

# **The possibility to reach meat self-sufficiency in Romania on long term**

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# A prospective approach within *Romania's Development Strategy for the Next 20 years, 2018-2038*

- Romanian Academy
  - 11 research institutes
- 13 strategic domains
  - Education, natural resources, energy, cyber protection, **food security**, quality of life, healthcare, the Danube strategy, culture, society of knowledge, globalization, public finance, public institutions
- Stages of strategy development
  - 2014: establishment of thematics
  - 2015: SWOT, vision, targets
  - 2016: resources, scenarios
  - 2017: comments by decision-makers
- 3 priority directions for food security:
  - ***Increasing the Romanian agriculture role as food security supplier***
    - increasing the coverage of food consumption needs from domestic production...
  - ***Improving the population's access to food and food and nutrition quality***
    - by increasing the population's purchasing power...
  - ***Improving food and nutritional safety***
    - by solving up the problem of technical municipal infrastructure...

# Methodology elements for the strategy referring to food security

- Qualitative, quantitative and semi-quantitative methods
  - literature review, SWOT analysis, defining the scenarios and vision, extrapolation of trends, Delphi technique
- Diagnosis analysis of agriculture and food situation in Romania
- Study on the prospective approaches of international organizations
  - *Looking ahead in world food and agriculture – perspectives to 2050* (FAO), *OECD-FAO Outlook 2016-2025*, *EU Agricultural Outlook. Prospect for EU agricultural markets and income 2016-2026* etc.
- Food balance analysis
  - conducted by the National Institute of Statistics, in conformity with FAO and Eurostat methodologies
- Extrapolation of trends
  - Regression equation for the food consumption expenditures; equations for the quantities of consumed products (cereals and meat)

# Elements referring to meat in the SWOT analysis of food security

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>-significant agricultural resources for animal production (fodder crops, pastures, hayfields)</li> <li>-progress in meeting the consumption needs from domestic production (poultry meat, sheep and goat meat)</li> <li>-important investments in food industry after accession</li> <li>-food consumption increased in nutritionally superior products (meat, fruit, fish)</li> <li>-implementation of zoo-veterinary norms according to European legislation</li> </ul>	<ul style="list-style-type: none"> <li>-the domestic agricultural production cannot cover the consumption needs in certain important groups of products (meat, milk, fruit, vegetables and fish)</li> <li>-human consumption dependence on imports is high for certain products (soybean, sugar, meat, fish, fruit)</li> <li>-the daily availability of animal protein (gr/capita/day) is lower in Romania compared to other EU member states</li> <li>-the share of consumption expenditures of poor population (first decile) exceeds 65% of total consumption expenditures</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>-incomes increase and poverty alleviation – increasing domestic demand for nutritionally superior products (fruit, meat)</li> <li>-increasing external demand for food (for meat in the Near East and Asia-Pacific areas)</li> </ul>	<ul style="list-style-type: none"> <li>-uncertainties regarding the future evolution of the Common Agricultural Policy by the year 2038, including those concerning agriculture funding from EU sources</li> <li>-evolution of climate factors</li> <li>-occurrence of certain animal diseases</li> </ul>

# Targets for pigmeat

- The **low self-sufficiency in pigmeat**, in 2015, mainly relates to the consumption of fresh meat, for which prices are higher, while the meat necessary for the sausage and cold meat industry is mainly ensured from imports.
- In order to surmount the current problems of the pig farming sector, besides the strict management of the swine fever risk, investments are also necessary on the reproduction farms specialized in producing piglets with high genetic potential, as well as in modern pig raising technologies.

(fresh meat equivalent)	u.m.	Baseline situation (2015)	Short term (2020)	Medium term (2028)	Long term (2038)
<b>Utilizable production</b>	thou.tons	434	486	608	668
<b>Import</b>	thou.tons	238	202	125	100
<b>Export</b>	thou.tons	33	40	55	80
<b>Supply availability</b>	thou.tons	620	648	678	688
<b>Self-supply level</b>	%	70%	75%	90%	97%

# Targets for poultry meat

- The relatively **high self-sufficiency in poultry meat**, in 2015, will be improved by maintaining high production growth rates after 2028 as well, which will lead to export growth on long term.
- Having technical performances comparable to those of the most performant producers in the EU, poultry subsector is slightly disadvantaged by the weaknesses of the domestic poultry market, i.e. consumers' preferences for cheap, low quality products.

(fresh meat equivalent)	u.m.	Baseline situation (2015)	Short term (2020)	Medium term (2028)	Long term (2038)
<b>Utilizable production</b>	thou.tons	406	455	496	570
<b>Import</b>	thou.tons	137	132	121	115
<b>Export</b>	thou.tons	88	90	95	130
<b>Supply availability</b>	thou.tons	455	496	522	555
<b>Self-supply level</b>	%	89%	92%	95%	103%

# Targets for beef

- With a smaller share in total meat consumption, beef can contribute to reaching the self-sufficiency target in the future, both through production increase and through production quality improvement, which will also put into value the export potential of this product.
- Reaching the proposed targets for beef production is **an ambitious objective** that could be facilitated by the initiation of a national program for the specialization in beef production of small farms that raise cattle.

(fresh meat equivalent)	u.m.	Baseline situation (2015)	Short term (2020)	Medium term (2028)	Long term (2038)
<b>Utilizable production</b>	thou.tons	99	101	111	122
<b>Import</b>	thou.tons	34	32	29	27
<b>Export</b>	thou.tons	8	7	9	12
<b>Supply availability</b>	thou.tons	125	126	132	137
<b>Self-supply level</b>	%	79%	80%	84%	89%

# Targets for sheep and goat meat

- The targets proposed on the short, medium and long term for sheep and goat meat have in view **maintaining a self-supply level of over 100%** and export growth.

(fresh meat equivalent)	u.m.	Baseline situation (2015)	Short term (2020)	Medium term (2028)	Long term (2038)
Utilizable production	thou.tons	49	53	58	65
Import	thou.tons	1,1	1,2	1,2	1,4
Export	thou.tons	7	8	10	13
Supply availability	thou.tons	44	46	50	53
Self-supply level	%	111%	114%	117%	122%



## Targets for **total meat production**

- In the European and global context, taking into consideration the country's needs and possibilities, Romania can propose to maintain its self-sufficiency in sheep meat and to reach self-sufficiency in poultry meat by the year 2028; by the year 2038, self-sufficiency in beef could be also reached, and eventually in pigmeat.

(fresh meat equivalent)	u.m.	Baseline situation (2015)	Short term (2020)	Medium term (2028)	Long term (2038)
<b>Utilizable production</b>	thou.tons	1040	1155	1333	1485
<b>Self-supply level</b>	%	79%	83%	92%	99%

# Targets for the annual **meat consumption** level

- The consumption of meat and other products of animal origin will increase, due to the unsaturated demand and the still low level of concerns for a healthy diet.

	UM	Reference (2015)	Short term (2020)	Medium term (2028)	Long term (2038)
<b>Meat consumption (fresh meat equivalent), out of which:</b>	Kg/capita	<b>63.4</b>	<b>66.9</b>	<b>72.1</b>	<b>77.2</b>
<b>-pigmeat</b>	Kg/cap.	<b>31.3</b>	<b>32.9</b>	<b>35.4</b>	<b>37.1</b>
<b>-poultry meat</b>	Kg/cap.	<b>23.0</b>	<b>25.2</b>	<b>27.2</b>	<b>29.9</b>
<b>-beef</b>	Kg/cap.	<b>6.3</b>	<b>6.4</b>	<b>6.9</b>	<b>7.4</b>
<b>-sheep and goat meat</b>	Kg/cap.	<b>2.2</b>	<b>2.4</b>	<b>2.6</b>	<b>2.9</b>

# Support to investments in the meat subsector

- Estimating the **support from public funds** necessary for financing investments in meat production (million euro)

	Necessary 2016-2020	Necessary 2021-2027	Necessary 2028-2038
Pigmeat	150	150	300
Poultry meat	171	172	345
Beef	85	130	235

- The comparison between the available and necessary resources for the period 2016-2020 reveals that from the food security perspective, the financial resources do not represent the main problem (in fact not all the available funds from NRDP 2007-2013 have been spent); the main problem is rather represented by the set of measures to boost investments (production implicitly) in the priority sectors for food security, the livestock sector respectively.

# Importance of **EU funding** for the support to agriculture: 3 scenarios

- The **realistic scenario** had in view CAP operation along the current directions in the next 20 years, with total financial allocations at EU level slightly diminishing.
  - An increasing convergence between Romania and the Old Member States is expected.
- The **pessimistic scenario** assumed that the European Union will continue to function for the next 20 years, but has in view CAP funding diminution through the reallocation of money to other destinations.
  - In this situation, the estimated amounts for reaching the targets from this strategy should largely come from the national budget, which might lead to non-reaching certain objectives.
- The **optimistic scenario** presupposes that the importance of agriculture will be recognized at European level, which will make the future CAP be funded in accordance with the ambitious objectives assumed.
  - In this case, Romania could be an important beneficiary of CAP funds.

# Scenarios concerning meat consumption and share of food consumption expenditures

- Scenarios for the evolution of total meat consumption (**kg/capita/year**)

Scenarios	Horizon 2020	Horizon 2028	Horizon 2038
Optimistic	70	80	85
Realistic	67	72	77
Pessimistic	65	67	70

- Scenarios for the evolution of the share of food consumption expenditures (food and non-alcoholic beverages) in total consumption expenditures of households (**%**)

Scenarios	Horizon 2020	Horizon 2028	Horizon 2038
Optimistic	35	24	17
Realistic	37	32	27
Pessimistic	38	35	32

# Conclusions on meat consumption per capita in Romania on the long term

- The estimated indicator by the three time horizons (2020-2028-2038) refers to the total meat consumption per capita, **meat being a main foodstuff in the Romanian consumers' diet.**
- The animal protein intake in Romanians' diet is **deficient, mainly in the case of certain vulnerable categories** such as children from poor families.
- The building of scenarios was based on criteria and hypotheses concerning the evolution of the population's incomes, the future Common Agricultural Policy and the domestic meat production evolution.
- Taking into consideration the assumed hypotheses and the proposed targets, **self-sufficiency in meat is possible by the year 2038** under the realistic scenario, on the basis of sustained growth of poultry meat production and of relaunching pigmeat production.

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