



# AGRICULTURE REVIEW 2006-2015

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## Agriculture Review 2006-2015

### Abbreviations

ACGR	annual cumulative growth rate
CV	coefficient of variation
EU	European Union
FAO	UN Food and Agriculture Organization
GDP	gross domestic product
ITC	international trade center
MoA	ministry of agriculture
n	nominal (prices)
NSO	national statistics office
r	real (prices)
VA	value added
VPPFS	veterinary, plant protection, food safety

### Summary

Agriculture production is concentrated among small-scale farming households. Around 86.5 percent of total agriculture land has been farmed by 571,900 family holdings. Majority of holdings have small plots; about 77 percent of family holdings has owned at most 1 ha area of land, and average plot size per family holding has been 1.2 ha. Through 2003-15 growth in agriculture spending did not translate into proportional growth in agriculture output and agriculture GDP per capita. One of the underlying reasons might have been increased allocation of spending toward provision of “private” goods at the expense of “public” goods. Analysis have revealed that spending on “public” goods have led to more than proportional growth in agriculture output, while spending on “private” goods have led to less than proportional growth in agriculture output. Growth in annual crop production with the exception of vegetables and beans have been driven mainly by increase in yield levels; both, area planted with vegetables and yield levels were characterized with a negative growth. Increased utilization of farm inputs and increase in the area of irrigated and drained land along with other factors should have contributed to increased yield levels in grain crops, potatoes, etc. During the recent years, area of land planted with semi-intensive and intensive orchards has increased substantially. Output level of all pome fruits and most stone fruits have had a negative growth; positive growth was estimated for nuts, berries, citrus, grapes and subtropical fruits. Population of all types of livestock with the exception of swine has increased; however, output of all types of meat exclusive of poultry has declined; positive growth rates were derived in output levels of milk, eggs, and honey. Retail prices on perennial and vegetable crops and foodstuffs were characterized with notable seasonality; overall, volatility of perennial and vegetable crop prices were higher than those of foodstuffs, but growth rates of latter were greater. Agriculture sector international trade performance was better than of other sectors in terms of import coverage with exports indicator. Proportion of major export products was more concentrated than that of major imported products, while concentration rates of major export markets and import supplying markets were roughly similar.

## Introduction

Georgia is a small upper-middle income country with a population of about 3.7 million (sex ratio of 91 men per each 100 women), and an average nominal gross domestic product (GDP) per capita of US\$3,765.

An Association Agreement and a Deep and Comprehensive Free Trade Area agreement was signed with the European Union in June 2014. Trade with Russia opened up in 2013 and has since grown significantly. Corruption

and ease of doing business indices continue to be favorable. In keeping with the European Union – Georgia Association Agreement that came into force in July 2016, the Government plans to harness the gains of deeper integration by promoting the reallocation of capital and labor to more productive industries, building supporting firms to comply with the harmonization of the legal and regulatory frameworks, and upgrading state institutions to improve trade facilitation, reduce technical barriers to trade, protect intellectual property rights, and develop the country’s human capital.

Agriculture sector remains an important although still declining sector in Georgia in terms of GDP contribution, foreign exchange earnings, and poverty reduction. The sector is mainly of subsistence nature and has been characterized by low productivity and weak competitiveness. Around 14% of the economically active population find professional occupation in agriculture, and around 43% of the population live in rural areas. Agriculture production is concentrated among small-scale farming households. Around 86.5 percent of total agriculture land has been farmed by 571,900 family holdings. Majority of holdings have small plots; about 77 percent of family holdings has owned at most 1 ha area of land.<sup>1</sup> State allotment to the agriculture sector has increased substantially during the recent years. Ministry of Agriculture ongoing main activities include human, animal and plant health protection, research, international promotion of Georgian products, support to the development of business oriented farmer groups, rehabilitation of irrigation and drainage systems, and improvement in the availability and accessibility to financial resources and production inputs (planting stock, seeds, fertilizers, and chemicals, etc.). There has been significant progress in poverty reduction and shared prosperity in recent years. The poverty rate, estimated using the US\$2.5/day PPP poverty line, fell from 46.7% in 2010 to 31.2% in 2015. During 2013–14, poverty reduction was largely driven by a combination of strong growth in the construction and non-tradable sectors, contrasting with 2010–13, when income growth among the poor was mostly driven by increased social transfers. Despite significant gains in agricultural incomes, poverty remains higher in rural areas.

There is a strong consensus in Georgia among all stakeholders that agricultural development offers both a huge investment opportunity and is essential for the development of the country as a whole, and particularly for employment, growth, poverty reduction and food security.

## Land resources

Agriculture production is concentrated among small-scale farming households. Around 86.5 percent of total agriculture land has been farmed by 571,900 family holdings. Majority of holdings have small plots; about 77 percent of family holdings has owned at most 1 ha area of land, and average plot size per family holding has been 1.2 ha.<sup>2</sup>

Area of total agriculture land has been 2.3 million ha. Pasture land has accounted for the largest proportion of total agriculture land, followed by arable land, land under perennial crops, and meadows in a declining sequence. About 45 percent and 55 percent of total agriculture land have been under private and state ownership, respectively. At least 70 percent of arable land and land under perennial crops has been owned privately, and about 45 percent and most of the pasture land have been under state ownership (Table 1).

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<sup>1</sup> Agriculture Census 2014; National Statistical Office of Georgia

<sup>2</sup> Agriculture Census 2014; National Statistical Office of Georgia

Table 1. Type of agriculture land and ownership status

	Total, ha	Private, ha	State, ha
Total agriculture	2,318,779	1,035,316	1,283,463
Arable	583,836	459,377	124,459
Perennial	138,380	123,509	14,871
Meadow	134,575	74,576	59,999
Pasture	1,262,836	178,702	1,084,134
Breakdown by type of land			
	Total	Private	State
Arable	25%	44%	10%
Perennial	6%	12%	1%
Meadow	6%	7%	5%
Pasture	54%	17%	84%
Breakdown by ownership			
	Private	State	
Total agriculture	45%	55%	
Arable	79%	21%	
Perennial	89%	11%	
Meadow	55%	45%	
Pasture	14%	86%	

Source: MoA, estimates

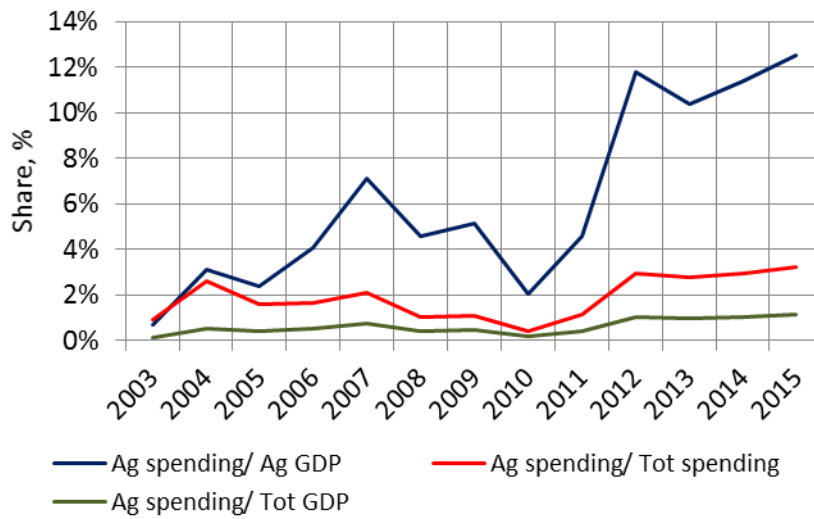
During 2006-2015 rural and urban population declined by 24 percent and 8 percent, accordingly, and in 2015 rural population totaled 1,592 thousand persons.<sup>3</sup> The share of rural population in total population has also declined during the same period, but at less extent, by 10 percent.

#### Agriculture spending and output

The proportions of agriculture spending in agriculture GDP, total spending and total GDP have had declining pattern from 2006 to 2010, followed by continued surge through 2015. The surge has been attributed to an increased government focus on agriculture development and allotments (Figure 1, Table 1.1).

<sup>3</sup> Population census 2014; National Statistics Office of Georgia

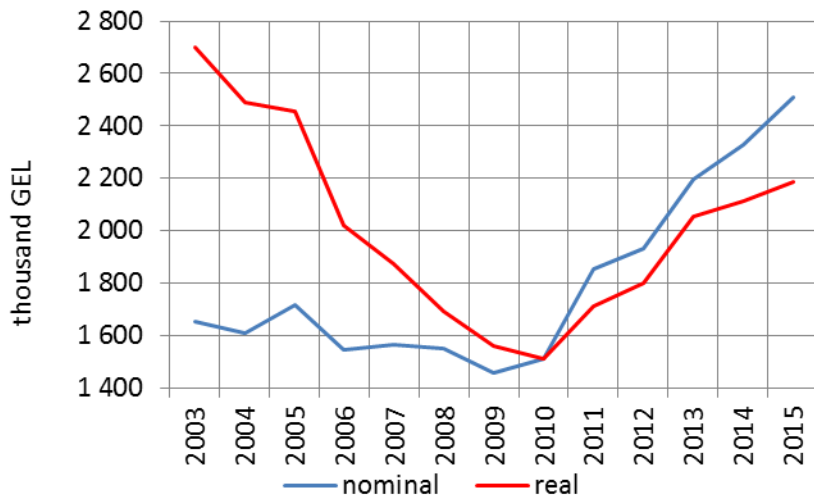
Figure 1. Agriculture spending



Source: NSO, estimates

From 2006 through 2015 agriculture GDP has had a convex shape. Declining pattern from 2006 to 2010 was continued by notable upward trend through 2015. During this period, nominal and real agriculture GDP growth rates were 6 percent and 1 percent, respectively (Figure 2, Table 1.1).

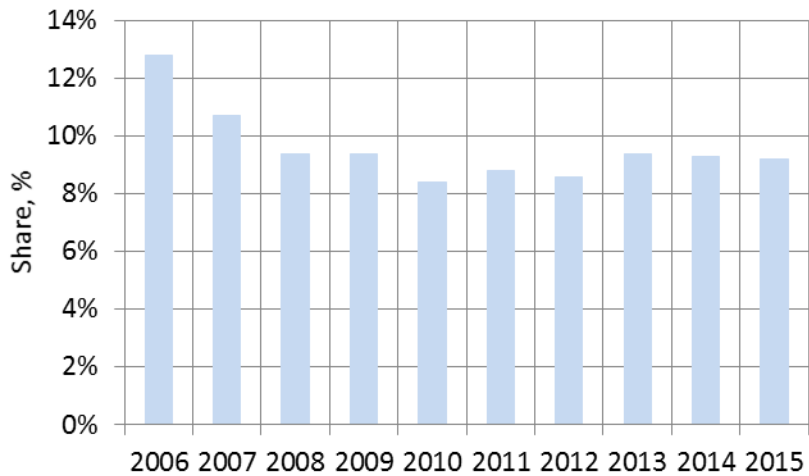
Figure 2. Nominal and real agriculture GDP



Source: NSO, estimates

Agriculture's share in GDP after a declining pattern from 2006 to 2010, discerned a recovery through 2015; however, growth of agriculture's contribution to total GDP through the analysis period has been negative (-4) percent (Figure 3, Table 1.1).

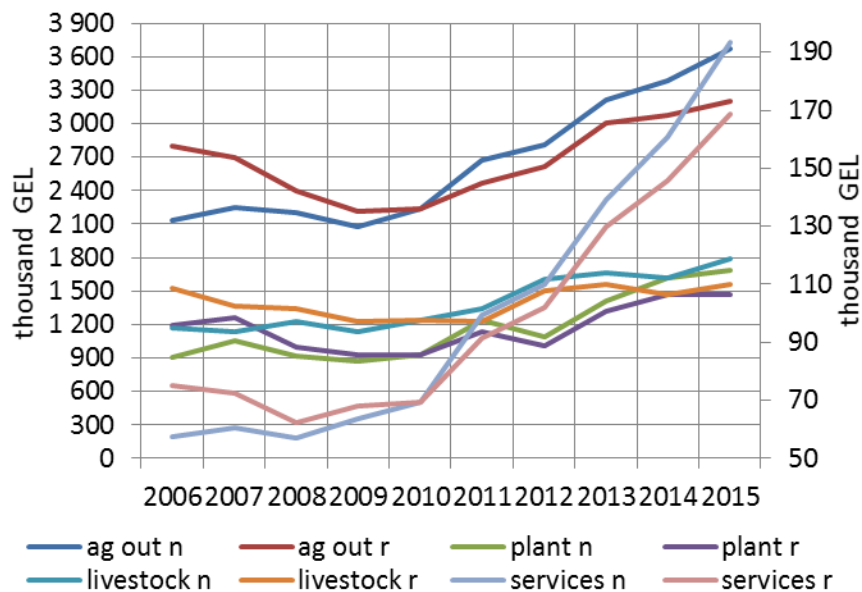
Figure 3. Agriculture share in total GDP



Source: NSO, estimates

The most notable growth in total agriculture output was observed in agriculture services, followed by plant growing and livestock sector in a declining order. Growth rates in nominal and real agriculture output, plant, growing, livestock production, and agriculture services have been 6/2 percent, 7/2 percent, 5/0 percent, and 14/9 percent, accordingly. Growth rates of proportions of plant growing, livestock production and agriculture services in total agriculture output have been 1 percent, (-1) percent, and 6 percent, respectively. Notable growth in agriculture services can be explained by multi-year nationwide state support to small-scale farmers in ploughing and provision with different farm inputs (Figure 4, Table 1.1).

Figure 4. Agriculture output

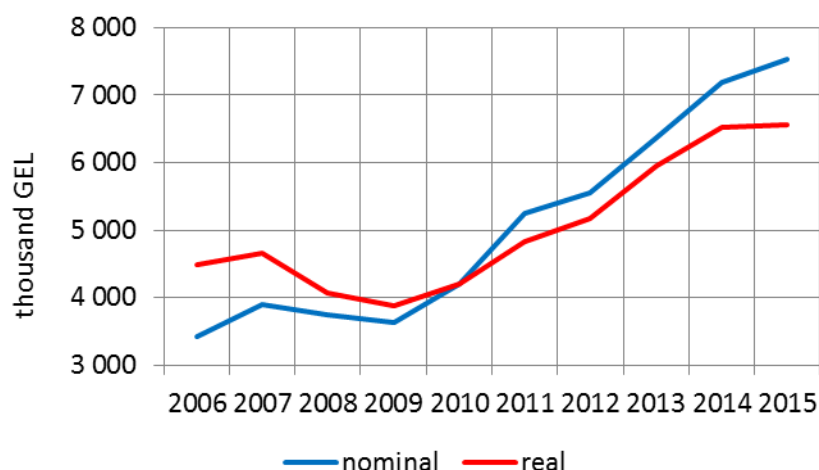


Source: NSO, estimates



During 2006-15 nominal and real growth rates in agriculture value added approximated 9 percent and 4 percent, respectively. Both, in nominal and real terms, the most notable growth was observed in other food products (18/ 13 percent), flour value added (15/ 10 percent), mineral waters and non-alcoholic beverages (16/ 11 percent, each), and agriculture services (14/ 9 percent). The livestock sector (28 percent) and other food products (15 percent) have contributed the most to total value added, whereas contribution of agriculture services and tobacco production where the least, 2 percent, each (Figure 5, Table 2, Table 1.1).

Figure 5. Agriculture value added



Source: NSO, estimates

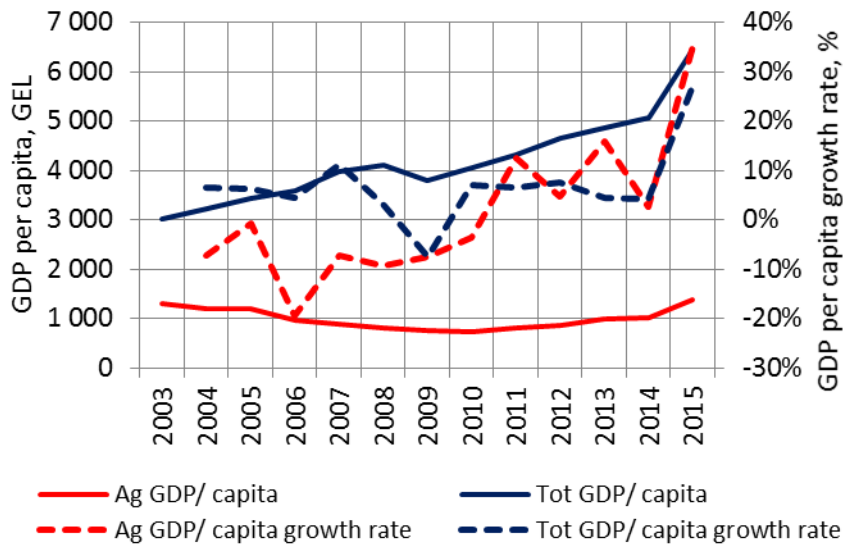
Table 2. Agriculture value added growth and composition

	Growth rate		Share in total VA
	nominal	real	
Grain crops and others	7%	2%	8%
Fruits, nuts, and other crops produced for production of beverages and spices	8%	3%	9%
Vegetables, orchard crops, and nurseries	4%	0%	6%
Livestock	5%	1%	28%
Agriculture services	14%	9%	2%
Grain value added (flour and feed)	8%	3%	6%
Flour value added	15%	10%	6%
Other food products	18%	13%	15%
Mineral waters and non-alcoholic beverages	16%	11%	8%
Alcoholic beverages	9%	4%	9%
Tobacco production	0%	-5%	2%
Total agriculture and food	9%	4%	

Source: NSO, estimates

Through 2006-15 agriculture GDP per capita had a slightly concave shape without a significant variability, while total GDP per capita was characterized with an increasing pattern. Agriculture GDP per capita growth rate was 4 percent, while total GDP per capita – 7 percent. Low agriculture growth combined with a constant share of labor force participation in the sector has also led to a stagnant per worker value added (Figure 6, Table 1.1).

Figure 6. GDP per capita and growth rate

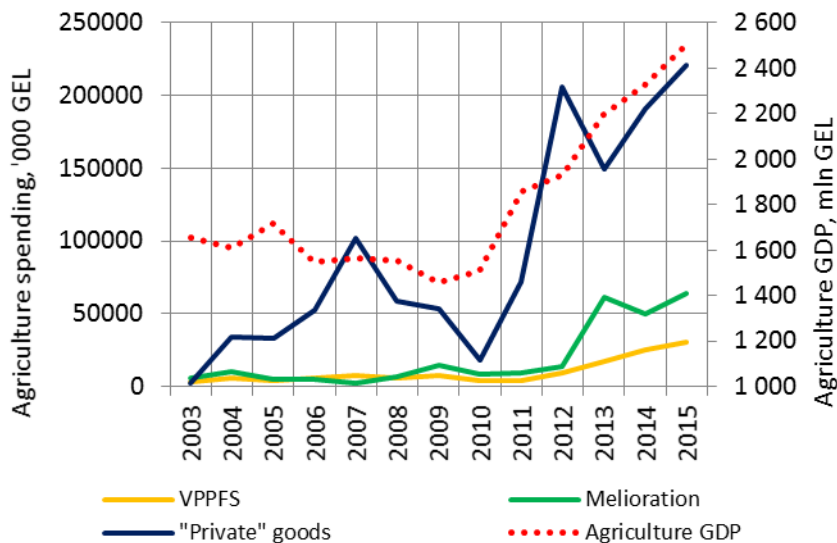


Source: NSO, estimates

During 2003-15 growth in agriculture spending did not translate into proportional growth in agriculture output and agriculture GDP per capita. underlying reasons might have been increased allocation of spending toward provision of “private” goods at the expense of “public” goods, and inconsistency and ineffectiveness in the allotments for the provision of “private” goods. Although spending on “private” goods might have been useful for different operators in the sector, it would have been unlikely to lead to significant increases in agricultural productivity.

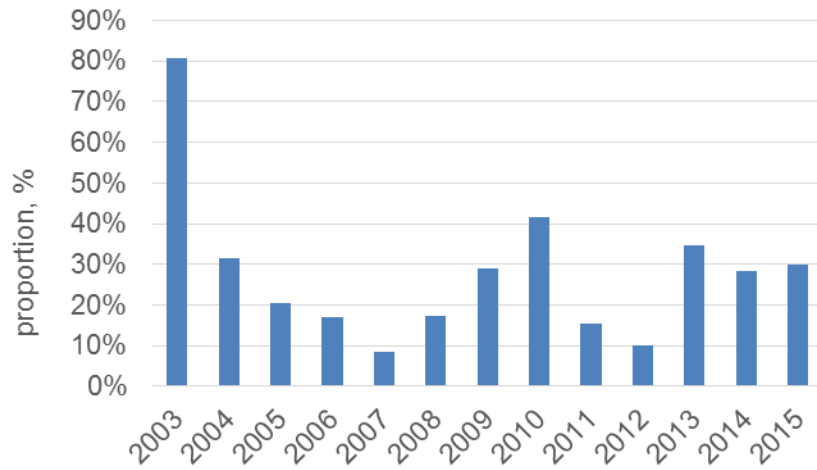
Composition of agriculture spending trends has indicated that substantial resources have been directed to support “private” goods at the expense of providing public goods. The share of spending on “public goods” with the exception of 2003 did not exceed 42 percent of total spending, and in 2003 total agriculture spending was considerably lower than those during the subsequent years. The spending on “private goods” included different support measures, such as farmer provision with fertilizers and fuel, agriculture credits, export facilitation, food security, planting materials, etc., and these allotments lacked consistency and have been characterized with notable variability (Figures 7-8, Table 1.1)

Figure 7. Agriculture spending composition vs agriculture GDP



Source: NSO, estimates

Figure 8. Proportion of spending on “public” goods in total agriculture spending



Source: NSO, estimates

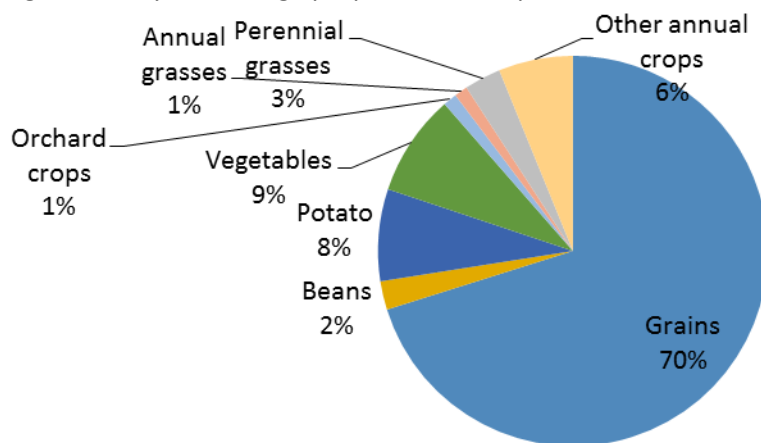
To learn whether the volume and composition of agriculture spending have had an impact on growth in agriculture sector, contributions of spending on “public” and “private” goods to agriculture GDP were assessed. Analysis revealed that spending on “public” goods such as VPPFS and melioration have had more than proportional positive impact on agriculture GDP growth, while spending on “private” goods has had less than proportional positive impact on agriculture GDP growth; 1 unit change in spending in:

- VPPFS, should lead to a 3.6 % increase in agriculture GDP
- Melioration, should lead to a 1.4% increase in agriculture GDP
- “Private” goods, should lead to a 0.3% increase in agriculture GDP

### Planted area and livestock population

During 2006-15 grain crops have accounted for about 70 percent of total area planted with annual crops, followed by vegetables (9 percent) and potatoes (8 percent) in a declining sequence (Figure 9, Table 1.2).

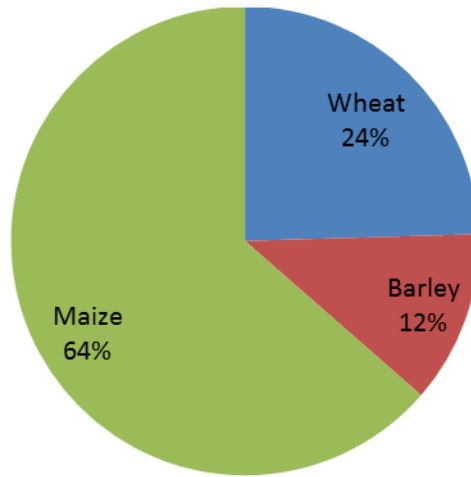
Figure 9. 10-year average proportion of crops in total annual crop planted area



Source: NSO, estimates

About 64 percent of planted area with grain crops was devoted to maize production, 24 percent to wheat production, and 12 percent to barley production (Figure 10, Table 1.2).

Figure 10. 10-year average proportion of grain crops in total grain planted area

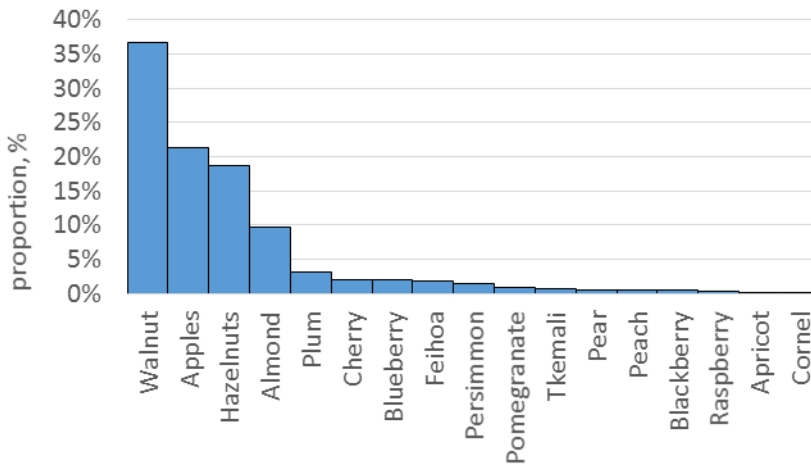


Source: NSO, estimates

Through the analysis period, growth in the area planted with annual crops has been negative (-1 percent). Negative growth was driven mainly by drop in the area planted with annual feed grass (-12 percent), vegetables (-4 percent), and other annual crops (-7 percent). Area planted with the remaining annual crops either has increased by 1 percent or remained unchanged; the only exception has been wheat – area planted with wheat has declined by 1 percent. Estimates of volatility in area planted differed among annual crops. Planted area with annual grasses and barley were the most variable, while that with wheat was the least volatile (Tables 3-4, Figures 12-14).

During the last 3 years are planted with new semi-intensive and intensive orchards has increased at least by 2,196 ha. Walnuts (37 percent), apples (21 percent), hazelnuts (19 percent) and almonds (10 percent) have accounted for 86 percent of total new orchards (Figure 11, Table 1.3).

Figure 11. Composition of new semi-intensive and intensive orchards



Source: MoA, estimates

Between livestock, trend in swine annual population was the most changeable, while the least volatile has been that in cattle population. Major outbreak of African Swine Fever (ASF) in 2007 and occurrences during the consecutive years should have underlay noticeable variability in swine population. For livestock, negative growth was estimated only for swine population (-6 percent). The most notable positive growth rates were derived for bee colonies (12 percent) and poultry (6 percent). Increased demand on honey and poultry sector recovery after Avian Influenza outbreak in 2006 could have caused increase in beehives and poultry population (Tables 3-4, Table 1.4, Figures 15-16).

Table 3. 10-year mean and CV in area planted and livestock population

	Mean	CV
Annual crops	296	9
Wheat	51	9
Barley	25	24
Maize	132	12
Beans	7	13
Potato	22	13
Orchard crops	3	23
Perennial grasses	9	29
Annual grasses	3	70
Vegetables	25	15
Other annual crops	19	43
Large livestock	1,129	10
Dairy	594	8
Swine	169	46
Sheep & goat	772	13
Sheep	707	14
Poultry	6,679	13
Bee hives	300	33

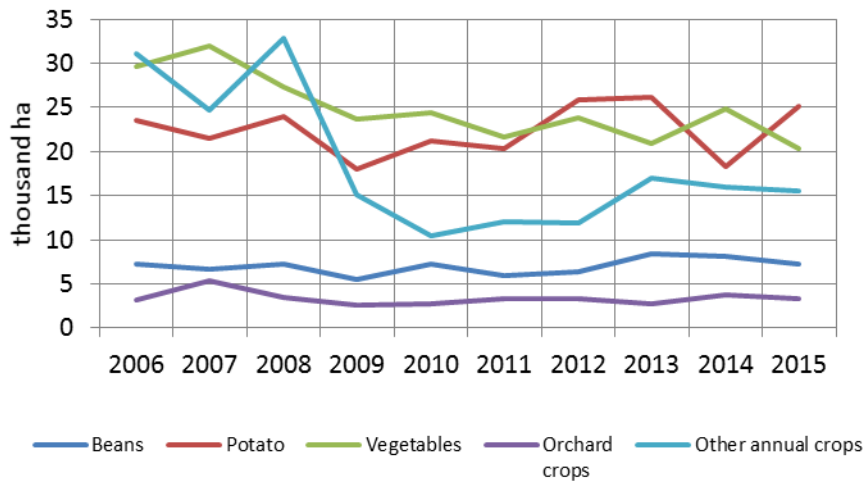
Source: NSO, estimates

Table 4. 10-year growth in area planted with annual crops and livestock population

	Growth		Growth
Annual crops	-1%	Vegetables	-4%
Wheat	-1%	Other annual crops	-7%
Barley	0%	Large livestock	2%
Maize	1%	Dairy	1%
Beans	0%	Swine	-6%
Potato	1%	Sheep & goat	1%
Orchard crops	0%	Sheep	2%
Perennial grasses	3%	Poultry	6%
Annual grasses	-12%	Bee hives	12%

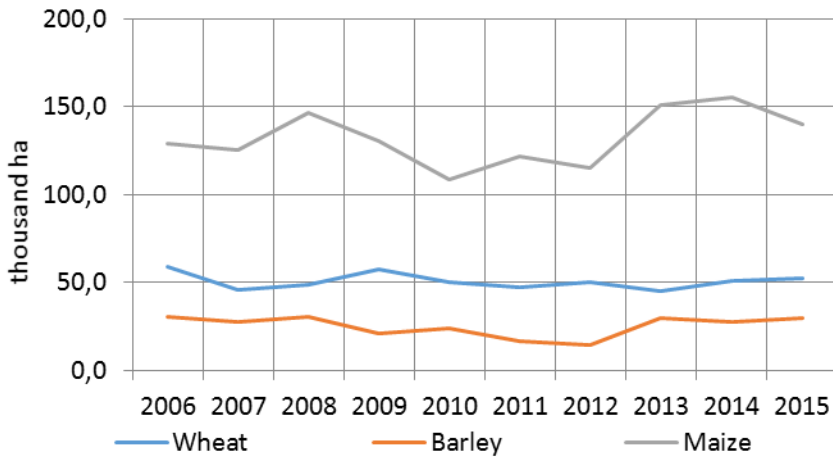
Source: NSO, estimates

Figure 12. Planted area with vegetables, potatoes, orchard crops, and other annual crops



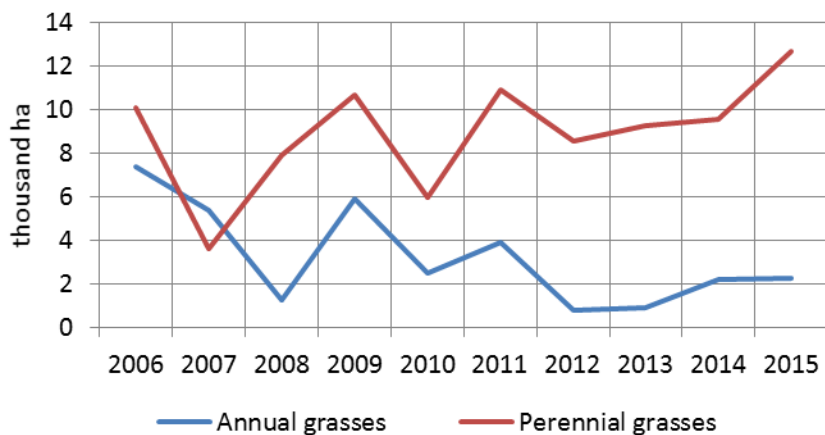
Source: NSO

Figure 13. Planted area with grain crops



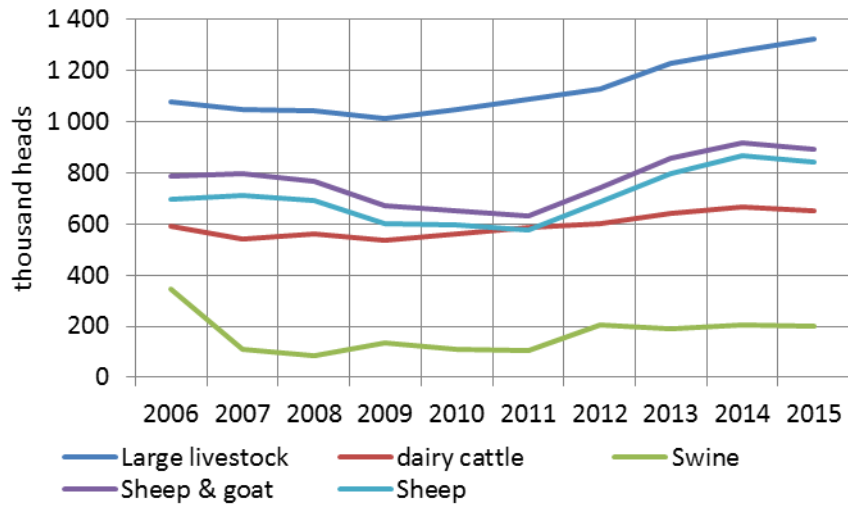
Source: NSO, estimates

Figure 14. Area planted with feed grasses



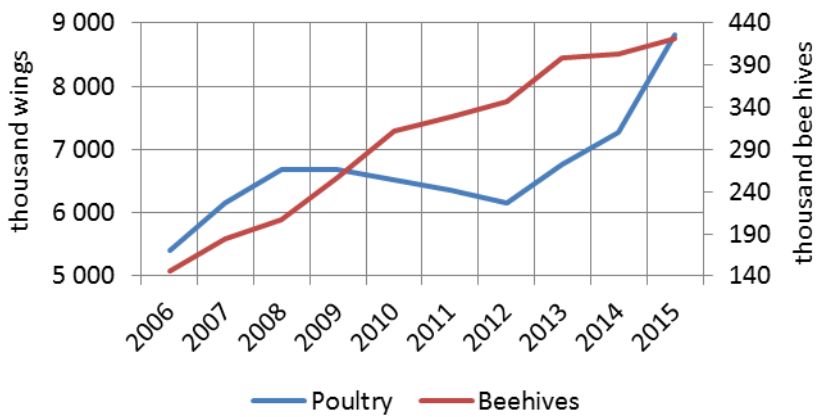
Source: NSO

Figure 15. Livestock population



Source: NSO

Figure 16. Poultry and beehive population



Source: NSO

Yield levels

Through 2006-2015 yield levels of annual crops, with the exception of maize and vegetables, have had a positive growth. The most substantial growth was observed in wheat, barley, orchard crops and perennial feed grass yields. Maize yield has had a negative growth of (-1) percent, while vegetable crop yields remained unchanged. The most notable variability in yield levels was observed for wheat and orchard crops, while the least - for maize and vegetables. Volatility in yield levels among other factors could be explained by significant vulnerability of annual crop growing to unfavorable weather conditions (Tables 5-6, Table 1.5, Figures 17-19).

Growth of Milking rate was positive 4 percent, while growth in fleece yield was negative (-1) percent. Overall, livestock productivity indicators have been less variable than annual crop yields (Tables 5-6, Table 1.6, Figure 20).

Table 5. 10-year mean yields and CV

	Mean	CV
Wheat	1.6	30
Barley	1.4	20
Maize	2.1	17
Beans	0.7	23
Potato	10.3	19
Orchard crops	16.3	30
Perennial grasses	3.8	23
Annual grasses	4.0	24
Vegetables	6.9	10
Milking rate	1,237	9
Fleece	3	7

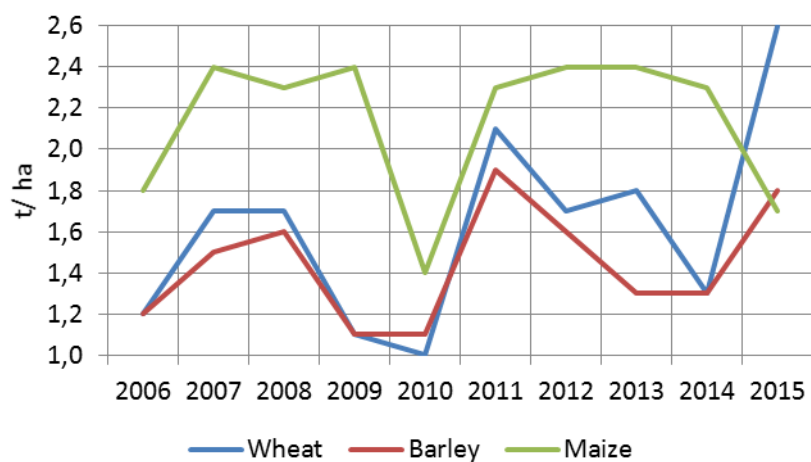
Source: NSO, estimates

Table 6. 10-year average growth in yield levels

Crop	Growth
Wheat	9%
Barley	5%
Maize	-1%
Beans	2%
Potato	1%
Orchard crops	8%
Perennial grasses	6%
Annual grasses	1%
Vegetables	0%
Milking rate	4%
Fleece	-1%

Source: NSO, estimates

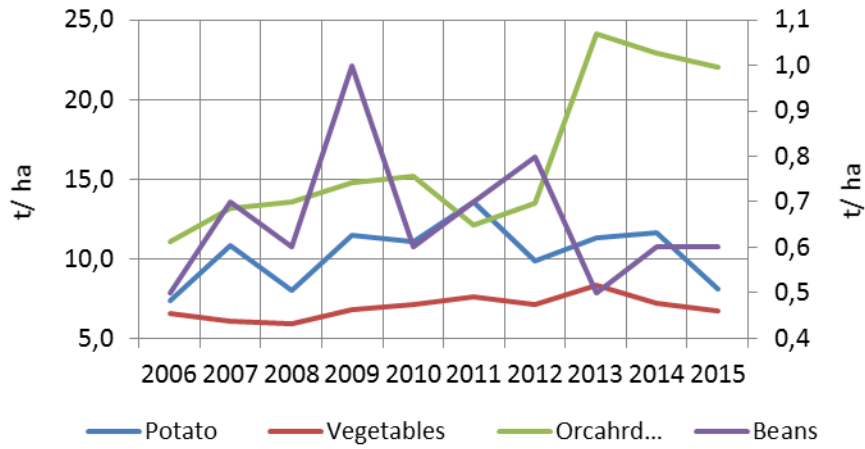
Figure 17. Grain crop annual yield levels



Source: NSO

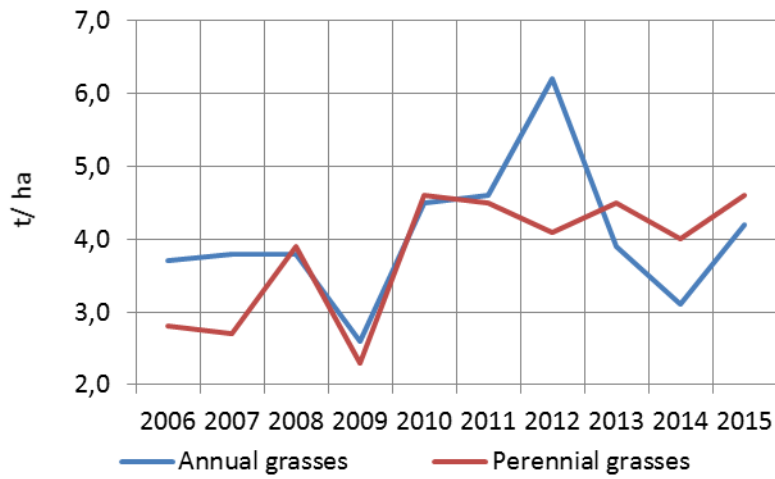


Figure 18. Vegetable, potato, bean, and orchard crop yield levels



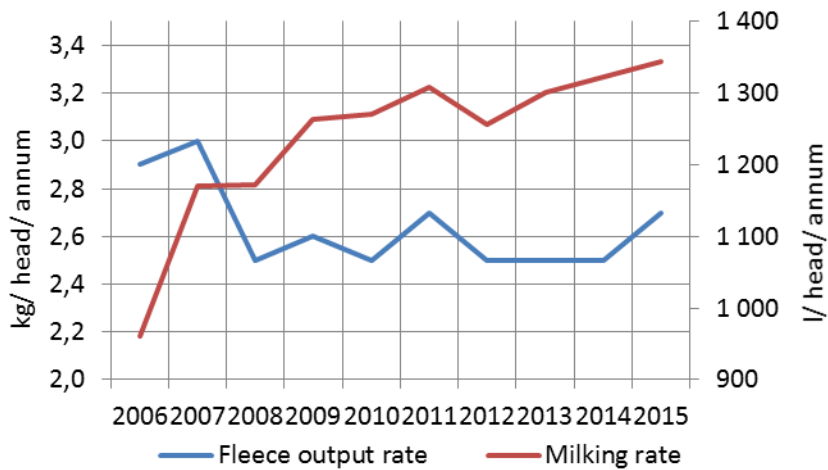
Source: NSO

Figure 19. Feed grass yield levels



Source: NSO

Figure 20. Dairy cattle annual milking rate and average annual fleece output



Source: NSO

From 2006 to 2015, growth in the utilization of plant protection products in perennial crops was significantly higher than that in annual crops. Also, while growth in the utilization of crop nutrition products in perennial crops was positive, growth rates of the use of different types of chemical fertilizers in annual crops have been negative (Table 7, Table 1.7).

Table 7. Fertilizer and pesticide utilization

	Growth
Pesticide (ann/tha ha)	4%
Fungicide(ann/tha ha)	10%
Insecticide (ann/tha ha)	-1%
Other (ann/tha ha)	3%
Pesticide (per/ tha ha)	12%
Fungicide (per/ tha ha)	11%
Insecticide (per/ tha ha)	15%
Other (per/ tha ha)	34%
All fertilizer (tha tons)	3%
Nitrogenous (tha tons)	-2%
Other (tha tons)	-19%
All fertilizer (ann/ tha ha)	-1%
Nitrogenous (ann/ tha ha)	-1%
Other (ann/ tha ha)	2%
All fertilizer (per/ tha ha)	2%
Nitrogenous (per/ tha ha)	1%
Other (per/ tha ha)	8%

Source: NSO, estimates

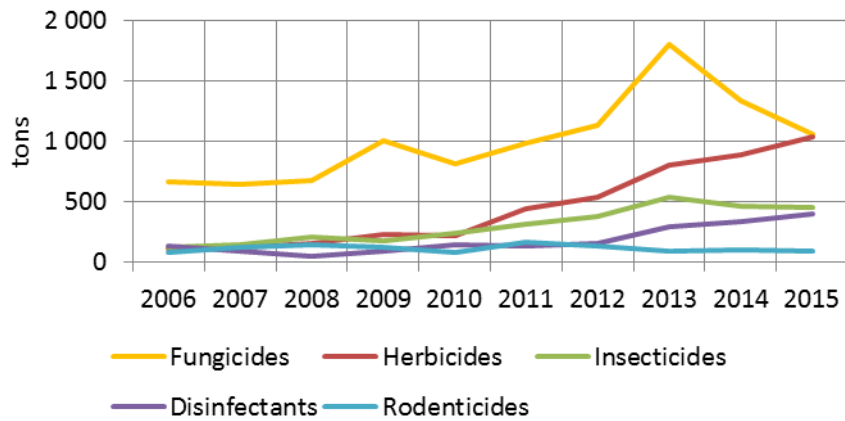
Through the analysis period import of all farm inputs, both pesticides and fertilizers, were characterized with a positive growth. The most significant growth among pesticides was derived for herbicides and insecticides, and that between fertilizers - for nitrogenous and combined fertilizers (Table 8, Table 1.8, Figures 21-22).

Table 8. Import of farm inputs

Farm Inputs	Growth
Fungicides	5%
Herbicides	28%
Insecticides	16%
Disinfectants	12%
Rodenticides	2%
Combined fertilizers	28%
Nitrogenous fertilizers	45%
Phosphatic fertilizers	15%
Potassic fertilizers	3%
Animal/ vegetable fertilizers	4%

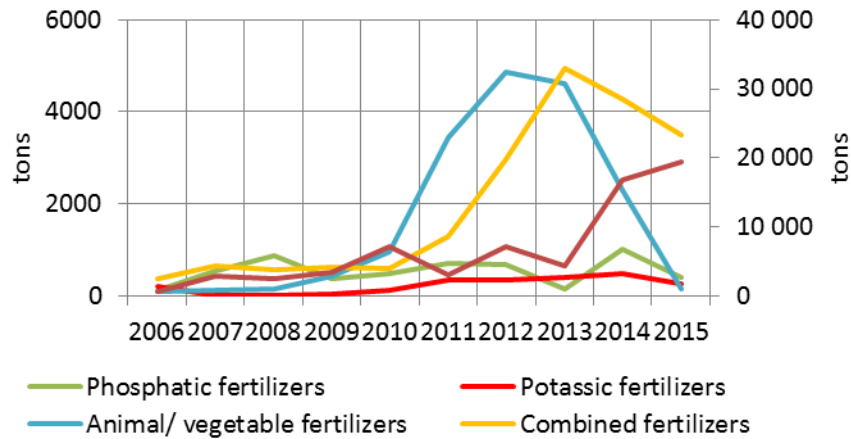
Source: NSO, estimates

Figure 21. Volume of pesticide imports



Source: NSO

Figure 22. Volume of fertilizer imports



Source: NSO

Table 9 presents estimated significant correlations between annual crop yield levels and area coverage with and import volume of pesticides and fertilizers. Observed relations might have underlay observed increase in yield levels.

Table 9. Correlation matrix

	Area treated			Import of								
	Fungicide	Insecticide	Nitrogenous fertilizer	Fungicide	Herbicide	Insecticide	Disinfectants	Rodenticide	Combined fertilizer	Nitrogenous fertilizer	Potassic fertilizer	Animal/vegetable fertilizer
Vegetables	X	X										
Orchard crops	X	X	X	X	X	X	X		X		X	X
Perennial grasses	X	X										X
Wheat				X	X	X	X	X	X	X		
Barley					X	X						
Maize								X				
Beans								X				
Vegetables												X
Annual grasses				X	X	X	X		X	X	X	

Source: NSO, ITC, estimates

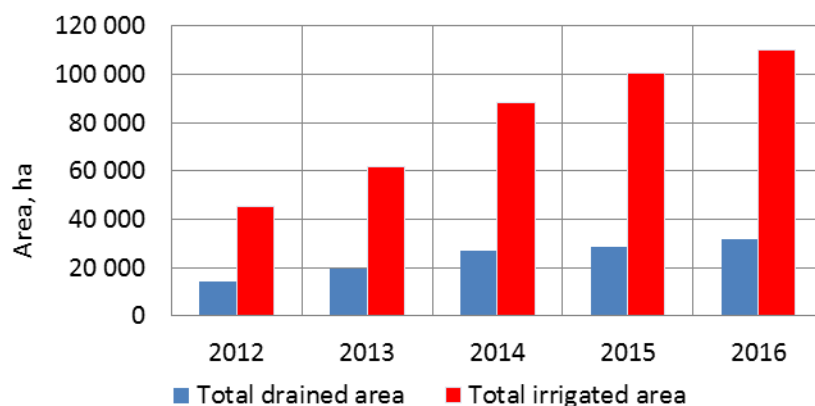
From 2012 to 2016 areas of agriculture land irrigated and drained have increased by 25 percent and 23 percent, accordingly. Significant positive correlation was obtained only between orchard crop yield levels and area of land irrigated (Table 10, Figure 23).

Table 10. Area irrigated and drained, ha

	Area (ha)	
	Drained	Irrigated
2012	14,000	45,234
2013	19,584	61,924
2014	26,891	88,422
2015	28,375	100,643
2016	31,575	110,042
Growth	23%	25%

Source: MoA, estimates

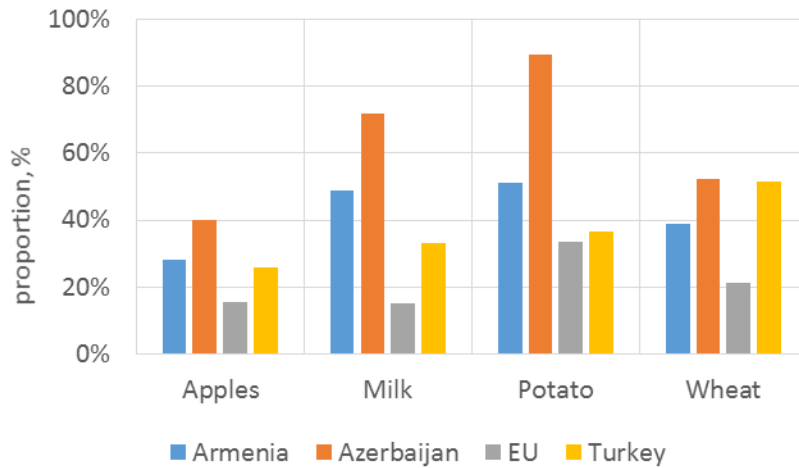
Figure 23. Area drained and irrigated, ha



Source: MoA

In general, yield levels in Georgia have been low. Figure 24 illustrates tomato, wheat, potato, and milk yield levels in Georgia in 2014 in percent of equivalent product yield levels in neighboring countries and EU.

Figure 24. Georgia yield level comparison



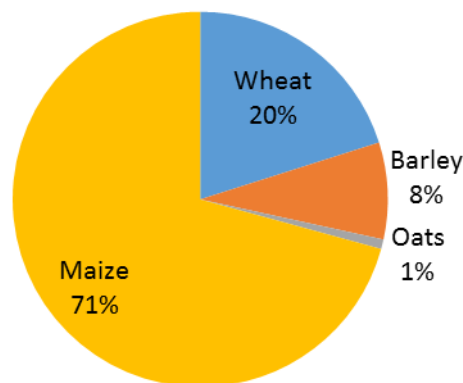
Source: FAO, estimates

### Agriculture output

#### Annual crops

During 2006-15, on average, maize output has accounted for the largest proportion in volume of total grain production (71 percent), followed by wheat (20 percent), barley (8 percent), and oats (1 percent) in a declining order (Figure 25, Table 1.9).

Figure 25. 10-year average proportion of grain crops in total grain output

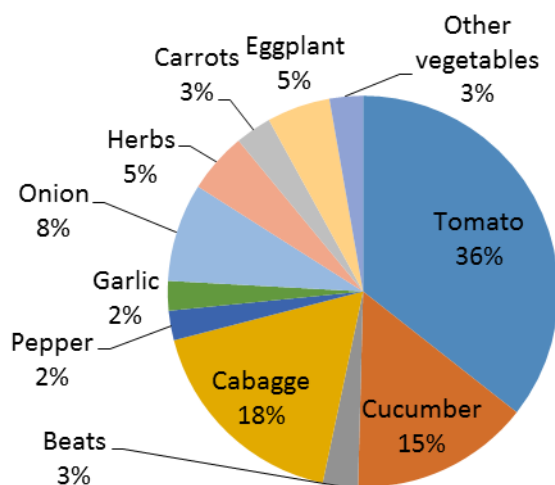


Source: NSO, estimates

Through 2006-15 output growth of annual crops with the exception of beans, annual feed grasses, and vegetables has been positive. The most significant positive growth was estimated for grain and orchard crops. Among annual crops, oats and annual feed grass output levels have discerned the highest variability, whereas vegetable output was the least volatile (Table 11-12, Table 1.9, Figures 27-28).

Tomato (36 percent), cabbage (18 percent), and cucumber (15 percent) have accounted for 69 percent of total vegetable output in volume. Between vegetables, output of carrots and beats were characterized with the most notable fluctuation, while tomato, onion and cabbage output have discerned the least changeability. Overall, volatility levels in the output of vegetable crops and other annual crops have been similar (Figure 25, Table 1.10).

Figure 25. 10-year average proportion of vegetables in total vegetable output



Source: NSO, estimates

Among vegetable crops, majority were characterized with a negative growth. The most significant drop was in eggplant production, and the most notable rise in carrot production. Higher positive growth rates were associated with higher volatility in annual production (Tables 11-12, Table 1.10, Figures 29-32).

#### Perennial crops

During the analysis period, production levels of all fruit crops did not fluctuate significantly. Output of pome fruits and stone fruits with the exception of peaches and apricot have had a negative growth. Production levels of berries, nuts, subtropical and citrus crops were characterized with upward surge. Among perennial crops the most notable decline was estimated for tea. Overall, higher growth, both positive and negative, was associated with a high variability in annual production levels. In general fluctuation in permanent crop output has been greater than that among annual crops. The most volatile has been peach output, and the least - subtropical fruits (Table 11-12, Table 1.11, Figures 33-36).

#### Livestock products

Output of all types of meat with the exception of poultry was characterized with a negative growth, while milk, egg, honey and fleece output were characterized with a positive growth. Higher growth rates, both positive and negative, were related with higher annual output levels. Livestock output volatility has been smaller than those of annual and perennial crops. The highest volatility was estimated for mutton/ goat meat production, and the lowest for cow milk (Tables 11-12, Table 1.12, Figures 37-39).

Table 11. 10-year mean output and CV

Product	Mean	CV	Product	Mean	CV
Wheat	77	33	Cherry/ Sour-cherry	4	28
Barley	33	32	Apricot	1	39
Oats	3	62	Peach	14	50
Maize	275	24	Tkemali	14	39
Beans	9	22	Walnut	7	37
Potato	228	17	Hazelnut	28	27
Orchard crops	55	32	Subtropical fruits	24	9
Perennial grasses	33	42	Berries	1	41
Annual grasses	12	65	Other fruits	1	89
Vegetables	182	8	Grapes	186	25
Tomato	65	13	Mandarin	71	29
Cucumber	27	23	Orange	2	50
Beats	5	46	Lemon	2	29
Cabbage	32	22	Tea	4	48
Pepper	4	28	Meat	58	21
Garlic	5	39	beef	24	23
Onion	15	21	Pork	16	42
Herbs	9	24	Mutton/ goat meat	5	38
Carrots	6	61	Poultry	13	20
Eggplant	10	28	Cow milk	605	6
Other vegetables	5	33	Sheep/ goat milk	8	17
Apples	57	48	Eggs	460	20
Pears	16	19	Fleece	2	13
Quince	1	48	Honey	3	31
Plum	10	37			

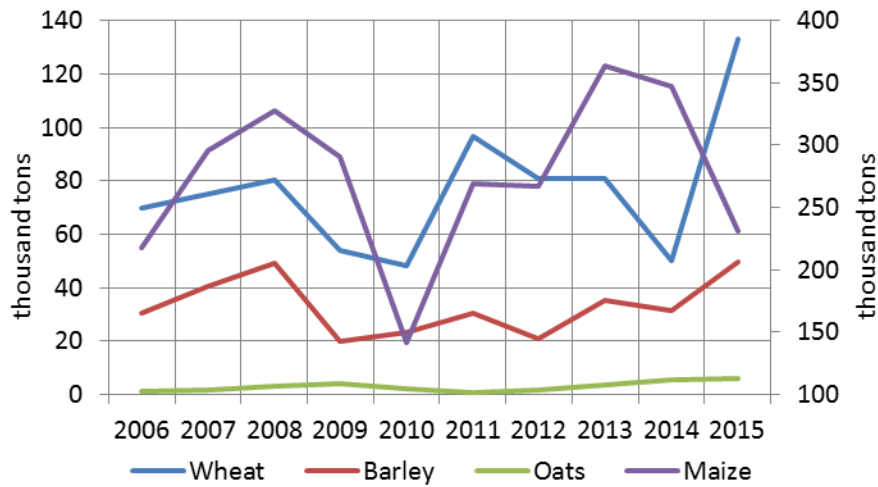
Source: NSO, estimates

Table 12. 10-year growth in output

Product	Growth	Product	Growth	Product	Growth
Wheat	7%	Herbs	3%	Grapes	6%
Barley	5%	Carrots	12%	Mandarin	6%
Oats	18%	Eggplant	-7%	Orange	7%
Maize	1%	Other vegetables	-3%	Lemon	6%
Beans	-3%	Total fruits	0%	Tea	-12%
Potato	2%	Apples	-2%	Meat	-3%
Orchard crops	8%	Pears	-5%	beef	-5%
Perennial grasses	9%	Quince	-7%	Pork	-7%
Annual grasses	-11%	Plum	-10%	Mutton/ goat meat	-5%
Vegetables	-1%	Cherry/ Sour-cherry	-6%	Poultry	6%
Tomato	-1%	Apricot	0%	Other meat	0%
Cucumber	4%	Peach	12%	Cow milk	1%
Beats	5%	Tkemali	-7%	Sheep/ goat milk	3%
Cabbage	-5%	Walnut	5%	Eggs	10%
Pepper	-4%	Hazelnut	5%	Fleece	2%
Garlic	4%	Subtropical fruits	2%	Honey	11%
Onion	-3%	Berries	9%		

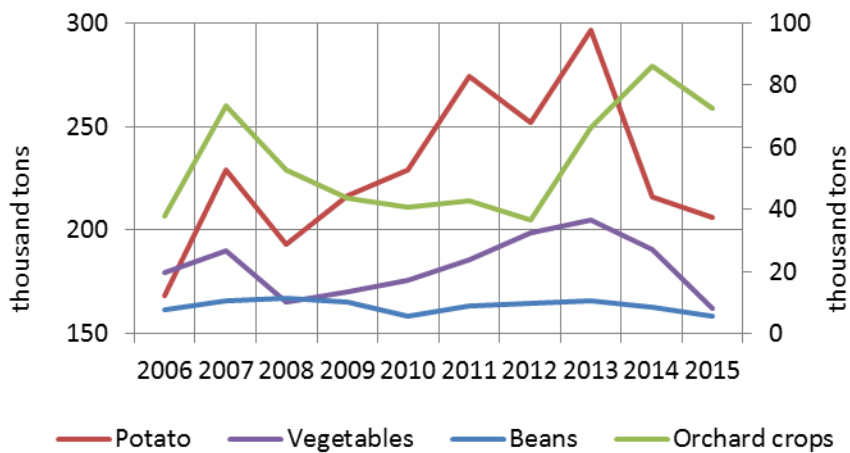
Source: NSO, estimates

Figure 27. Wheat, barley, oats, and maize output



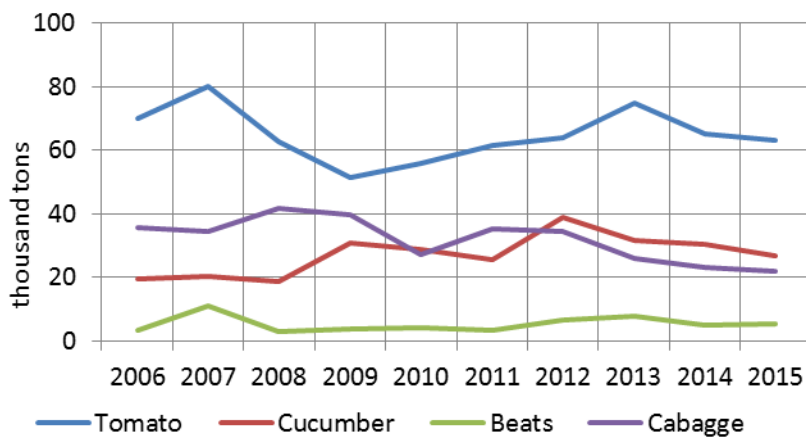
Source: NSO

Figure 28. Potato, vegetable, beans, and orchard crop output



Source: NSO

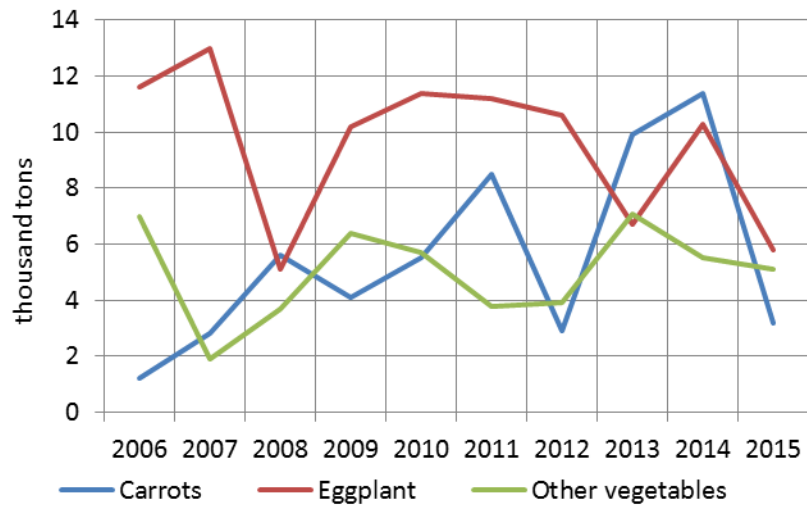
Figure 29. Tomato, cucumber, beats, and cabbage output



Source: NSO

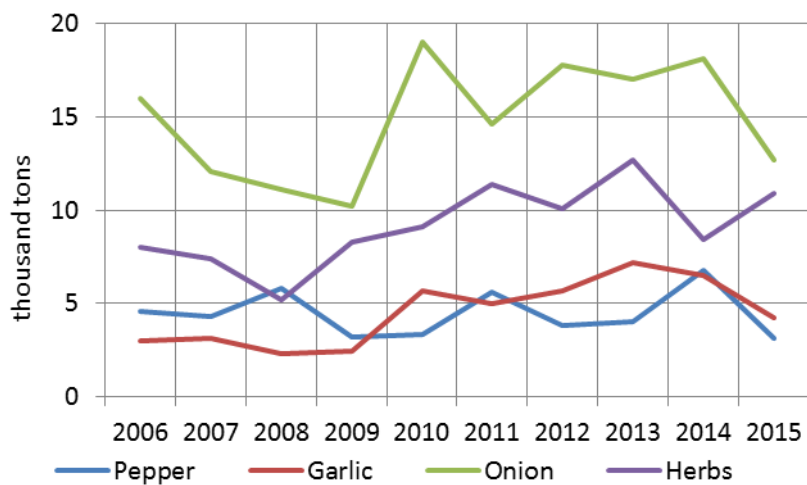


Figure 30. Carrots, eggplant and other vegetable output



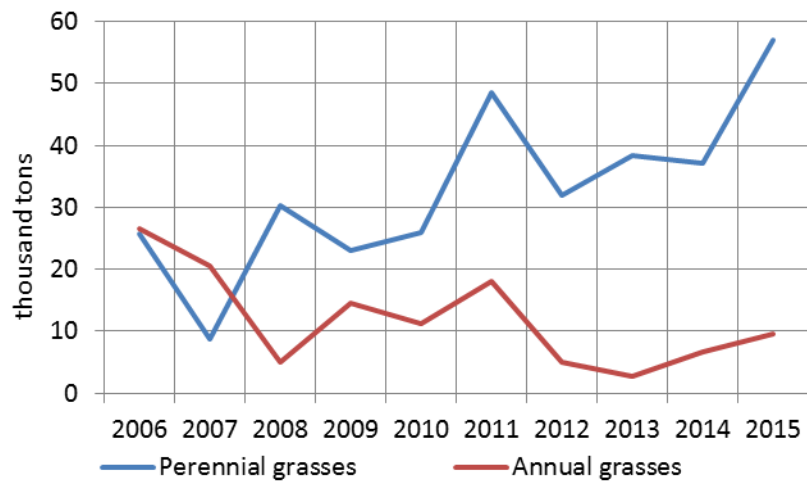
Source: NSO

Figure 31. Pepper, garlic, onion and herbs output



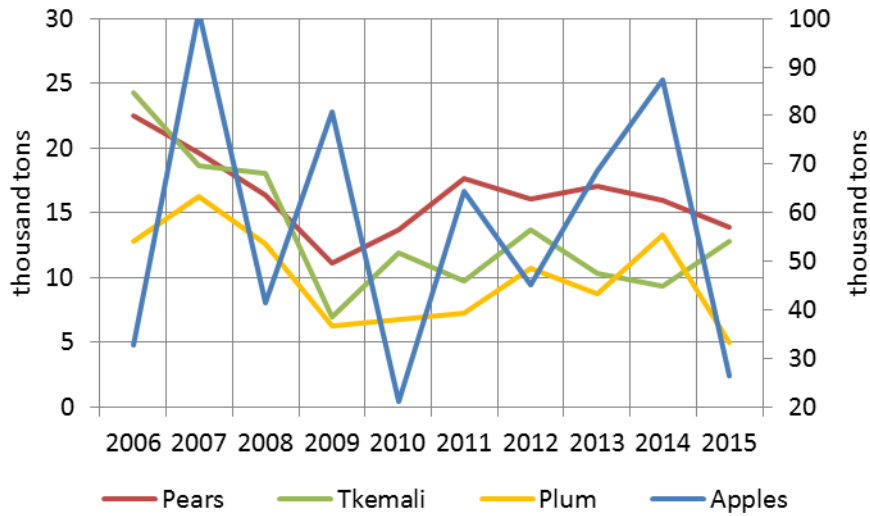
Source: NSO

Figure 32. Feed grass output



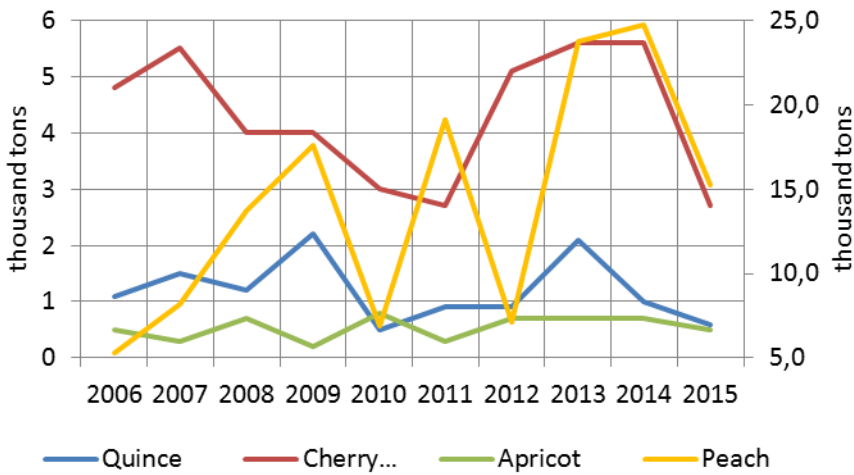
Source: NSO

Figure 33. Pears, tkemali, plum and apple output



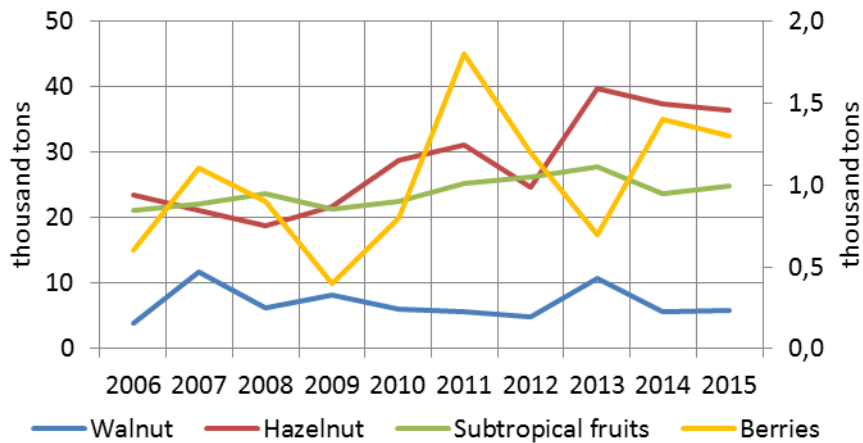
Source: NSO, estimates

Figure 34. Quince, cherry, apricot, and peach output



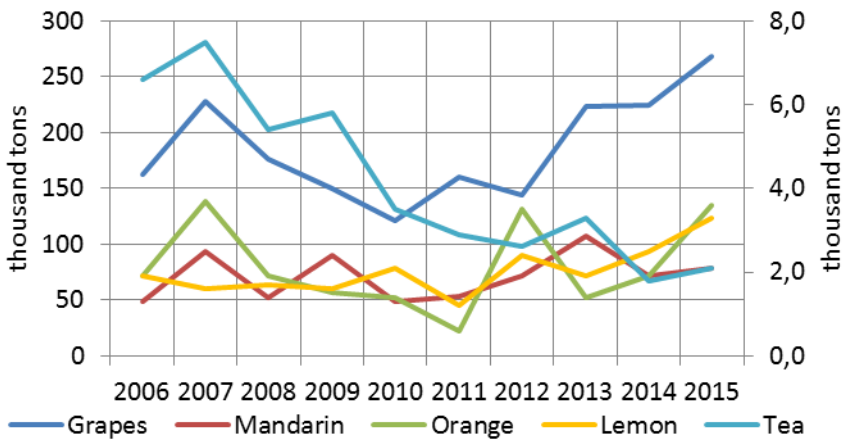
Source: NSO, estimates

Figure 35. Walnut, hazelnut, berry, and subtropical fruit output



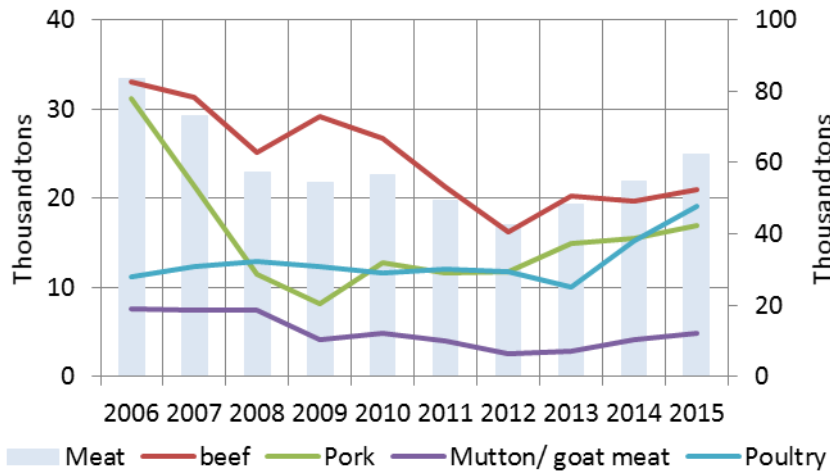
Source: NSO

Figure 36. Grapes, lemon, mandarin, tea, and orange output



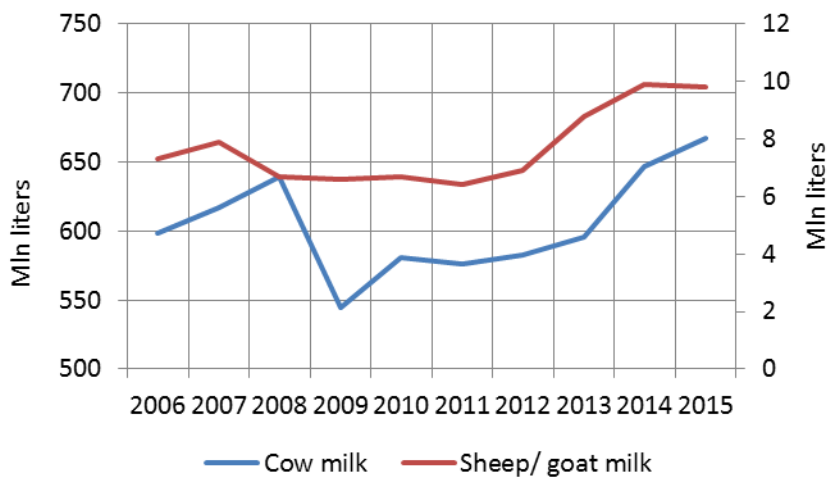
Source: NSO

Figure 37. Output of different types of meat



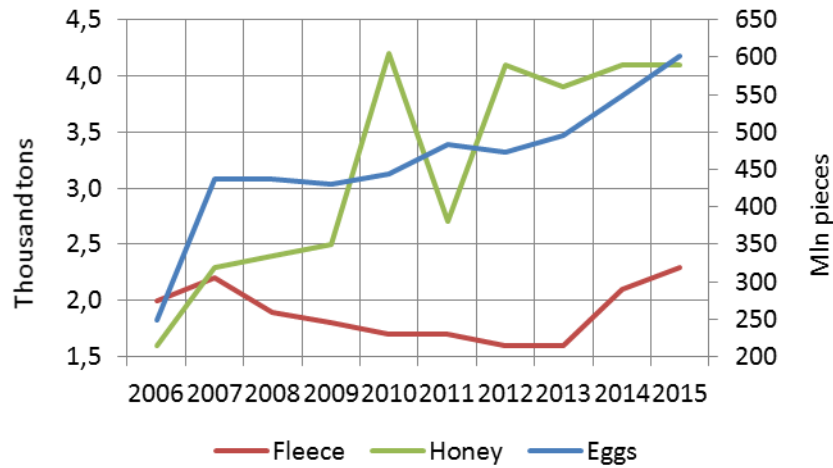
Source: NSO

Figure 38. Output of cow and sheep/ goat milk



Source: NSO

Figure 39. Egg, fleece and honey output

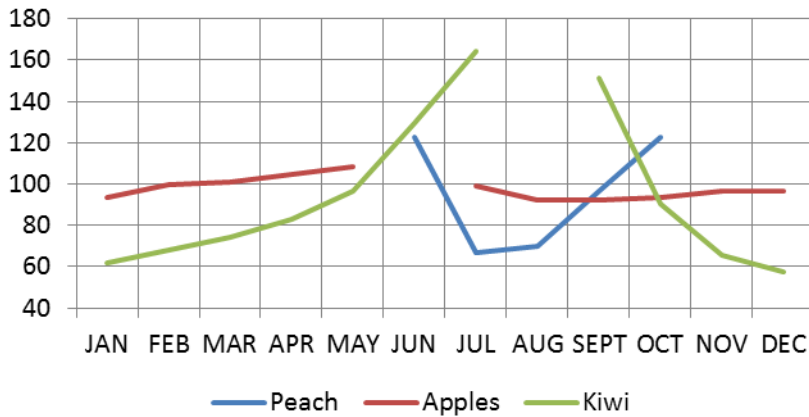


Source: NSO, estimates

### Retail prices

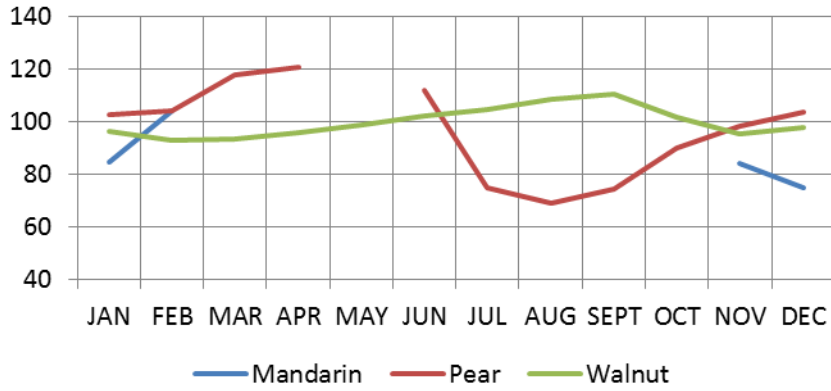
Retail prices were characterized with significant seasonality. Underlying factors have been availability of local production and a seasonality in local consumption patterns. In general, lower price levels were associated with the peak in local production availability, and higher prices with market dominance of imported equivalents (Figures 40-46, Table 1.13).

Figure 40. Peach, apple, and kiwi price seasonal indices



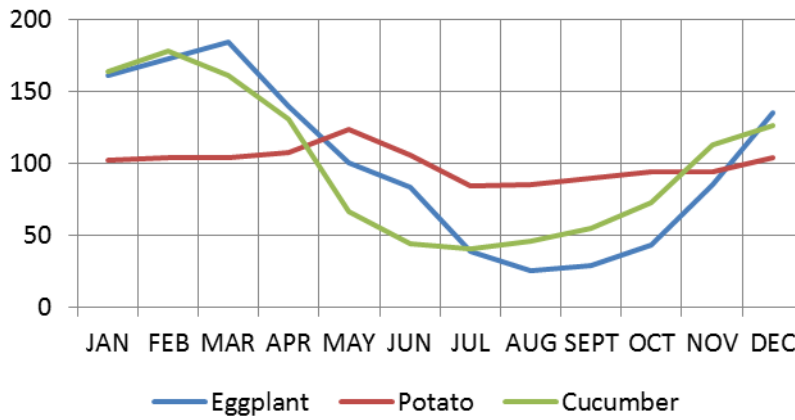
Source: NSO, estimates

Figure 41. Mandarin, pear, and walnut price seasonal indices



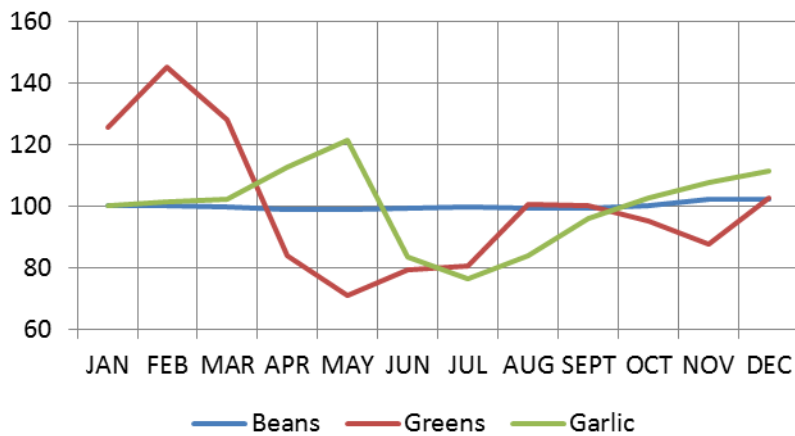
Source: NSO, estimates

Figure 42. Eggplant, potato, and cucumber price seasonal indices



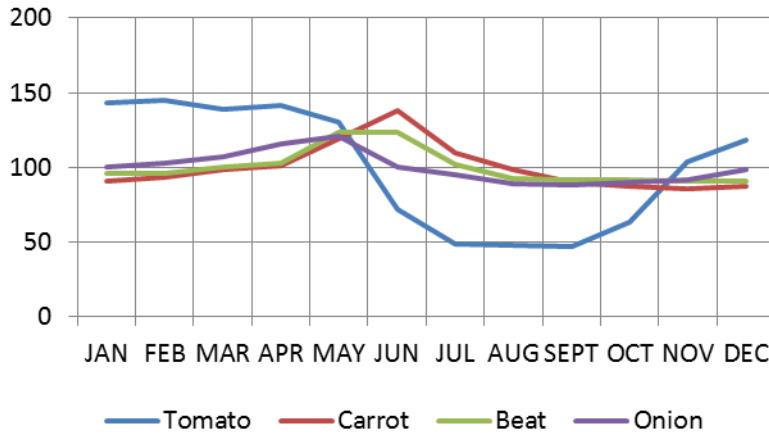
Source: NSO, estimates

Figure 43. Beans, greens, and garlic price seasonal indexes



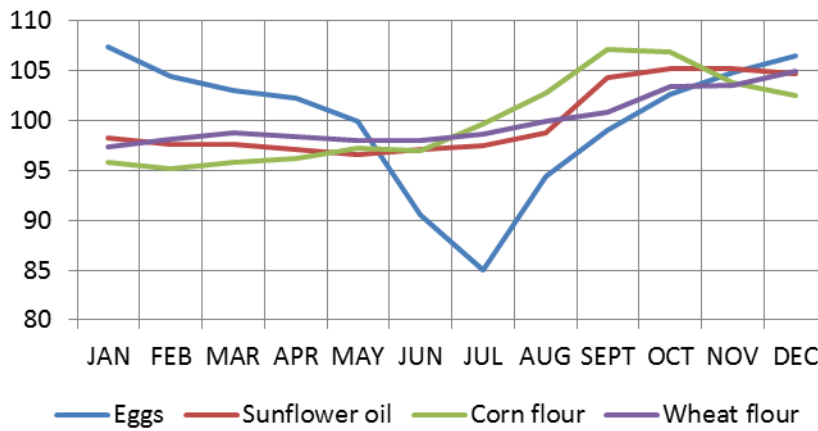
Source: NSO, estimates

Figure 44. Tomato, carrot, beet, and onion price seasonal indices



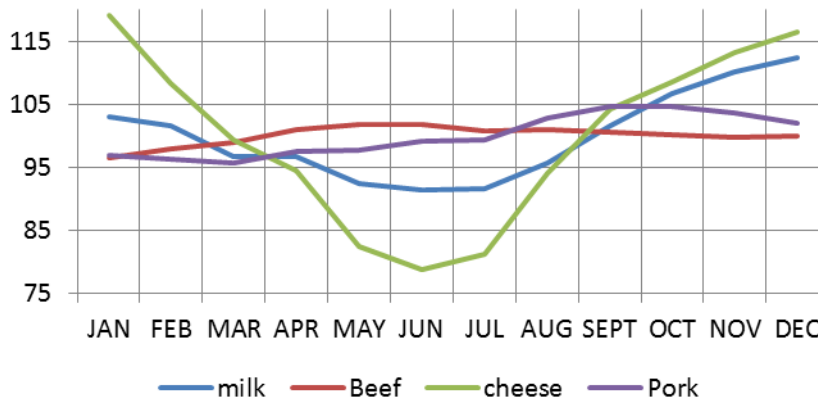
Source: NSO, estimates

Figure 45. Eggs, sunflower oil, corn flour, and wheat flour price seasonal indices



Source: NSO, estimates

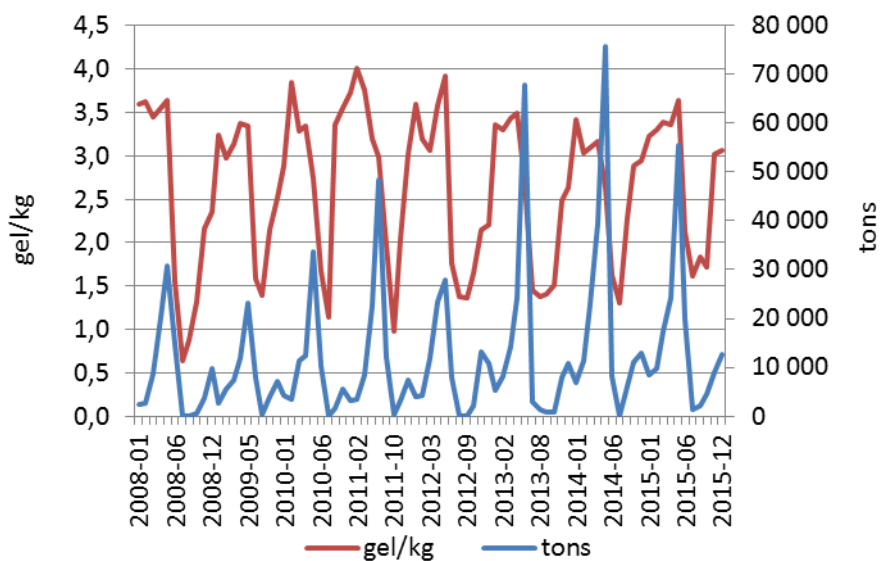
Figure 46. Beef, pork, cheese, and milk price seasonal indices



Source: NSO, estimates

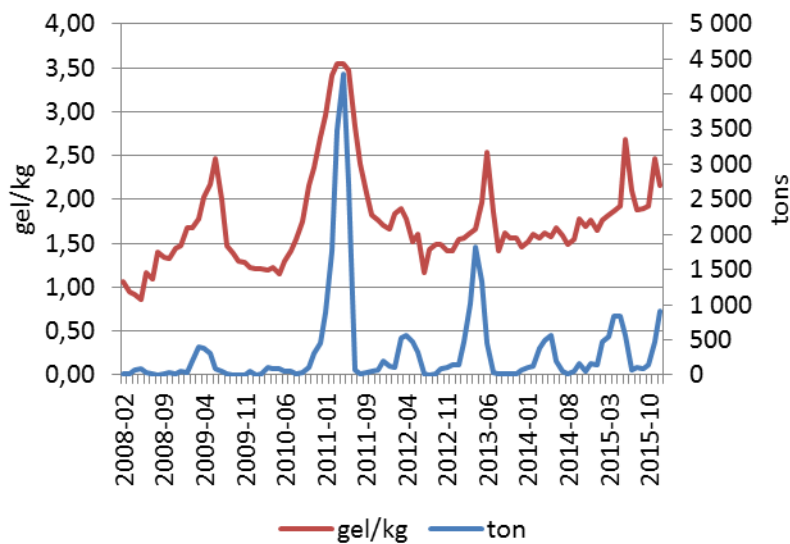
Local retail price levels have had impact on import supplies. Increase in price levels has been considered as indicator of scarcity in product availability at local markets, and the gap has been addressed by imports. To illustrate import supply responsiveness to price change, relationship between tomato and apply prices and relevant product import supplies were assessed. Figures 47-48 illustrate noticeable seasonality in prices and import supplies.

Figure 47. Tomato monthly imports and retail prices



Source: ITC, estimates

Figure 48. Apple monthly imports and retail prices



Source: ITC, estimates

Based on the results of conducted analysis, it could be concluded that

- About 53 percent of variation in tomato imports can be explained by variability in local retail prices on tomatoes
- Estimated tomato import demand elasticity is price elastic, implying that 1 percent increase in tomato retail prices would lead to 3.5 percent increase in import supply volume
- Around 36 percent of variation in apple imports can be explained by variability in local retail prices on apples
- Derived apple import demand elasticity is price elastic, meaning that 1 percent increase in apple retail prices should result in 3.4 percent increase in the supply volume of imported apples

#### Perennial crops

Through 2006-15 period prices on perennial crops have increased with the exception of kiwi prices. The most notable growth was observed in pear prices, and the least - in apple prices. Peach and kiwi prices have discerned the highest fluctuation, and while apple and mandarin price variability was the least notable (Table 13, Table 1.13).

Table 13. Perennial crop mean price and variability

Product	9-year		Growth
	Mean	CV	Mean
Peach	2.08	41	4%
Apples	1.76	22	1%
Kiwi	4.82	44	-1%
Mandarin	1.57	26	6%
Pear	2.03	29	7%
Walnut	19.30	11	5%

Source: NSO, estimates

#### Vegetable crops

Through 2006-15 all vegetable crop prices were characterized with a positive growth. The most notable growth was estimated for garlic prices, and the least for cucumber, greens, and tomato prices. Variability levels among vegetable crop prices differed. The most significant variability was derived for eggplant, and the prices on beans have been least volatile (Table 14, Table 1.13).

Table 14. Vegetables mean price and variability

Product	9-year		Growth
	Mean	CV	Mean
Eggplant	2.52	60	2%
Potato	0.99	18	3%
Cucumber	2.15	53	1%
Beans	3.66	6	4%
Greens	0.41	37	1%
Garlic	4.47	22	7%
Tomato	2.40	43	1%
Carrot	1.47	21	4%
Beet	1.33	18	2%
Onion	1.10	15	4%

Source: NSO, estimates



## Foodstuffs

Variability of foodstuff prices has been considerably lower than those of perennial and vegetable crop prices. The most notable volatility was derived for cheese prices, and the least - for beef prices; however, overall growth of food staff prices was higher than of prices for vegetables and perennial crops. The most significant rise was obtained for beef and pork, whereas the least for corn flour prices (Table 15, Table 1.13).

Table 15. Food staff mean price and variability

Product	9-year		Growth
	Mean	CV	Mean
Eggs	2.88	8	2%
Sunflower oil	3.52	8	3%
Corn flour	1.79	7	1%
Wheat flour	1.52	5	5%
Milk	1.92	9	7%
Beef	9.95	3	8%
Cheese	6.77	15	5%
Pork	10.49	6	8%

Source: NSO, estimates

## International trade

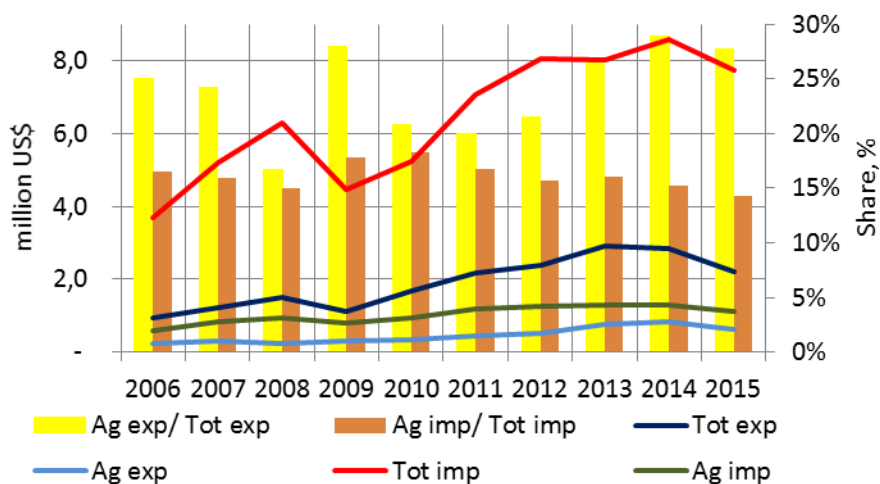
Through 2006-2015 growth in agriculture exports was greater than growth in total exports, and growth in agriculture imports was lower than growth in total imports. Share of agriculture exports in total exports has increased by 1 percent, while the share of agriculture imports in total imports has declined by 2 percent. Total import coverage with total exports was 1 percent, while that in case of agriculture products totaled 4 percent (Table 16, Table 1.14, Figure 49-50).

Table 16. Growth in trade Indicators

	Growth
Total exports	10%
Agriculture exports	11%
Total imports	9%
Agriculture imports	7%
Ag exp/ Tot exp	1%
Ag imp/ Tot imp	-2%
Tot import coverage	1%
Ag import coverage	4%

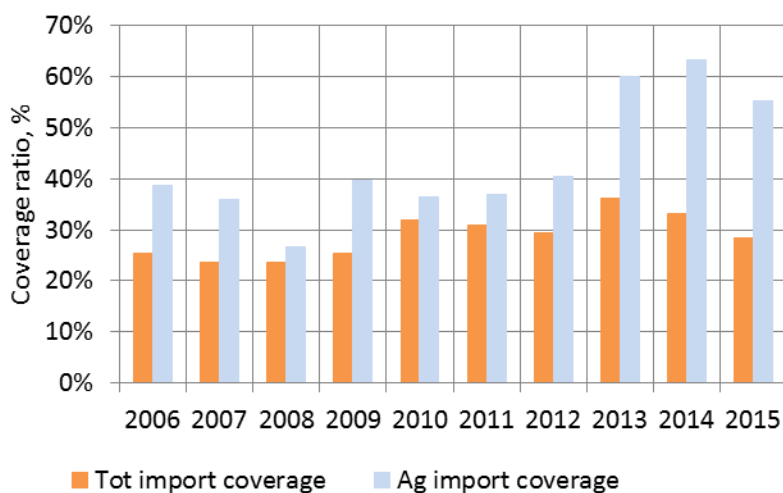
Source: NSO, estimates

Figure 49. Share of agriculture trade in total trade



Source: NSO, estimates

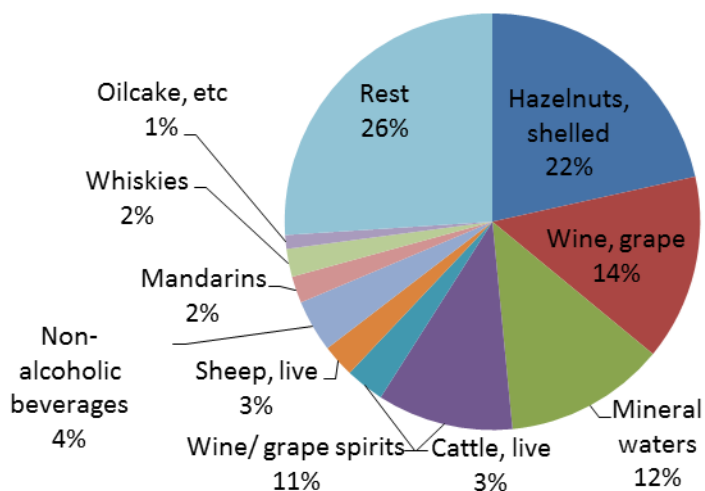
Figure 50. Export coverage of imports



Source: NSO, estimates

From 2006 to 2015, 10 major export commodities accounted for 74 percent of total agriculture exports. The three main export products included hazelnuts (22 percent), wine (14 percent) and mineral waters (12 percent) (Figure 51, Table 1.15).

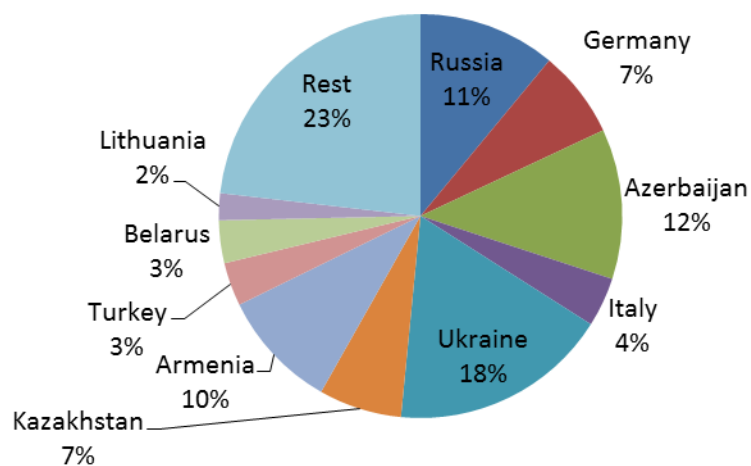
Figure 51. Major export products



Source: ITC, estimates

Proportion of 10 top export destination markets was 77 percent of total export shipments. Three major export markets were represented by Ukraine (18 percent), Azerbaijan (12 percent) and Russia (11 percent) (Figure 52, Table 1.16).

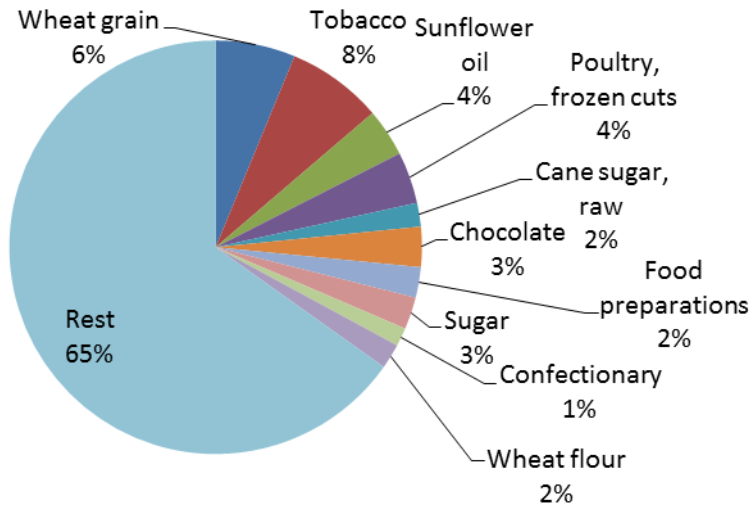
Figure 52. Major export destination markets



Source: ITC, estimates

Through 2006-2015, share of 10 major imported agriculture products was 35 percent in total agriculture imports. On average, three main imported products comprised tobacco (8 percent), wheat grain (6 percent), and sunflower oil and a frozen cuts of poultry (4 percent, each) (Figure 53, Table 1.17).

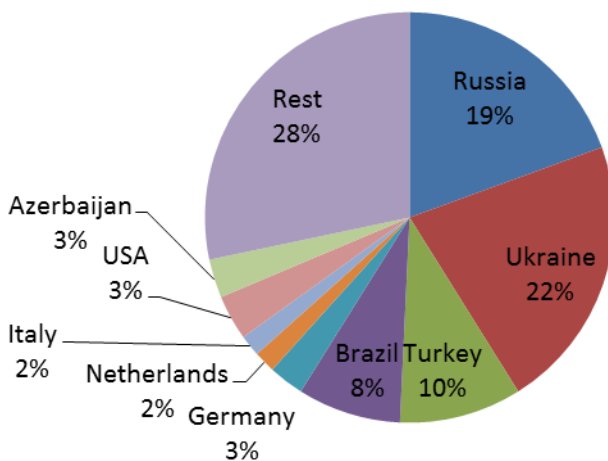
Figure 53. Major import products



Source: ITC, estimates

Top 10 importer markets have supplied 72 percent of total agriculture import supplies, and three major import suppliers consisted of Ukraine (22 percent), Russia (19 percent), and Turkey (10 percent) (Figure 54, Table 1.18).

Figure 54. Major import supplier markets

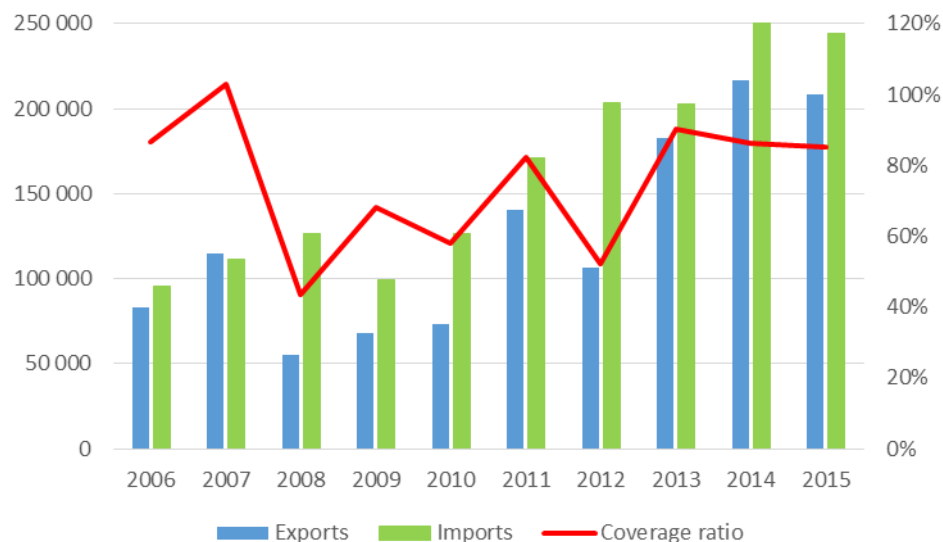


Source: ITC, estimates

## Georgia – EU trade

During 2006-2015, trade in agriculture products between Georgia and EU was characterized with a positive growth; growth rates in Georgia’s exports and import to/ from EU were 12 percent, each. With the exception of 2007, Georgia has had a negative trade balance with the EU. Georgia export coverage of supplies from EU has had a negative growth rate of -0.2 percent (Figure 55, Table 1.19).

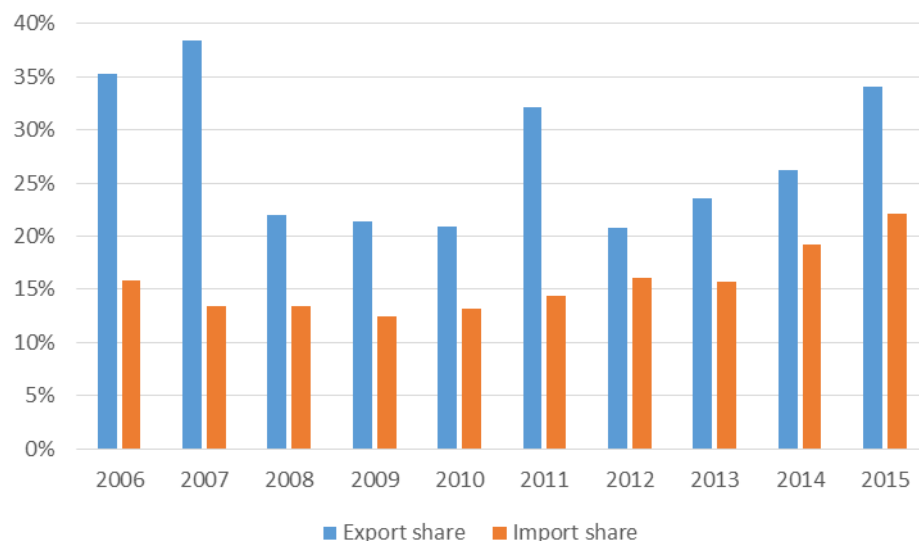
Figure 55. Georgia-EU trade and export coverage of imports



Source: ITC, estimates

Georgia’s export shipments to EU have had greater share in total exports relative to Georgia import supplies from EU in total agriculture imports. From 2006 to 2015 proportion of EU exports in total exports has declined by 0.4 percent, while share of EU import supplies in Georgia’s total agriculture imports has increased by 4 percent (Figure 56).

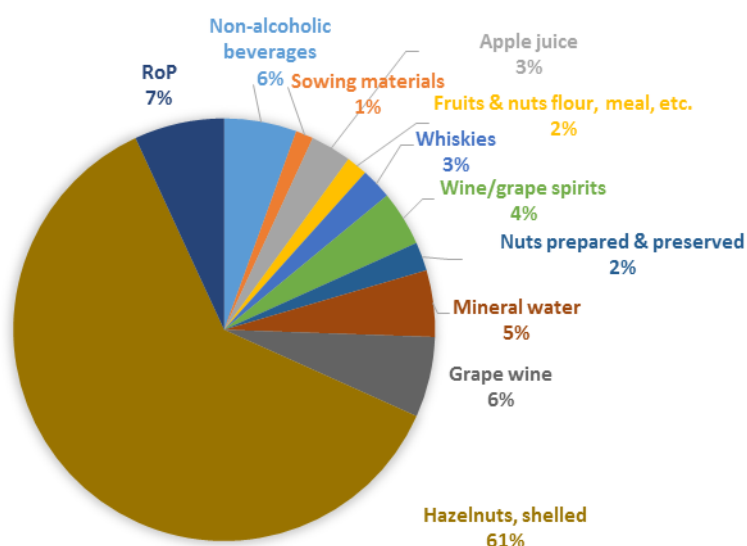
Figure 56. Share of Georgia-EU trade in Georgia total agriculture trade



Source: ITC, estimates

Main 10 export products accounted for 93 percent of total exports to EU. Proportion of hazelnuts, grape wine, and non-alcoholic beverages in total exports have been 61 percent, 6 percent, and 6 percent, accordingly (Figure 57, Table 1.20).

Figure 57. Major export products to EU market



Source: ITC, estimates

The most notable growth rates were estimated in exports of whiskies, and wine/ grape spirits, whereas growth in exports of sowing materials and non-alcoholic beverages has been negative (Tables 17 & 1.20).

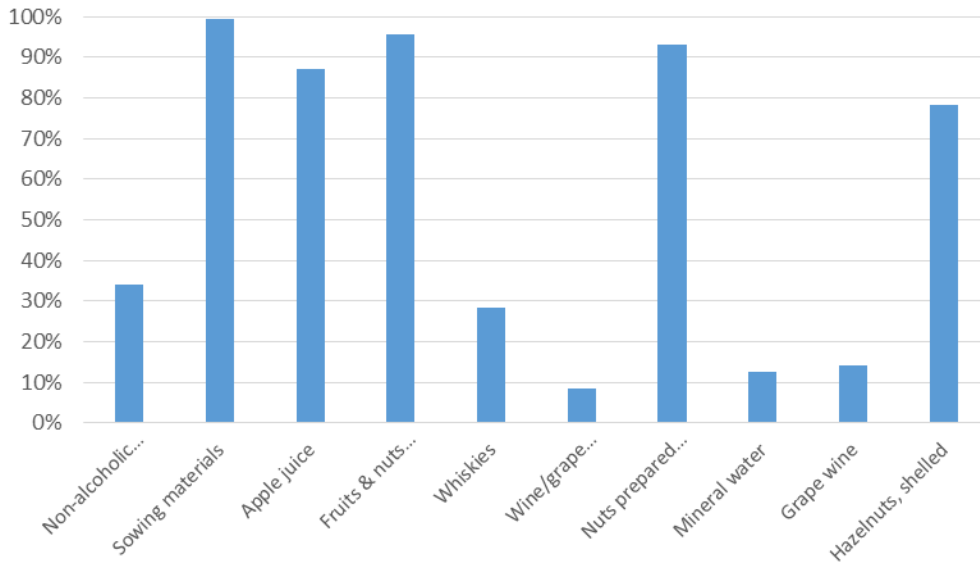
Table 17. Growth rates in the supply of main export products

Export products	Growth
Non-alcoholic beverages	-38%
Sowing materials	-3%
Apple juice	7%
Fruits & nuts flour, meal, etc.	34%
Whiskies	61%
Wine/grape spirits	54%
Nuts prepared & preserved	11%
Mineral water	27%
Grape wine	16%
Hazelnuts, shelled	16%

Source: ITC, estimates

Among main export products, largest proportions of hazelnuts and whiskies were supplied to EU market; and proportions of other main export products (wine grape, grape/ wine spirits, non-alcoholic beverages, and mineral waters) to EU market have been less than 20 percent (Figure 58).

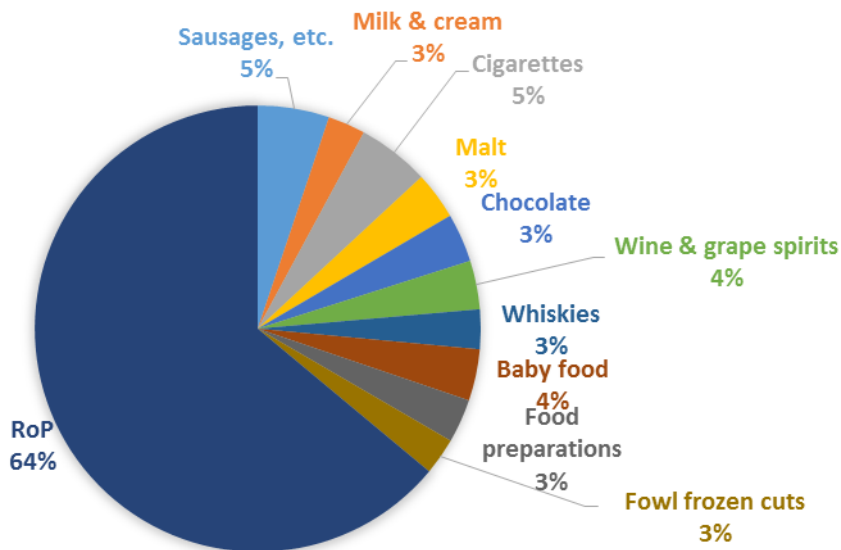
Figure 58. Share of major export products going to EU in total Georgia exports



Source: ITC, estimates

Share of main 10 import products in total imports has been 36 percent. Proportions of sausages, etc. and cigarettes imports were 5 percent, each, and those of baby food and grape/ wine spirits 4 percent, each (Figure 59, Table 1.21).

Figure 59. Major import products from EU



Source: ITC, estimates

The most notable growth in imports from EU was estimated for milk & cream, whereas growth rates for cigarettes and grape/ wine spirits were negative (Tables 18 & 1.21).

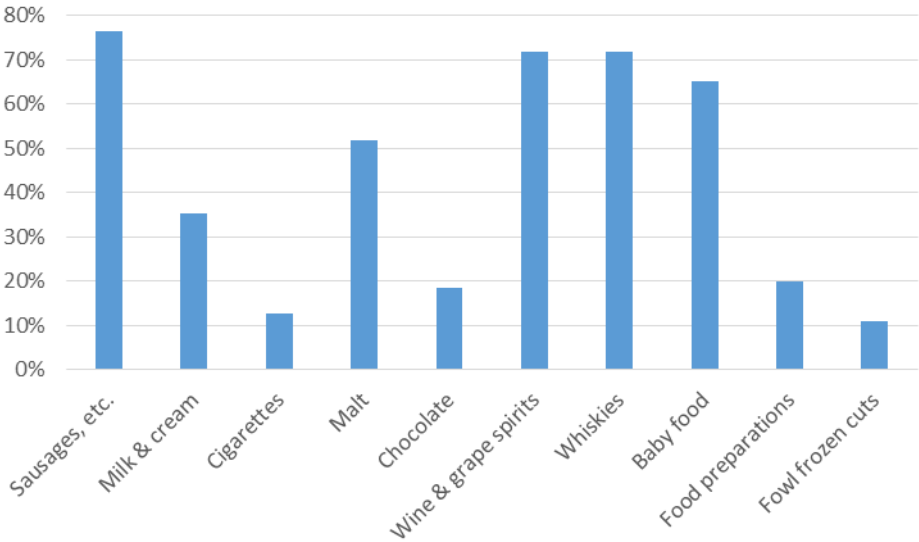
Table 18. Growth rates in the supply of main import products

	Growth
Sausages, etc.	1%
Milk & cream	86%
Cigarettes	-1%
Malt	10%
Chocolate	5%
Wine & grape spirits	-4%
Whiskies	14%
Baby food	17%
Food preparations	39%
Fowl frozen cuts	20%

Source: ITC, estimates

Proportions of main import products (poultry frozen cuts and cigarettes) were less than 20 percent in the total supplies from EU (Figure 60).

Figure 60. Share of major import products originated in EU in total Georgia imports



Source: ITC, estimates



Table 1.1. Rural Population, spending, and output

	unit	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total population	ths. persons	4,343	4,315	4,289	4,401	4,395	4,382	4,385	4,436	4,469	4,498	4,484	4,490	3,714
Urban population	ths. persons	2,267	2,252	2,243	2,310	2,309	2,304	2,309	2,351	2,371	2,392	2,411	2,411	2,123
Rural population	ths. persons	2,076	2,063	2,046	2,091	2,086	2,078	2,076	2,086	2,098	2,106	2,073	2,079	1,591
MoA budget, nominal	ths. GEL	11,092	50,004	41,356	63,166	111,100	70,871	75,160	30,641	85,112	228,360	227,430	265,756	314,332
MoA budget, real	ths. GEL	18,131	77,366	59,111	82,707	133,160	77,221	80,504	30,641	78,414	212,391	212,615	241,047	274,131
VPPFS, nominal	ths. GEL	3,234	5,916	3,580	6,012	7,066	5,753	7,359	4,026	4,038	8,961	16,987	24,943	30,054
Melioration, nominal	ths. GEL	5,730	9,827	4,917	4,758	2,511	6,512	14,405	8,749	8,967	13,850	61,471	50,100	63,524
"Private goods", nominal	ths. GEL	2,128	34,262	32,859	52,396	101,522	58,605	53,396	17,866	72,107	205,549	148,971	190,713	220,755
"Public goods", real	ths. GEL	14,653	24,357	12,145	14,102	11,479	13,365	23,312	12,775	11,981	21,216	73,348	68,066	81,610
"Private goods", real	ths. GEL	3,478	53,009	46,966	68,605	121,681	63,856	57,192	17,866	66,432	191,175	139,267	172,981	192,522
Total GDP, nominal	mil. GEL	8,042	8,990	10,284	12,047	14,611	16,522	15,546	18,014	20,975	22,505	23,335	25,096	27,468
Total spending, nominal	mil. GEL	1,207	1,930	2,619	3,823	5,238	6,759	6,754	6,972	7,459	7,807	8,104	9,010	9,703
Agriculture GDP, nominal	ths. GEL	1,653	1,611	1,716	1,544	1,563	1,551	1,457	1,510	1,855	1,933	2,195	2,328	2,508
Agriculture GDP, real	ths. GEL	2,702	2,492	2,453	2,022	1,873	1,690	1,561	1,510	1,709	1,798	2,052	2,112	2,187
Agriculture real GDP rural per capita	ths. GEL	1,302	1,208	1,199	967	898	813	752	724	815	854	990	1,016	1,375
Grain crops and others, nominal	mln. GEL				278	386	403	374	287	471	415	485	515	497
Fruits, nuts, and other crops produced for production of beverages and spices, nominal	mln. GEL				361	420	297	286	329	476	396	598	689	722
Vegetables, orchard crops, and nurseries, nominal	mln. GEL				272	245	219	208	316	290	276	322	410	403
Livestock, nominal	mln. GEL				1,165	1,139	1,228	1,140	1,240	1,337	1,610	1,666	1,613	1,837
Agriculture services, nominal	mln. GEL				57	60	57	63	69	99	110	139	161	194
Grain value added (flour and feed), nominal	mln. GEL				217	328	244	257	337	257	260	394	397	425
Flour value added, nominal	mln. GEL				151	153	234	211	242	455	440	309	340	515
Other food products, nominal	mln. GEL				335	547	381	447	565	977	994	1,123	1,334	1,478
Mineral waters and non-alcoholic beverages, nominal	mln. GEL				203	285	299	236	339	347	414	573	747	754
Alcoholic beverages, nominal	mln. GEL				299	237	270	295	371	449	555	693	905	626
Tobacco production, nominal	mln. GEL				80	89	104	103	100	89	84	66	75	78
Grain crops and others, real	mln. GEL				364	463	439	401	287	434	386	453	467	433
Fruits, nuts, and other crops produced for production of beverages and spices, real	mln. GEL				473	504	323	307	329	439	368	559	625	630

Vegetables, orchard crops, and nurseries, real	mln. GEL				356	294	238	223	316	267	257	301	372	351
Livestock, real	mln. GEL				1,526	1,365	1,338	1,222	1,240	1,232	1,498	1,557	1,463	1,602
Agriculture services, real	mln. GEL				75	72	62	68	69	91	102	130	146	169
Grain value added (flour and feed), real	mln. GEL				283	393	266	276	337	237	242	369	360	370
Flour value added, real	mln. GEL				198	183	255	226	242	419	410	288	308	449
Other food products, real	mln. GEL				439	656	415	479	565	900	925	1,050	1,210	1,289
Mineral waters and non-alcoholic beverages, real	mln. GEL				266	341	326	253	339	319	385	535	677	658
Alcoholic beverages, real	mln. GEL				392	284	294	316	371	413	516	648	821	546
Tobacco production, real	mln. GEL				105	107	113	110	100	82	78	61	68	68
Agriculture output, nominal	mln. GEL				2,134	2,251	2,203	2,072	2,242	2,674	2,807	3,210	3,388	3,667
Agriculture output, real	mln. GEL				2,794	2,698	2,400	2,220	2,242	2,464	2,611	3,001	3,073	3,198
Plant output, nominal	mln. GEL				911	1,052	918	868	932	1,238	1,087	1,405	1,613	1,690
Plant output, real	mln. GEL				1,193	1,261	1,000	930	932	1,140	1,011	1,314	1,463	1,474
Livestock output, nominal	mln. GEL				1,165	1,139	1,228	1,141	1,240	1,337	1,610	1,666	1,613	1,784
Livestock output, real	mln. GEL				1,526	1,365	1,338	1,222	1,240	1,232	1,498	1,557	1,463	1,556
Services, nominal	mln. GEL				58	61	57	64	69	99	110	139	161	194
Services, real	mln. GEL				75	73	62	68	69	91	102	130	146	169

Source: NSO, MoF

Table 1.2 Area planted, ths. ha

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total area planted	330	297	329	290	257	262.4	259.6	310.7	316.6	308.4
Wheat	58.7	45.4	48.6	57.5	50.0	47.0	50.0	45.0	51.1	52.3
Barley	30.2	27.1	30.4	20.6	23.7	16.1	14.2	29.9	27.3	29.8
Maize	129	126	146	130	109	121	115	150	155	140
Wheat	58.7	45.4	48.6	57.5	50.0	47.0	50.0	45.0	51.1	52.3
Barley	30.2	27.1	30.4	20.6	23.7	16.1	14.2	29.9	27.3	29.8
Maize	129	126	146	130	109	121	115	150	155	140
Orchard crops	3.2	5.3	3.5	2.6	2.7	3.3	3.3	2.7	3.8	3.3
Other annual crops	31.1	24.7	32.8	15.1	10.4	12.0	11.9	17.0	16.0	15.6
Annual grasses	7.4	5.4	1.3	5.9	2.5	3.9	0.8	0.9	2.2	2.3
Perennial grasses	10.1	3.6	7.9	10.7	6.0	10.9	8.6	9.3	9.6	12.7

Source: NSO

Table 1.3 Area planted with intensive and semi-intensive orchards

Perennial crop	ha
Walnut	805
Apples	466
Hazelnuts	412
Almond	211
Plum	68
Cherry	44
Blueberry	42
Feihoa	40
Persimmon	31
Pomegranate	20
Tkemali	16
Pear	13
Peach	11
Blackberry	9
Raspberry	6
Apricot	1
Cornel	1
Total	2,196

Source: MoA

Table 1.4 Livestock population

	unit	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Large livestock	ths. heads	1,080	1,049	1,046	1,015	1,049	1,088	1,129	1,230	1,278	1,326
dairy cattle	ths. heads	591	541	561	538	562	588	602	641	665	650
Swine	ths. heads	344	110	86	135	110	105	204	191	205	198
Sheep & goat	ths. heads	789	797	769	674	654	630	743	857	920	891
Sheep	ths. heads	697	711	690	602	597	577	688	796	866	842
Poultry	mln. Wings	5,401	6,150	6,682	6,675	6,522	6,360	6,159	6,761	7,273	8,806
Beehives	ths. beehives	146	184	207	257	312	328	348	399	403	422

Source: NSO

Table 1.5 Annual crop yield, t/ha

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Wheat	1.2	1.7	1.7	1.1	1.0	2.1	1.7	1.8	1.3	2.6
Barley	1.2	1.5	1.6	1.1	1.1	1.9	1.6	1.3	1.3	1.8
Maize	1.8	2.4	2.3	2.4	1.4	2.3	2.4	2.4	2.3	1.7
Beans	0.5	0.7	0.6	1.0	0.6	0.7	0.8	0.5	0.6	0.6
Potato	7.4	10.8	8.0	11.5	11.1	13.6	9.9	11.3	11.6	8.1
Vegetables	6.6	6.1	5.9	6.8	7.1	7.6	7.1	8.3	7.2	6.7
Orchard crops	11.1	13.2	13.6	14.8	15.2	12.1	13.5	24.1	22.9	22.0
Annual grasses	3.7	3.8	3.8	2.6	4.5	4.6	6.2	3.9	3.1	4.2
Perennial grasses	2.8	2.7	3.9	2.3	4.6	4.5	4.1	4.5	4.0	4.6

Source: NSO

Table 1.5 Livestock productivity

	unit	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fleece output rate	kg/head/annum	2.9	3.0	2.5	2.6	2.5	2.7	2.5	2.5	2.5	2.7
Milking rate	l/head/annum	960	1,170	1,172	1,263	1,270	1,309	1,256	1,302	1,322	1,344

Source: NSO

Table 1.7 Utilization of farm inputs

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pesticide (ann/tha ha)	52.3	20.4	26.6	31.4	57.1	46.8	51.6	89.7	76.4	72.3
Fungicide(ann/tha ha)	8.2	5.6	6.7	6.7	15.7	13.5	12.4	18.5	18.5	19.3
Insecticide (ann/tha ha)	14.1	5.3	6.5	7.5	6.5	3.5	7.5	13.7	9.5	12.9
Other (ann/tha ha)	30	9.5	13.4	17.2	34.9	29.7	31.6	57.6	48.4	40.1
Pesticide (per/ tha ha)	84.7	102.9	155.6	177	174.6	171.3	161.6	270.5	292.9	241.1
Fungicide (per/ tha ha)	73.5	88.9	135.5	124.2	117.9	120.8	107.4	180.6	170.3	185
Insecticide (per/ tha ha)	9.6	9.9	16.4	34.9	24.5	19.4	21.7	39.1	47.1	33.3
Other (per/ tha ha)	1.6	4.1	3.7	17.9	23.2	31	32.5	50.8	25.5	22.8
All fertilizer (ths tons)	45.9	51.1	52.7	59.6	51.7	45.1	56.4	71	66.6	61.5
Nitrogenouse (ths tons)	67.2	46.8	51.2	57.9	50.2	43.3	49.5	64.6	61.1	57.3
Other (ths tons)	28.7	4.3	1.5	1.7	1.5	1.7	6.9	6.4	5.6	4.2
All fertilizer (ann/ tha ha)	165.2	117.4	130.8	155.2	114.4	107.5	123.6	174.5	171.8	156.8
Nitrogenouse (ann/ tha ha)	155.6	112.9	125	151.9	110.7	103.2	119.7	159.8	160.9	145.6
Other (ann/ tha ha)	9.6	4.5	5.8	3.3	3.7	4.3	3.9	14.7	10.9	11.2
All fertilizer (per/ tha ha)	33.6	19.8	15.9	29.3	23	20.1	22.3	57.1	47	41.9

Nitrogenouse (per/ ths ha)	25.8	15.9	13.3	23.4	16.3	15.9	19.1	37.6	27.8	27
Other (per/ ths ha)	7.8	3.9	2.6	5.9	6.7	4.2	3.2	19.5	19.2	15

Source: NSO

Table 1.8 Import of farm inputs, tons

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Fungicides	664	645	674	1,004	821	988	1,135	1,811	1,343	1,062
Herbicides	111	122	153	226	222	446	539	802	896	1,037
Insecticides	121	145	215	178	239	320	379	541	468	452
Disinfectants	139	91	54	89	150	133	155	292	338	397
Rodenticides	81	123	149	129	82	165	131	97	108	97
Combined fertilizers	2,472	4,352	3,698	4,196	4,061	8,534	19,820	32,914	28,581	23,359
Nitrogenous fertilizers	687	2,848	2,422	3,346	7,100	3,044	7,188	4,304	16,833	19,365
Phosphatic fertilizers	117	544	867	365	472	699	683	149	1,001	399
Potassic fertilizers	207	11	10	44	129	331	340	399	493	264
Animal/ vegetable fertilizers	96	121	139	436	949	3,439	4,849	4,599	2,287	138

Source: ITC

Table 1.9 Annual crop production, ths. tons

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Wheat	69.7	74.9	80.3	53.9	48.4	96.8	80.7	81.0	50.2	133.4
Barley	30.6	40.3	49.3	19.9	23.3	30.3	20.7	35.0	31.5	49.4
Oats	1.3	1.6	2.9	4.2	2.0	0.7	1.6	3.4	5.6	5.9
Maize	217.4	295.8	328.2	291.0	141.1	269.6	267.0	363.9	347.2	231.4
Beans	7.6	10.5	11.6	10.2	5.8	8.9	9.6	10.5	8.7	5.8
Potato	168.7	229.2	193.4	216.8	228.8	273.9	252.0	296.6	216.2	206.2
Orchard crops	37.8	73.5	52.8	43.7	40.9	42.8	36.7	66.4	85.9	72.6
Perennial grasses	25.8	8.8	30.2	23.0	25.9	48.5	31.9	38.4	37.2	57.0
Annual crops	26.5	20.5	5.0	14.6	11.2	18.1	5.0	2.7	6.7	9.5
Vegetables	179.7	190.3	165.0	170.3	175.7	185.8	198.5	204.8	190.9	162.2

Source: NSO

Table 1.10 Vegetable production, ths. tons

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Tomato	69.9	80.2	62.6	51.4	56.0	61.6	63.9	75.0	65.1	63.0
Cucumber	19.4	20.3	18.6	30.9	28.6	25.5	38.7	31.5	30.6	26.7
Beats	3.5	10.9	3.1	3.6	4.3	3.4	6.6	7.7	5.1	5.5
Cabbage	35.5	34.3	41.9	39.6	27.1	35.2	34.5	26.0	23.3	22.0
Pepper	4.6	4.3	5.8	3.2	3.3	5.6	3.8	4.0	6.8	3.1
Garlic	3.0	3.1	2.3	2.4	5.7	5.0	5.7	7.2	6.5	4.2
Onion	16.0	12.1	11.1	10.2	19.0	14.6	17.8	17.0	18.1	12.7
Herbs	8.0	7.4	5.2	8.3	9.1	11.4	10.1	12.7	8.4	10.9
Carrots	1.2	2.8	5.6	4.1	5.5	8.5	2.9	9.9	11.4	3.2
Eggplant	11.6	13.0	5.1	10.2	11.4	11.2	10.6	6.7	10.3	5.8
Other vegetables	7.0	1.9	3.7	6.4	5.7	3.8	3.9	7.1	5.5	5.1

Source: NSO

Table 1.11 Perennial crop production

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total fruits	153.3	227.5	157.6	181.2	124.1	187.3	157.9	217.6	229.0	146.6
Grapes	162.5	227.3	175.8	150.1	120.7	159.6	144.0	222.8	224.9	267.8
Mandarin	48.4	93.6	51.6	90.5	48.6	53.1	71.1	107.1	71.8	78.6
Orange	1.9	3.7	1.9	1.5	1.4	0.6	3.5	1.4	1.9	3.6
Lemon	1.9	1.6	1.7	1.6	2.1	1.2	2.4	1.9	2.5	3.3
Tea	6.6	7.5	5.4	5.8	3.5	2.9	2.6	3.3	1.8	2.1
Quince	1.1	1.5	1.2	2.2	0.5	0.9	0.9	2.1	1.0	0.6
Cherry/ Sour-cherry	4.8	5.5	4.0	4.0	3.0	2.7	5.1	5.6	5.6	2.7
Apricot	0.5	0.3	0.7	0.2	0.8	0.3	0.7	0.7	0.7	0.5
Peach	5.3	8.2	13.7	17.6	6.9	19.1	7.1	23.7	24.7	15.2
Walnut	3.9	11.8	6.2	8.2	6.1	5.7	4.8	10.8	5.6	5.9
Hazelnut	23.5	21.2	18.7	21.8	28.8	31.1	24.7	39.7	37.4	36.4
Subtropical fruits	21.2	22.1	23.7	21.4	22.4	25.3	26.2	27.8	23.7	24.9
Berries	0.6	1.1	0.9	0.4	0.8	1.8	1.2	0.7	1.4	1.3
Other fruits	0.0	0.0	0.0	0.4	1.4	1.6	1.5	1.9	2.9	1.2

Grapes	162.5	227.3	175.8	150.1	120.7	159.6	144.0	222.8	224.9	267.8
Citrus total	52.2	98.9	55.2	93.6	52.1	54.9	77.0	110.4	76.2	85.5
Mandarin	48.4	93.6	51.6	90.5	48.6	53.1	71.1	107.1	71.8	78.6
Orange	1.9	3.7	1.9	1.5	1.4	0.6	3.5	1.4	1.9	3.6
Lemon	1.9	1.6	1.7	1.6	2.1	1.2	2.4	1.9	2.5	3.3
Tea	6.6	7.5	5.4	5.8	3.5	2.9	2.6	3.3	1.8	2.1

Source: NSO

Table 1.12 Livestock production

	unit	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Meat	ths. tons	83.3	73.0	57.3	54.3	56.4	49.3	42.6	48.4	54.8	62.1
Beef	ths. tons	33.0	31.3	25.1	29.2	26.7	21.3	16.2	20.2	19.6	20.9
Pork	ths. tons	31.1	21.4	11.4	8.2	12.8	11.6	11.8	14.9	15.5	16.9
Mutton/ goat meat	ths. tons	7.6	7.5	7.5	4.1	4.9	4.0	2.5	2.8	4.1	4.8
Poultry	ths. tons	11.2	12.4	12.9	12.4	11.6	12.0	11.7	10.1	15.2	19.1
Other meat	ths. tons	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Cow milk	ths. liter	598.8	616.9	639.1	544.8	581.0	575.7	582.6	595.9	646.3	666.7
Sheep/ goat milk	ths. liter	7.3	7.9	6.7	6.6	6.7	6.4	6.9	8.8	9.9	9.8
Eggs	mln units	249.2	438.1	437.5	430.6	444.5	483.1	474.0	495.3	549.4	601.2
Fleece	ths. tons	2.0	2.2	1.9	1.8	1.7	1.7	1.6	1.6	2.1	2.3
Honey	ths. tons	1.6	2.3	2.4	2.5	4.2	2.7	4.1	3.9	4.1	4.1

Source: NSO

Table 1.13 Retail annual average prices

	unit	2007	2008	2009	2010	2011	2012	2013	2014	2015
Peach	gel/kg	1.89	2.53	1.57	2.40	2.34	1.67	1.56	2.03	2.68
Apples	gel/kg	1.82	1.16	1.71	1.60	2.68	1.56	1.70	1.62	2.01
Kiwi	gel/kg	5.63	5.06	4.07	4.89	5.09	4.27	4.10	5.02	5.24
Mandarin	gel/kg	1.30	1.56	1.60	1.52	1.67	1.47	1.46	1.47	2.12
Pear	gel/kg	1.83	1.60	1.77	1.74	2.13	1.85	2.03	2.23	3.12
Walnut	gel/kg	18.34	13.84	15.71	16.64	20.83	20.56	20.16	19.70	27.89
Eggplant	gel/kg	2.23	2.41	2.67	2.85	2.54	2.53	2.40	2.47	2.55
Potato	gel/kg	0.89	0.86	0.79	0.89	1.22	0.87	0.92	1.32	1.11
Cucumber	gel/kg	2.09	2.05	2.03	2.21	2.35	2.24	2.00	2.18	2.19
Beans	gel/kg	3.15	3.11	2.71	3.38	3.78	3.72	4.08	4.58	4.44
Greens	gel/kg	0.35	0.36	0.30	0.41	0.43	0.63	0.34	0.45	0.38
Garlic	gel/kg	3.54	2.92	2.75	6.41	7.35	3.20	3.84	4.17	6.02
Tomato	gel/kg	2.38	2.30	2.27	2.50	2.38	2.41	2.34	2.41	2.64
Carrot	gel/kg	1.29	1.55	1.32	1.31	1.57	1.44	1.48	1.58	1.71
Beat	gel/kg	1.23	1.33	1.27	1.12	1.59	1.18	1.42	1.40	1.41
Onion	gel/kg	0.94	0.80	0.94	1.45	1.34	0.96	1.09	1.11	1.25
Eggs	gel/dozen	2.49	2.80	2.73	2.88	3.10	3.04	3.00	2.90	2.99
Sunflower oil	gel/l	2.90	4.20	2.89	3.35	4.19	3.78	3.54	3.22	3.63
Corn flour	gel/kg	1.68	1.59	1.54	1.57	2.52	1.92	1.71	1.67	1.89
Wheat flour	gel/kg	1.17	1.52	1.34	1.40	1.73	1.55	1.62	1.63	1.69
milk	gel/l	1.40	1.77	1.82	1.40	2.04	1.78	2.29	2.38	2.42
Beef	gel/kg	6.82	7.48	7.43	7.94	10.97	12.10	11.59	12.68	12.55
cheese	gel/kg	5.25	6.27	5.50	6.16	7.01	7.49	7.31	8.02	7.87
Pork	gel/kg	6.60	9.82	11.05	9.07	11.15	12.24	10.62	11.70	12.18

Source: NSO



Table 1.14 Total and agriculture trade, ths. \$US

	Total exports	Agriculture exports	Total imports	Agriculture imports
2006	936,375	234,895	3,674,832	606,317
2007	1,232,110	298,613	5,212,150	832,494
2008	1,495,345	249,904	6,301,540	942,051
2009	1,133,630	316,472	4,475,725	795,168
2010	1,677,307	349,263	5,235,965	959,575
2011	2,186,421	436,555	7,072,260	1,183,759
2012	2,376,635	510,584	8,056,379	1,263,678
2013	2,910,637	774,804	8,022,739	1,288,601
2014	2,861,045	825,831	8,601,814	1,306,133
2015	2,204,684	612,190	7,730,103	1,106,449

Source: NSO

Table 1.15 Major export products, ths. \$US

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Hazelnuts, shelled	54,012	63,739	27,476	63,409	50,217	123,471	78,963	160,899	179,274	172,884
Wine, grape	39,512	27,334	34,333	29,382	35,669	47,895	57,497	118,076	172,408	90,747
Mineral waters	24,033	24,976	30,544	24,562	30,077	47,433	59,289	106,779	136,778	81,825
Wine/ grape spirits	25,482	45,137	42,052	41,244	34,645	45,292	57,433	72,599	68,805	46,490
Cattle, live	0	0	0	0	0	0	39,252	47,567	30,067	20,028
Sheep, live	0	0	1,062	17,054	7,842	14,910	18,035	15,547	21,040	19,678
Non-alcoholic beverages	23,026	29,378	7,525	10,491	13,148	15,045	20,874	17,411	28,428	18,110
Mandarins	2,489	4,579	3,732	15,671	12,043	5,136	7,322	18,320	12,986	11,613
Whiskies	2,391	3,203	5,525	5,823	10,563	12,016	12,517	16,716	17,701	11,587
Oilcake, etc	1,932	247	1,596	4,044	5,489	2,176	5,232	9,839	9,546	8,339

Source: ITC

Table 1.16 Major export destination markets, ths. \$US

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Russia	40,836	986	2,724	2,208	480	1,177	3,331	106,998	222,410	122,579
Germany	17,060	31,805	14,824	14,210	18,797	38,153	22,782	56,984	46,525	59,639
Azerbaijan	8,987	10,192	29,205	51,750	49,746	75,401	93,416	104,865	79,276	46,584
Italy	18,073	9,295	2,605	7,729	6,265	21,644	14,460	19,235	35,934	45,568
Ukraine	41,178	78,008	80,801	71,009	78,082	94,876	112,854	119,540	85,979	40,473
Kazakhstan	10,860	15,085	15,094	11,251	15,777	27,735	42,015	71,758	60,066	34,550
Armenia	36,584	55,843	36,297	20,694	29,256	26,956	67,108	85,845	46,351	32,346
Turkey	1,128	5,433	6,565	32,995	11,386	7,946	9,903	24,541	28,481	30,736
Belarus	3,165	4,494	9,524	12,219	13,555	18,349	23,506	29,083	26,808	15,504
Lithuania	2,617	5,320	7,376	6,147	7,753	11,567	10,856	13,427	18,090	15,151

Source: ITC

Table 1.17 Major imported products, ths. \$US

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Wheat grain	0	0	0	0	0	0	174,434	183,402	148,137	114,851
Tobacco	22,822	37,932	59,825	57,160	78,740	86,417	90,223	95,172	114,901	103,193
Sunflower oil	20,857	28,417	44,440	27,578	34,079	43,069	46,265	48,465	37,182	42,658
Poultry, frozen cuts	17,842	28,882	33,780	28,750	37,278	50,315	55,188	53,270	54,851	41,286
Cane sugar, raw	0	0	0	0	0	0	61,849	43,831	45,854	32,572
Chocolate	22,419	27,198	33,504	27,156	28,461	31,960	32,354	39,042	39,424	29,801
Food preparations	7,276	16,456	27,751	22,406	21,468	27,609	26,478	29,361	32,192	25,931
Sugar	24,805	41,487	36,649	10,485	31,730	25,385	22,423	23,302	17,233	16,462
Confectionary	9,022	11,123	12,526	10,103	12,546	15,705	17,418	18,747	20,453	15,624
Wheat flour	29,748	45,897	74,490	14,791	1,472	1,818	1,079	8,011	5,620	10,459

Source: ITC

Table 1.18 Major import supplier countries, ths. \$US

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Russia	167,099	196,360	161,943	147,503	132,080	161,620	212,548	269,517	273,065	268,929
Ukraine	92,401	148,410	242,885	211,043	234,438	297,555	234,903	266,938	258,202	229,876
Turkey	53,279	74,410	83,664	62,277	76,689	122,697	116,752	139,606	153,817	106,410
Brazil	50,133	77,341	76,133	72,870	74,604	106,426	115,436	97,784	106,527	59,272
Germany	15,485	16,645	19,638	16,102	21,298	27,884	33,966	39,985	47,030	46,883
Netherlands	8,910	8,458	11,499	11,949	13,022	25,923	21,947	21,215	24,540	27,706
Italy	8,163	10,301	17,986	14,906	11,268	16,990	16,720	21,643	28,054	26,144
USA	28,295	28,074	35,253	34,029	38,029	53,013	43,830	41,574	39,986	22,961
Azerbaijan	26,969	42,187	44,628	26,748	37,609	25,521	29,824	33,966	25,820	18,122

Source: ITC

Table 1.19 Georgia trade with EU, ths. \$US

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Exports	82,882	114,782	54,979	67,676	73,088	140,210	106,105	182,640	216,706	208,420
Imports	95,778	111,416	126,736	99,283	126,257	170,695	203,160	202,413	251,172	244,228

Table 1.20 Georgia export of main products to EU

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Non-alcoholic beverages	21,122	24,987	1,669	3,199	4,671	4,857	6,786	1,007	536	482
Sowing materials	822	1,156	1,430	1,097	3,972	2,420	1,634	1,915	1,655	667
Apple juice	1,066	11,515	5,863	1,168	2,993	2,574	7,726	1,679	2,592	1,895
Fruits & nuts flour, meal, etc.	392	1,956	1,688	572	1,372	2,349	2,490	2,774	2,696	4,033
Whiskies	111	1,264	1,706	1,468	3,042	2,793	2,077	5,394	6,819	5,061
Wine/grape spirits	214	466	749	359	460	483	8,019	20,637	14,585	6,626
Nuts prepared & preserved	3,277	1,559	1,476	270	785	2,007	2,130	3,039	5,189	7,652
Mineral water	1,572	3,847	5,599	3,608	4,112	6,836	7,495	8,565	11,246	10,696
Grape wine	3,444	4,619	6,916	5,808	5,988	8,033	8,999	10,145	11,922	10,934
Hazelnuts, shelled	45,909	58,049	20,048	44,888	39,788	100,706	50,199	115,850	143,133	147,146

Source: ITC

Table 1.21 Georgia import of main products from EU

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sausages, etc.	4,419	8,684	11,281	9,296	11,297	12,619	9,550	7,270	5,280	4,783
Milk & cream	36	265	439	43	7,106	8,190	9,457	6,786	6,865	5,078
Cigarettes	6,023	5,608	5,755	5,653	9,288	13,299	10,968	11,566	11,180	5,680
Malt	2,944	5,108	680	747	1,399	2,889	16,538	9,043	10,814	6,144
Chocolate	4,407	4,707	5,563	5,277	4,169	5,512	5,777	7,279	8,099	6,718
Wine & grape spirits	10,764	3,183	11,148	4,289	1,191	2,163	3,294	4,995	8,682	7,807
Whiskies	2,839	1,149	1,266	819	742	8,557	5,729	7,432	9,930	8,305
Baby food	2,419	3,283	6,039	4,604	6,116	6,270	5,822	8,294	9,316	8,736
Food preparations	737	1,581	3,523	2,664	3,293	4,583	6,267	8,341	10,394	10,195
Fowl frozen cuts	3,372	2,011	1,471	822	2,946	3,152	4,001	4,708	6,802	14,304

Source: ITC