TRENDS OF THE FOOD BALANCE AND FOOD CONSUMPTION IN OUR COUNTRY FOR THE PERIOD 2014-2019

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Abstract. Food security is one of the most pressing issues facing mankind. in this context, the analysis of the food balance trend of each country is a necessity to notice the aspects that need to be improved in order to avoid imbalances that may arise between the elements of the food balance. the paper analyzes for the period 2014-2019 the trend of the main agri-food products in Romania, of the share they occupy in the average daily food consumption and of the place in the European union regarding the efforts of the population to cover the food expenses. following the analysis, significant increases in Romania's agri-food resources were found during the analyzed period, as well as increases in the import of agri-food products.

Keywords: food balance, average daily consumption, food expenses

15. Introduction

This study approaches an important and well debated research topic, the trend of food balance and food consumption in Romania for the period before the pandemic crisis, 2014-2019. It was necessary such an analysis in order to establish the ways to improve and to correct the gaps in the food balance, close related also to the food security and food consumption.

In order to ensure the food self-sufficiency and the food security, both on short and long term, Romania must exploit the agricultural potential through a political frame more favourable and the increase of investments in the agricultural and rural development [3].

Consumption study is an important part of any market research. Consumption must be studied scientifically, in order to develop solid means of meeting its requirements and diversification possibilities. The Romanian consumer wants to eat healthy and cheap farm food products that meet their demands and preferences [7].

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16. Materials and methods

In the present paper were used physical values rendered from the existing nominations according to the official statistical data (National Institute of Statistics Bulletins) for the period 2014-2019, which were processed according to the statistical-mathematical methodology [5].

As such, these annual data series were processed following appropriate indicators such as: food balance, average daily net food consumption.

Of particular note is the interpretive use along with average indicators and statistical indicators, following the deviations, the coefficient of variation (CV) and the annual rhythms by which the trends of the analyzed phenomenon are captured, concretely delimiting its trends [6].

The concentration of the individual values of the characteristics compared to the typical values through the deviations 2019/2014, were outlined by the coefficient of variation and the annual rhythms.

The balance of food resources and their use is carried out according to a single scheme for plant and animal production, highlighting two parts - resources (inputs) and uses (use of resources) [5].

Average net daily food consumption per capita, expressed in grams (CMZ) - quantities of products that can be used in full as food; is established according to the relation: CMZ = CMN * kgc * 1,000)/365, where: kgc represents the coefficient of transformation into a consumable product (ex: boneless meat, pitted and peeled fruits, green peas, etc.) [1] [6].

17. Results and discussions

The whole issue was structurally represented by the level of resources and consumption of the main agri-food products, respectively the annual indicators of the analyzed period 2014-2019.

At national level according to the values in the tables that can be discussed as follows:

a) for *cereals and cereal products* according to *Table 1*, we have the following results:

- an average annual usable production of 24,993 thousand tons also resulted in an import of 2,721 thousand tons. It should be mentioned the variations that can be reflected by the deviation of the last year 2019 compared to 2014, the values being positive (8,303 thousand tons for usable production and 568 thousand tons for imports, are discussed by relative figures by comparing the two indicators representing 137.7% and 131.8% respectively). Next, the values of the coefficient

of variation (for usable production and import) is 20.0 and 29.1, respectively. Of all these variations, the annual rate is by 9.4%. At the usable production of 3.7% at import and 9.4% usable production, the known values also known as the increase rate reflect the percentage increase/decrease of the values from the analyzed data series.

Specification	MU			ye	ars			Average	2019 / v	s 2014	CV	Annual rhythm
		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	Th. to	23500	22359	25239	29640	31757	32370	27477	8870.0	137.7	15.8	6.61
Usable production	Th. to	21714	18964	21424	26725	31112	30017	24993	8303.0	138.2	20	6.69
Import	Th. to	1785	3395	3815	2914	2063	2353	2721	568.0	131.8	29.1	5.68
applications	Th. to	23500	22359	25239	29640	20630	23530	17526	30.0	100.1	69.2	0.03
Export	Th. to	10177	9635	11937	11103	12066	14204	11520	4027.0	139.6	14.1	6.90
Internal availability for consumption	Th. to	13322	12724	13302	18537	21110	18166	16194	4844.0	136.4	21.8	6.40
Average daily consumption	per capita	1320.3	1349.4	1331.2	1327.4	1309.1	1304.2	1324	-16.1	98.8	1.2	-0.25

Table 1. Food balance and daily food intake for Cereals and cereal products (tons of cereal grains)

Eurostat, NIS, 2021, Food balances [2] [4] [5].

At the same agri-food product, the uses and exports with annual averages of 17,526 and 11,520 thousand tons show deviations of 30 thousand tons for uses and 4,027 thousand tons for export. The coefficients of variation of 69.2% and 14.1% have rates of 0.03% and 6.9% respectively. Thus, the values of all these indicators characterize the entire period.

b) for the agri-food product potatoes according to Table 2, the following results:

The analysis of the degree of homogeneity of the data presented in *Table* 2 was calculated both according to the indicators of the central tendency to verify their representativeness as typical values of the respective series.

For the same product at the average daily food consumption expressed in calories, a relative uniformity of consumption is found annually. Related to this annual level, the coefficient of variation is 3%, and the annual rate is -1.73%.

Thus, it is found that for the **potato** product the annual rate is negative (with reference to resources, production used, uses and availability for export. There are positive values for the import of potatoes of 367 thousand tons per year, with an annual growth rate of 14.74 %.

Specification	MU			ye	ars			Average	2019 / v	s 2014	CV	Annual rhythm
•		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	Th.to	3788	290	3061	3462	3428	3162	2865	- 626.0	83.5	44.9	-3.55
Usable production	Th.to	3519	2625	2690	3117	3023	2627	2934	- 892.0	74.7	12.1	-5.68
Import	Th.to	269	274	372	345	405	535	367	266.0	198.9	26.8	14.74
applications	Th.to	3788	2899	3036	3415	3428	3162	3288	- 626.0	83.5	9.8	-3.55
Export	Th.to	32	30	26	47	43	38	36	6.0	118.8	22.4	3.50
Internal availability for consumption	Th.to	3766	2869	3036	3415	3385	3124	3266	- 642.0	83.0	9.8	-3.67
Average daily consumption	Per capita	199.4	194.6	189	191.3	189	182.7	191	-16.7	91.6	3.0	-1.73

Table 2. Food balance and daily food consumption for the Potatoes product

Eurostat, NIS, 2021, Food balances [2] [4] [5].

c) for the agri-food product leguminous grains according to *Table 3*, the following results:

Product leguminous grains is characterized according to *Table 4* by increasing values for all analyzed indicators.

Table 3. Nutrition balance and daily food intake of Leguminous grains (equivalent to grain cereals)

Specification	MU			ye	ars			Average	2019 / v	s 2014	CV	Annual rhythm
		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	Th.to	97	101	13	367	233	275	181	178.0	283.5	73.2	23.17
Usable production	Th.to	71	76	99	302	191	236	163	165.0	332.4	58.7	27.15
Import	Th.to	26	26	28	65	41	39	38	13.0	150.0	40.0	8.45
applications	Th.to	97	101	128	367	233	275	200	178.0	283.5	54.8	23.17
Export	Th.to	5	4	63	197	69	77	69	72.0	1540.0	101.8	72.78
Internal availability for consumption	Th.to	93	98	65	170	164	198	131	105.0	212.9	40.3	16.32
Average daily consumption	Per capita	28.6	26.7	17.3	20	33.9	33.3	27	4.7	116.4	25.6	3.09

Eurostat, NIS, 2021, Food balances [2] [4] [5].

There are positive growth rates for resources of 23.17%, imports of 8.45% and exports of 72.78%.

The level of the average daily consumption rate increased by 3%, during the studied period, from 28.6 calories/capita to 33.3 calories/capita.

d) for the agri-food product vegetables and vegetable products according to *Table 4*, the annual average of the same indicators highlights the increase of imports of 286 thousand tons in 2019, compared to 2014 (growth rate of 9.41% annually). During the same period, exports decreased by 19 thousand tons (annual rate of -5.59%).

products (e	quivalent	to fresh	n vegeta	ables)								
Specification	MU			ye	ars			Average	2019 / v	rs 2014	CV	Annual rhythm
		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	Th.to	3776	3700	3550	3751	3985	3800	3760	24.0	100.6	3.8	0.13
Usable production	Th.to	3272	3124	2881	3085	3214	3011	3098	- 261.0	92.0	4.5	-1.65
Import	Th.to	504	5858	669	666	772	790	1543	286.0	156.7	137.1	9.41
applications	Th.to	3776	3709	3550	3751	3985	3800	3762	24.0	100.6	3.7	0.13
Export	Th.to	76	60	44	55	62	57	59	-19.0	75.0	17.7	-5.59
Internal availability for consumption	Th.to	3700	3650	3506	3696	3924	3743	3703	43.0	101.2	3.7	0.23
Average daily consumption	Per capita	129.9	125.2	122.1	126.1	135.3	132.6	129	2.7	102.1	3.9	0.41

Table 4. Food balance and daily food consumption for the product Vegetables and vegetable

 products (equivalent to fresh vegetables)

Eurostat, NIS, 2021, Food balances [2] [4] [5].

The average daily calories consumption of the product Vegetables and vegetable products was relatively stable of 129 average daily calories per capita, with a coefficient of variation of 3.9%.

e) For the agri-food product sugar, the trend of dietary consumption tends to decrease, from an economic and social point of view by interpreting the values of the indicators analyzed in **Table 5**, which show maintenance trends sometimes even by a slight increase.

The import indicator shows an increase in imports of 288 thousand tons in 2019 compared to 2014, with a very high annual growth rate of 18.34%, while exports decreased by 44 thousand tons, from 166 thousand tons to 122 thousand tons, respectively an annual rate of -5.97%.

Specification	MU			yea	ars			Average	2019 / v	rs 2014	CV	Annual rhythm
I		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	Th.to	665	740	705	723	631	784	708	119.0	117.9	7.7	3.35
Usable production	Th.to	201	139	451	447	108	139	248	-62.0	69.2	64.2	-7.11
Import	Th.to	212	201	138	190	494	492	288	280.0	232.1	55.9	18.34
applications	Th.to	665	740	705	723	631	784	708	119.0	117.9	7.7	3.35
Export	Th.to	166	123	138	125	111	122	131	-44.0	73.5	14.7	-5.97
Internal availability for consumption	Th.to	498	617	567	598	520	663	577	165.0	133.1	10.7	5.89
Average daily consumption	Per capita	237.2	287.5	284.3	269.7	285.2	288	275	50.8	121.4	7.2	3.96

Table 5. Food balance and daily food intake of Sugar and sugar products (equivalent to refined sugar)

Eurostat, NIS, 2021, Food balances [2] [4] [5].

The average food consumption varies annually between 237 calories/capita and 288 calories/capita, with a coefficient of variation of 7.2% and an annual growth rate of 3.96%.

f) for the agri-food product milk and milk products from the analysis of the indicators presented in *Table 6*, a consumption is highlighted that can be reproduced by the following:

- resources and availabilities can be considered stationary. In terms of resources, there is an increase of 1 thousand tons, and in terms of availability, a decrease of 4 thousand tons.

- on import, there is an increase from 5 thousand tons in 2014 to 10 thousand tons in 2019 (the increase being 100%). The annual growth rate is 14.87%.

Production for export increased by 0.5 million tons, respectively by an annual rate of 4.5%.

Table 6. Food balance and daily food consumption of Milk and	d milk p	roducts (in mi	lk equi	valent,
3.5% fat)				

Specification	MU			yea	ars			Average	2019 / •	vs 2014	CV	Annual rhythm
1		2014	2015	2016	2017	2018		2014	2015	2016	2017	2018
Resources	Th.to	62	62	62	62	63	63	62	1.0	101.6	0.8	0.32
Usable production	Th.to	57	56	54	53	53	53	54	-4.0	93.0	3.2	-1.44
Import	Th.to	5	6	8	9	10	10	8	5.0	200.0	26.2	14.87
applications	Th.to	62	62	62	62	63	63	62	1.0	101.6	0.8	0.32
Export	Th.to	2	2	2	2.6	2.8	2.5	2	0.5	125.0	15.5	4.56
Internal availability for consumption	Th.to	60	60	60	59	60	60	60	0.0	100.0	0.7	0.00
Average daily consumption	Per capita	461.7	460.2	465.5	461.5	474	476.8	467	15.1	103.3	1.5	0.65

Eurostat, NIS, 2021, Food balances [2] [4] [5].

The average daily consumption remained in very tight limits from 461.7 cal./ capita in 2014 to 476.8 cal. /capita in 2019, with a coefficient of variation of 1.5%, for this period.

g) for the agri-food product *eggs* (thousand pcs), the increases shown by the values of the indicators in *Table* 7 show amplifications in the dynamics of the years, at the import and export indicators. Thus, the import shows an increase of 123 thousand pcs, with an annual increase of 6.97%, and the export indicator an increase of 147 thousand pcs, with an annual increase of 10.24%.

Domestic availability for consumption has a declining trend, with an annual rate of -3.50.

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Specification	MU			ye	ars			Average	2019 / vs 201		CV	Annual rhythm
		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	Mil. Pcs.	6943	6997	6585	6375	6061	5994	6493	-949.0	86.3	6.6	-2.90
Usable production	Mil. Pcs.	6636	6555	6182	5996	5713	5564	6108	-1072.0	83.8	7.1	-3.46
Import	Mil. Pcs.	307	382	403	379	348	430	375	123.0	140.1	11.5	6.97
applications	Mil. Pcs.	6943	6937	6333	6375	6061	5994	6441	-949.0	86.3	6.4	-2.90
Export	Mil. Pcs.	234	366	252	308	428	381	328	147.0	162.8	23.3	10.24
Internal availability for consumption	Mil. Pcs.	6709	6671	6333	6067	5633	5613	6171	-1096.0	83.7	7.9	-3.50
Average daily consumption	Per capita	57.6	61.4	62.6	59.7	55.2	56.4	59	-1.2	97.9	4.9	-0.42

 Table 7. Food balance and daily food consumption for the Egg product (in mil pcs)

Eurostat, NIS, 2021, Food balances [2] [4] [5]

At the same time, it is noted that the average daily food consumption of the egg product maintains a relatively constant level of 59 calories/capita, with a coefficient of variation of 4.9%.

h) for the agri-food product meat and meat products (in fresh meat equivalent) from the analysis of the indicators are presented in *Table 8*.

Table 8. Food balance and daily food consumption of **Meat** and meat products (in fresh meat equivalent)

Specification	MU			ye	ars			Average	2019 / v	s 2014	CV	Annual rhythm
		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	Th. to	1282	1419	1463	1502	1609	1606	1480	324.0	125.3	8.3	4.61
Usable production	Th. to	908	989	1009	1012	1035	1046	1000	138.0	115.2	4.9	2.87
Import	Th. to	384	430	454	490	574	560	482	176.0	145.8	15.4	7.84
applications	Th. to	1292	1419	1463	1502	1609	1606	1482	314.0	124.3	8.1	4.45
Export	Th. to	126.7	134.1	153.8	164.5	170.5	162.8	152	36.1	128.5	11.7	5.14
Internal availability for consumption	Th. to	1165	1274	1309	1338	1438	1443	1328	278.0	123.9	7.9	4.37
Average daily consumption	Per capita	265.6	289.5	301.4	319.7	340.8	344.1	310	78.5	129.6	9.9	5.32

Eurostat, NIS, 2021, Food balances [2] [4] [5].

Resources through usable production as well as imports have increased, which means that the consumption requirements of the population are still growing. Thus, the production increased by 138 thousand tons (annual growth rate

of 2.87%), and the import increased by 176 thousand tons, respectively an annual rate of 7.84% increased by 152 thousand tons, respectively with a rate of 5.14%. -At the same time, the average daily food consumption of the meat product is noticeable, which shows a high increase, from 265.6 calories/capita to 344.1 calories/capita, respectively of 78.5 calories/capita, with an annual growth rate of 5.32%.

i) for fish which is one of the foods that nutritionists recommend for a nutritionally balanced diet. Fish meat is an excellent source of omega-3 and omega-6 essential fatty acids, proteins, vitamins (A, B12, D, E) and minerals (potassium, iron, iodine, phosphorus, selenium) [9]. In a study, for the period 2014-2018, it is estimated that fish consumption increased to 30.7 g / day in 2014 to 52.5 g/day for men and 28.7 g/day to 46.1 g/day for women [8].

The analysis of the period 2014-2019, for the agri-food product *FISH* (*in fresh fish equivalent, Table 9*) *shows* the certain trends of an annual increase.

At all indicators of the coefficient of variation there are positive values which indicate a higher or sometimes smaller grouping around the average value, this coefficient being considered as the result of a sensitivity to the presence of extreme values.

Of note is the increase in imports of fish and fish products, from 87 thousand tons in 2014 to 140 thousand tons in 2019, with an increase of 53 thousand tons (160%), and an annual growth rate of 9.98 %.

Specification	MU			ye	ars			Average	2019 2014	/ vs	CV	Annual rhythm
		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	TH. to	102	114	119	128	135	163	127	61.0	159.8	16.6	9.83
Usable production	TH. to	15	20	2.3	26	2.3	24	22	9.0	160.0	17.7	9.86
Import	TH. to	87	95	96	103	112	140	106	53.0	160.9	17.9	9.98
applications	TH. to	102	114	119	128	135	163	127	61.0	159.8	16.6	9.83
Export	TH. to	3.6	4.1	3.3	5.2	6.2	11.9	6	8.3	330.6	56.2	27.01
Internal availability for consumption	TH. to	98	110	115	123	29	151	104	53.0	154.1	39.3	9.03
Average daily consumption	Per capita	9.4	10.6	11.3	12.2	12.9	15	12	5.6	159.6	16.4	9.80

 Table 9. Food balance and daily food consumption of Fish and fish products (equivalent to fresh fish)

Eurostat, NIS, 2021, Food balances [2] [4] [5].

At the same time, the average daily food consumption of fish and meat products is noticed, which has a high increase, from 9.4 calories/capita to 15 calories/capita, respectively of 5.6 calories/capita, with an annual rate of increase of 9.86%.

j) for the agri-food product vegetable and animal FATS (in tons), from the analysis of the indicators presented in *Table 10*, slightly increasing levels can be found during the analyzed period.

There is an increase in imports from 141 thousand tons in 2014 to 160 thousand tons in 2019 (average annual rate of 2.56%), while exports show an increase of 75 thousand tons (average annual rate of 9.94%).

Specification	MU			ye	ars			Average	2019 2014	/ vs	CV	Annual rhythm
		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Resources	Th. to	539	551	561	575	581	588	566	49.0	109.1	3.3	1.76
Usable production	Th. to	398	404	416	426	430	427	417	29.0	107.3	3.2	1.42
Import	Th. to	141	147	144	148	151	160	149	19.0	113.5	4.4	2.56
applications	Th. to	539	551	561	575	581	588	566	49.0	109.1	3.3	1.76
Export	Th. to	66	57	70	70	79	106	75	40.0	160.6	22.7	9.94
Internal availability for consumption	Th. to	473	494	491	504	502	482	491	9.0	101.9	2.4	0.37
Average daily consumption	Per capita	453.4	477.7	482.3	488.2	480.6	481.9	477	28.5	106.3	2.6	1.23

Table 10. Nutrition balance and daily food intake of vegetable and animal Fats (tons)

Eurostat, NIS, 2021, Food balances [2] [4] [5].

At the same time, the average daily food consumption of vegetable and animal fats is noticeable, it remains around f = 477 calories/capita, with a coefficient of variation of 2.6%.

For the present paper considered a qualitative side, it was a comparative set of the evolution of the caloric share of agri-food products in consumption and the value share of GDP in our country for the period 2014-2019 through the elements that were shown in Tables 11 and 12.

 Table 11. The evolution of the caloric share of food products in daily food consumption in our country, during 2014-2019

Specification	MU			ye	ars			Average	2019 /	vs 2014	CV	Annual rhythm
		2014	2015	2016	2017	2018	2019	MU	MU	%	%	%
Cereals	Cal/capita (%)	41.7	41.1	40.7	40.5	39.5	39.3	40	-2.4	94.2	2.3	-1.18
Potatoes	Cal/capita (%)	6.3	5.9	5.8	5.8	5.7	5.5	6	-0.8	87.3	4.6	-2.68
Leguminous grains	Cal/capita (%)	0.9	0.8	0.5	0.6	1	1	1	0.1	111.1	26.2	2.13
vegetables	Cal/capita (%)	4.1	3.8	3.7	3.8	4.1	4	4	-0.1	97.6	4.4	-0.49
Sugar, products sugar	Cal/capita (%)	7.5	8.8	8.7	8.2	8.6	8.7	8	1.2	116.0	5.9	3.01
Milk, dairy products	Cal/capita (%)	14.6	14	14.2	14.1	14.3	14.4	14	-0.2	98.6	1.5	-0.28
Eggs	Cal/capita (%)	1.8	1.9	1.9	1.8	1.7	1.7	2	-0.1	94.4	5.0	-1.14
Meat (without fish)	Cal/capita (%)	8.4	8.8	9.2	9.8	10.3	10.4	9	2.0	123.8	8.6	4.36
Over	Cal/capita (%)	0.3	0.3	0.3	0.4	0.4	0.5	0	0.2	166.7	22.3	10.76
FATS	Cal/capita (%)	14.3	14.6	14.8	14.9	14.5	14.5	15	0.2	101.4	1.5	0.28
TOTAL	Cal/capita (%)	100	100	100	100	100	100	х	х	х	х	х

Eurostat, NIS, 2021, Food balances [2] [4] [5].

Thus, regarding the analyzed products, they were analyzed, being represented by a trivalence nominated by: the structure of agri-food products, these being hierarchized in the following steps:

* cereals, milk and dairy products and fats that remain with the highest share in consumption (between 14% and 40%);

* vegetables, sugar and potatoes with weights between 4% and 8%;

* eggs, legumes and fish in which the weight level is delimited at the level of 1.8% and below 1%.

At the same time, the coefficient of variation remains high for leguminous grains and fish, for which the annual rate is between -2.7 and 8.8.).

The *evolution of the share of food expenditures in GDP* in some EU countries was also shown below, compared for the period 2014-2019, which shows the following (*Table 12*):

-it notes that the lowest level of food expenditure is recorded in countries such as Portugal, Ireland, Belgium, Czech Republic, Germany; France, Luxembourg, Austria and Sweden which can be considered as national territories with high living standards,

- and countries where the share of food expenditures represents high levels such as Greece with 11.0%, Bulgaria with 11.2% and Romania with 14.7%, considered countries with low living standards.

Specification	MU	years						Average	2019 2014	/ vs	CV	Annual rhythm
		2014 2015 2016 2017 2018 2019						MU	MU	%	%	%
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EU27	%	6.47	6.37	6.32	6.26	6.24	6.2	6	-0.3	95.8	1.6	-0.85
Belgium	%	5.81	5.81	5.82	5.76	5.74	5.67	6	-0.1	97.6	1.0	-0.49
Bulgaria	%	11.76	11.61	11.46	11.17	11.05	10.42	11	-1.3	88.6	4.3	-2.39
Czech Republic	%	7.14	6.91	6.91	6.83	6.61	6.49	7	-0.6	90.9	3.4	-1.89
Germany	%	4.74	4.75	4.71	4.65	4.69	4.72	5	0.0	99.6	0.8	-0.08
Ireland	%	3.61	2.72	2.73	2.49	2.33	2.2	3	-1.4	60.9	18.7	-9.43
Greece	%	11.01	11.22	10.95	11.01	10.9	10.83	11	-0.2	98.4	1.2	-0.33
Spain	%	7.38	7.24	7.03	6.82	6.87	6.81	7	-0.6	92.3	3.4	-1.59
France	%	6.52	6.45	6.47	6.37	6.29	6.24	6	-0.3	95.7	1.7	-0.87
Italy	%	8.05	8.08	7.97	8.01	7.95	7.94	8	-0.1	98.6	0.7	-0.27
Luxembourg	%	2.72	2.66	2.67	2.62	2.6	2.58	3	-0.1	94.9	2.0	-1.05
Hungary	%	7.85	7.76	7.65	7.76	7.48	7.38	8	-0.5	94.0	2.4	-1.23
Austria	%	4.74	4.69	4.58	4.56	4.49	4.44	5	-0.3	93.7	2.5	-1.30
Poland	%	9.34	8.88	8.97	8.86	8.54	8.48	9	-0.9	90.8	3.5	-1.91
Portugal	%	11.16	11.03	10.89	10.71	10.5	10.28	11	-0.9	92.1	3.1	-1.63
Romania	%	15.35	14.73	15.01	14.85	15.15	13.32	15	-2.0	86.8	4.9	-2.80
Sweden	%	4.97	4.87	4.91	4.83	4.87	4.85	5	-0.1	97.6	1.0	-0.49

Table 12. Evolution of the share of food expenditures in GDP, in some EU countries, during 2014-2019`

Source:Eurostat:https://ec.europa.eu/eurostat/databrowser/view/tec00009/default/table?lang=en [2].

Conclusions

(1) Throughout the period, Romania's agri-food resources show positive annual growth rates: cereals (6.61%), leguminous grains (23.17%), meat (4.61%), fish (9.83%) except for potato products (-3, 55%) and eggs (-2.9%).

(2) The trend of import of agri-food products is increasing for cereals (5.68%), leguminous grains (8.45% _), vegetables (9.41%), sugar (18.34%), milk (14.87), eggs (6.97%), meat (7.84%), fish (9.98%).

(3) The export trend of agri-food products shows increases for cereal products (6.9%), leguminous grains (72.78%), eggs (10.24%), fish (27.01%) and decreases for vegetable products (-5, 59%), sugar (-5.97%).

(4) The share of food products in the average daily consumption, expressed in horse/loc, for the period 2014-2019, has coefficients of variation up to 8.6% for most products, except for the grain legume product of 26.2% and the fish product and preparations of over 22.3%.

(5) There are annual increases in the share of products: leguminous by 2.13%; for meat by 4.36% and for fish by 10.76%.

(6) The share of food expenditure in GDP differs greatly from one country to another within the European Union. The lowest share is in Luxembourg of 2.6%, Ireland 2.7%, Austria 4.6%, and at the opposite pole Greece with 11.0%, Bulgaria with 11.2% and Romania with 14.7%.

REFERENCES

- [1] Constantin, M., Marketing Explicative Dictionary (Dicționar explicativ de agromarketing), Publishing House of Academy of the Romanian Scientists, Bucharest, Romania, (2020).
- [2] Eurostat, Final consumption expenditures of households; https://ec.europa.eu/eurostat/databrowser/view/tec00009/default/table?lang=fr, (2021).
- [3] Gavrila, V., Kruszlicika, M., Chiritescu, V., Food Consumption in Romania-Quantitative and Qualitative Aspects of Food Security. Bulletin of the University of Agricultural Sciences & Veterinary Medicine Cluj-Napoca. Animal Science & Biotechnologies, 71.1. (2014).
- [4] National Institute of Statistics, Consumption availabilities of the population in 2017, 2018, 2019;
 https://insse.ro/cms/sites/default/files/field/publicatii/disponibilidadile_de_consum_ale_popul atiei_anul_2018.pdf, (202.
- [5] National Institute of Statistics, Balances of food resources and their use; https://statistica.gov.md/public/files/Metadate/Balanta_resurse_alimentare.pdf, (2021).

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- [6] Necula, I. R.-A., Development of the agri-food system in the context of ensuring food security and independence of Romania, Doctoral thesis, Academy of Economic Studies, Bucharest, Romania, (2019).
- [7] Popescu, G. Food consumption trends in Romania. Scientific Papers Journal Agronomy Series 51.3:375-378 (2008).
- [8] Trends in food behavior, https: //cnmrmc.insp.gov.ro/images/rapoarte/starea-de-nutritie.pdf (2021)
- [9] Zarojanu, M. Doctor's advice, https://www.sfatulmedicului.ro/Alimentatia-sanatoasa/beneficiileconsumului-de-peste_11721, (2021).