toprak.veyis@invest.gov.tr

## SPAIN

Yasemen KORUKÇU  
korukcu.yasemen@invest.gov.tr

## SAUDI ARABIA

Mustafa GÖKSU  
goksu.mustafa@invest.gov.tr

## UK

Ahmet IPLİKÇİ  
iplikci.ahmet@invest.gov.tr  
Muhammed AKDAĞ  
akdag.muhammed@invest.gov.tr

## USA

Öner AYAN  
ayan.oner@invest.gov.tr  
Olivia CURRAN  
curran.olivia@invest.gov.tr



For comments on the report and additional information please contact:

**info@invest.gov.tr**

**www.invest.gov.tr**

### Head Office

Address: Kavaklıdere Mahallesi  
Akay Caddesi No:5  
Çankaya/ANKARA 06640

Phone: (+90 312) 413 89 00

### Office

Address: Dünya Ticaret Merkezi A1  
Blok Kat:8 No:296  
Yeşilköy/İSTANBUL 34149

Phone: (+90 212) 468 69 00

