



International Conference
The New Agricultural Policy – continuation or revolution?

Structural Changes in Ukrainian Agricultural Production after Strategy of Agricultural Development 2020 adoption

Sergii Kvasha,

Prof. Dr. of Sciences, First Vice-Director of National Scientific Centre “Institute of Agrarian Economics”, Kyiv

Orest Furdychko,

Prof. Dr. of Sciences, Director of Institute of Agrarian Ecology, Kyiv

Oleksandr Zhemoyda,

Ass.Prof., PhD. In Economics, National University of Life and Environmental Sciences of Ukraine, Kyiv

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Agriculture Essence

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graph TD; A[Agriculture Essence] --> B[Infrastructure and Transportation]; A --> C[Production and Technology]; A --> D[Social and Demographic]; A --> E[Ecology and Recreation]; A --> F[Historical and Cultural];
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**Infrastructure
and
Transportation**

**Production
and
Technology**

**Social and
Demographic**

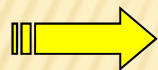
**Ecology and
Recreation**

**Historical
and
Cultural**

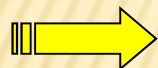
Status and trends of agricultural production in Ukraine

Agriculture provides 8.2% of gross value added by sectors of the national economy

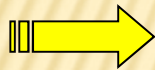
Agriculture



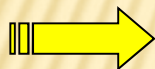
Average gross output in 2008-2010 compared to 1999 increased by 44%;



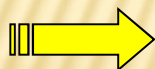
Operates nearly 56,500 businesses, including 41 thousand farms;



21.6 million hectares of agricultural land, incl. 4.3 mio ha of farmers;



fixed assets costs more than 100 billion UAH;



number of villages - 28.5 thousand, the number of resident rural population - 14.2

million people;



on agricultural production employs more than 3 million persons;



number of households in Ukraine - 17.0 million;



agriculture employs 2.6 mio. persons, agricultural enterprises – 0,6 mio. persons

Analysis of production and technological functions of agriculture

Strengths

- ✓ **Strong export position - cereals, oilseeds and oils**
- ✓ Agricultural market infrastructure development;
- ✓ Agricultural land quality;
- ✓ Relatively favorable natural and climatic conditions;
- ✓ **Profitability of the industry since 2008;**
- ✓ The increasing investment attractiveness of the industry

Weaknesses

- ✓ Incomplete land reform;
- ✓ Industry deregulation
- ✓ Low yields (losses) of livestock;
- ✓ Technical and technological gap
- ✓ Failure to agri-environmental and technological standards
- ✓ **Polarization of business size (Small-Huge);**
- ✓ Non-active selfregulation;

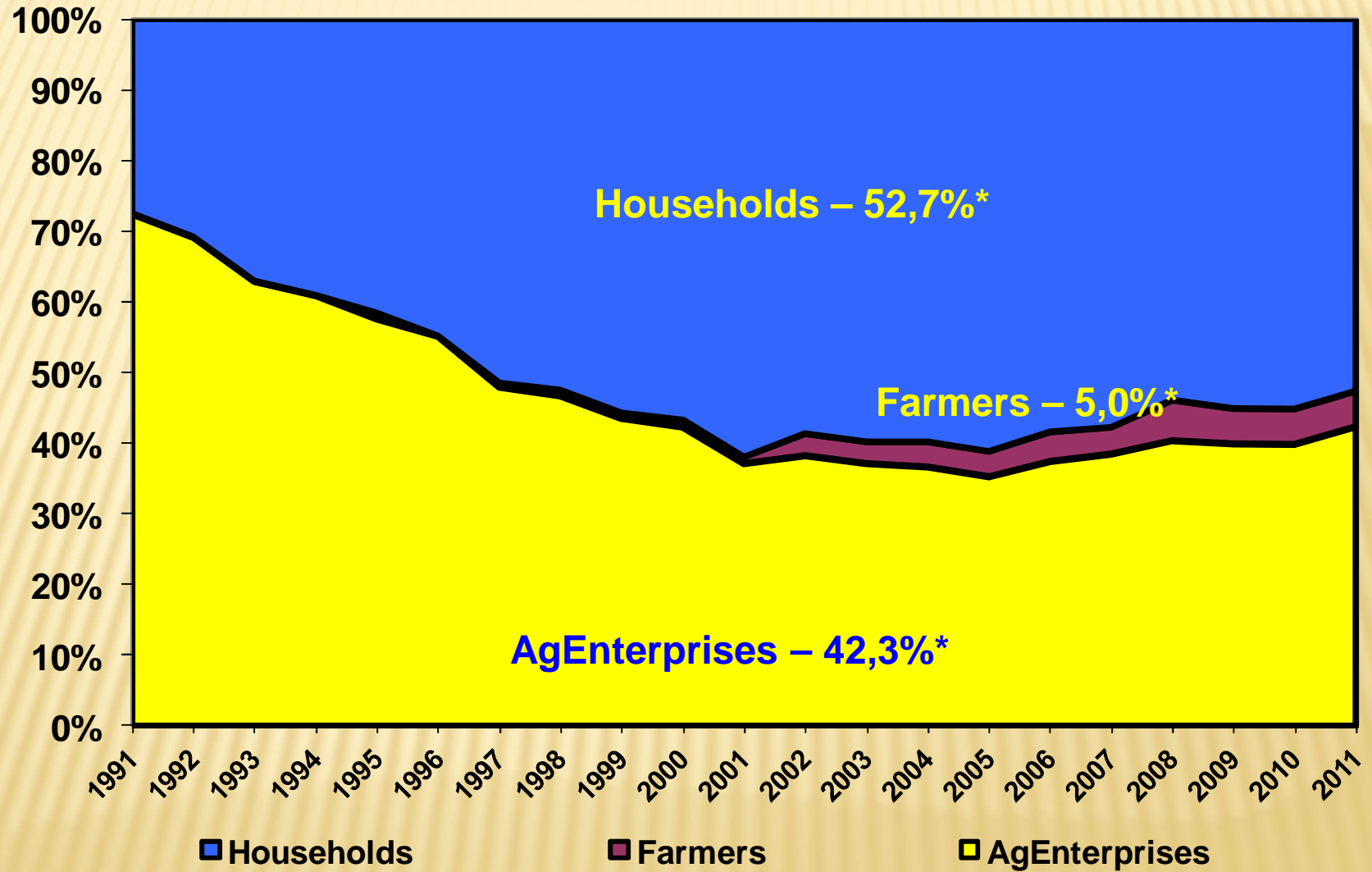
Opportunities

- ✓ **Global trends to increased demand for agricultural products and food**
- ✓ The development of bio-energy and energy-saving technologies
- ✓ Expansion segment of organic products
- ✓ The favorable geographical location;
- ✓ Global economic integration;
- ✓ The increase investment attractiveness of the industry

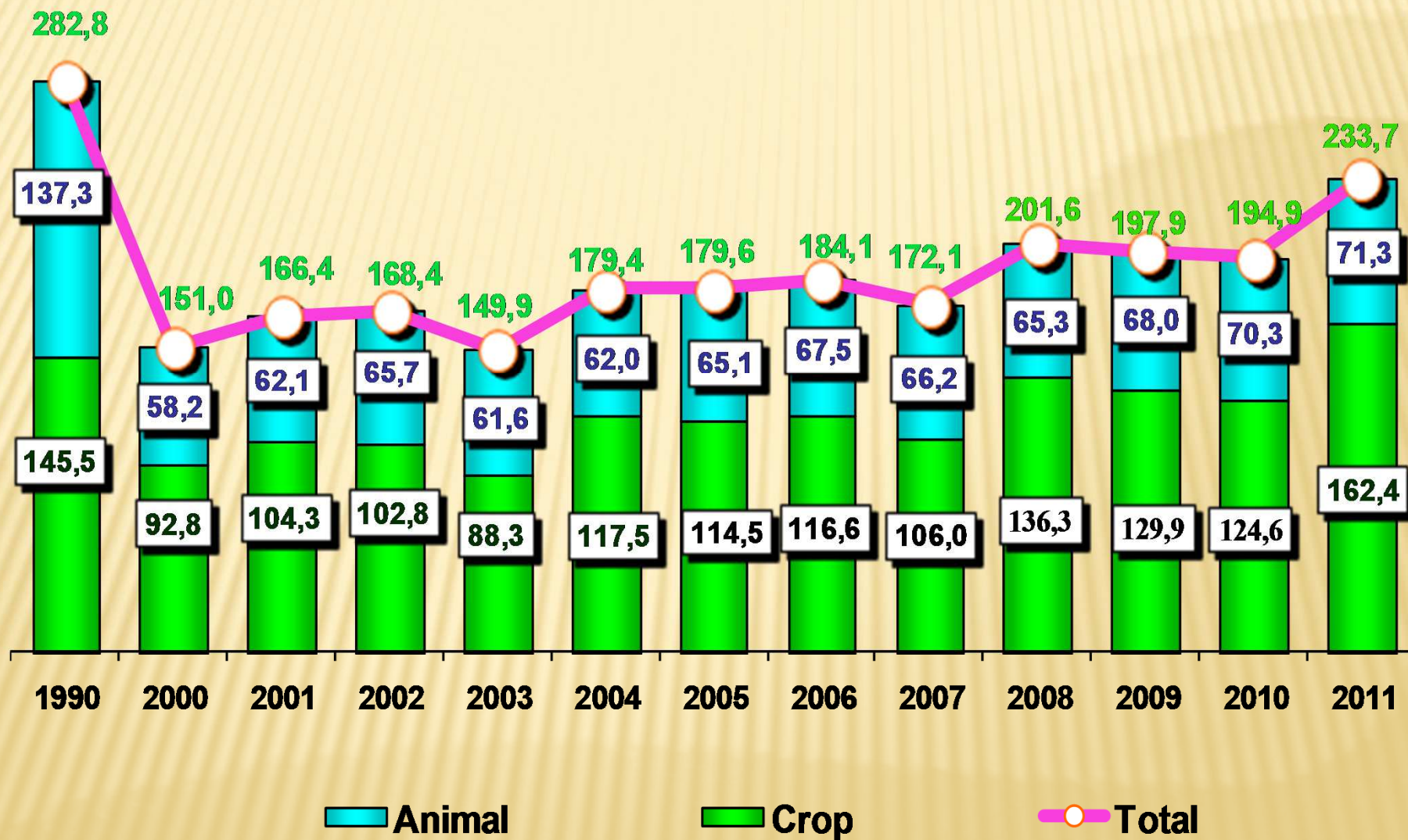
Threats

- ✓ Import dependency for fish and fish products, fruits, berries and grapes, vegetable oil
- ✓ Under-consumption of meat, fish, dairy products, fruits, berries and grapes
- ✓ Low solvency of the population
- ✓ **Lack of attractiveness for employment in agriculture**
- ✓ Energy supplies dependency

Structure of gross output

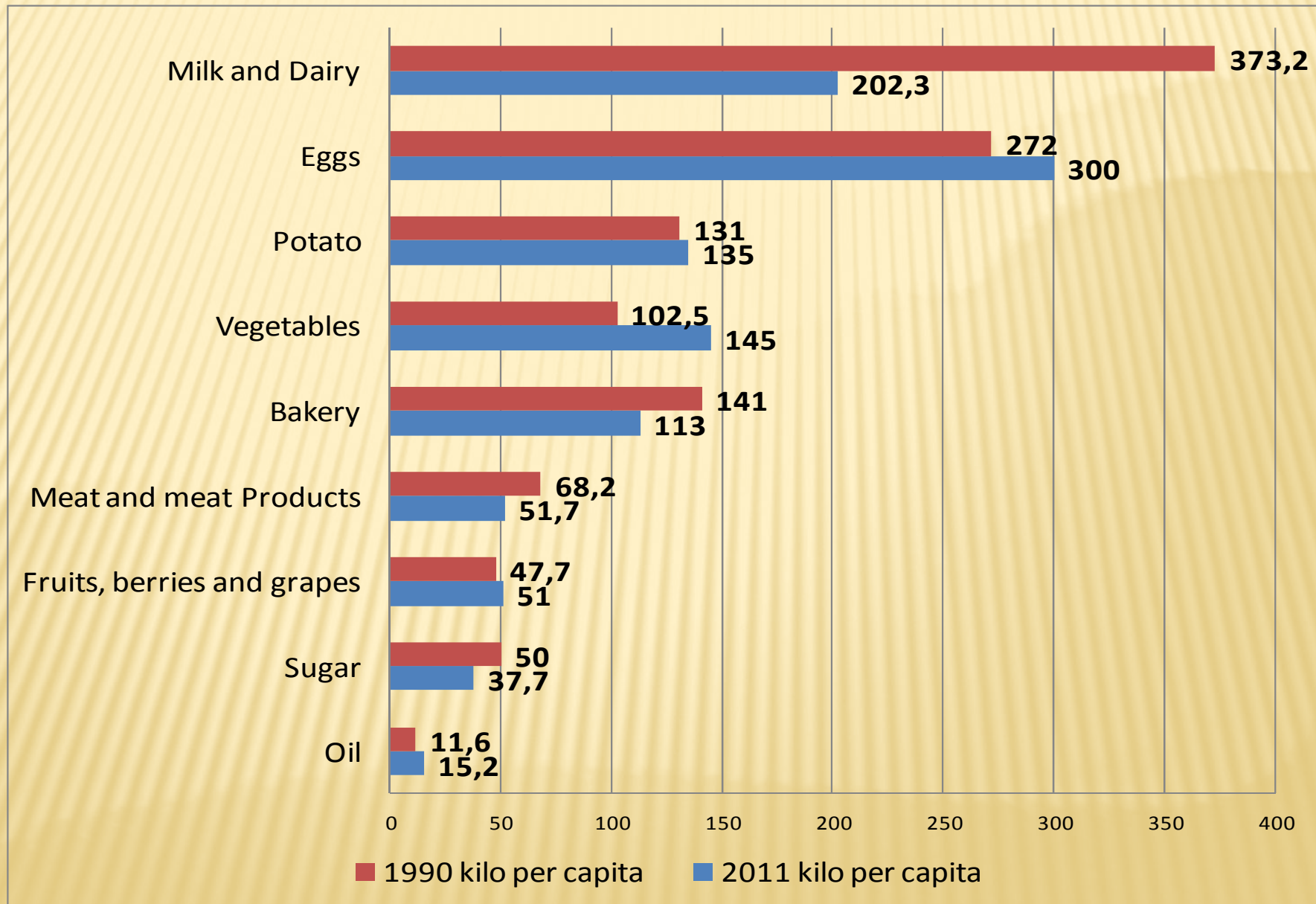


Gross output (at constant 2010 prices, billion UAH*)



*1 EUR = 11.25 UAH

Consumption of basic food products in Ukraine



Groups of interest

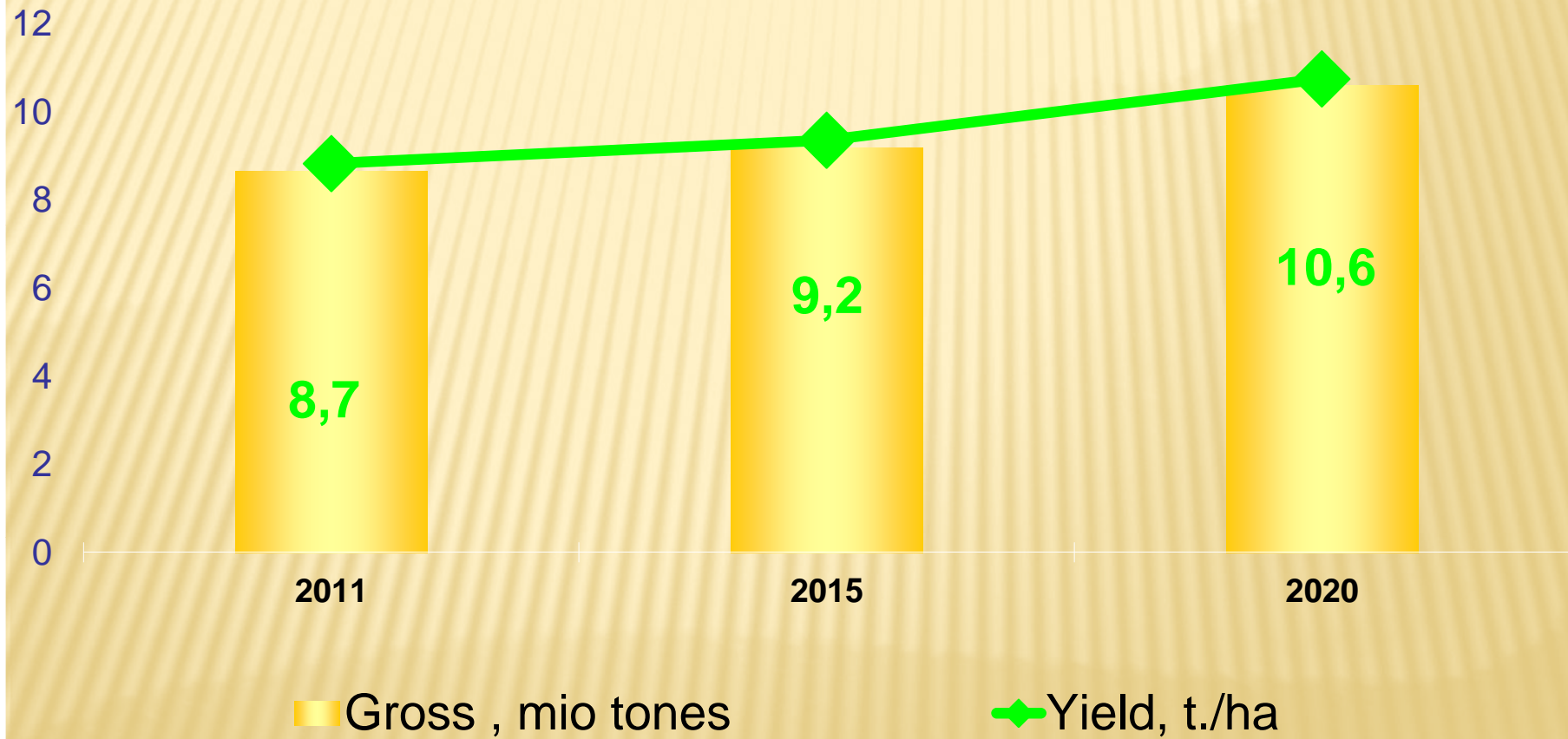
- **Producer's Incomes - 14 billion. USA.**
- **Trader's Income - 2 billion UAH.**
- **Wages - 1.2 billion UAH.**
- **Shareholder's Income - 1.9 billion UAH.**
- **Pensioners Income - 4.2 billion UAH.**

Budget revenues from agricultural enterprises - 40,0 bln. UAH:

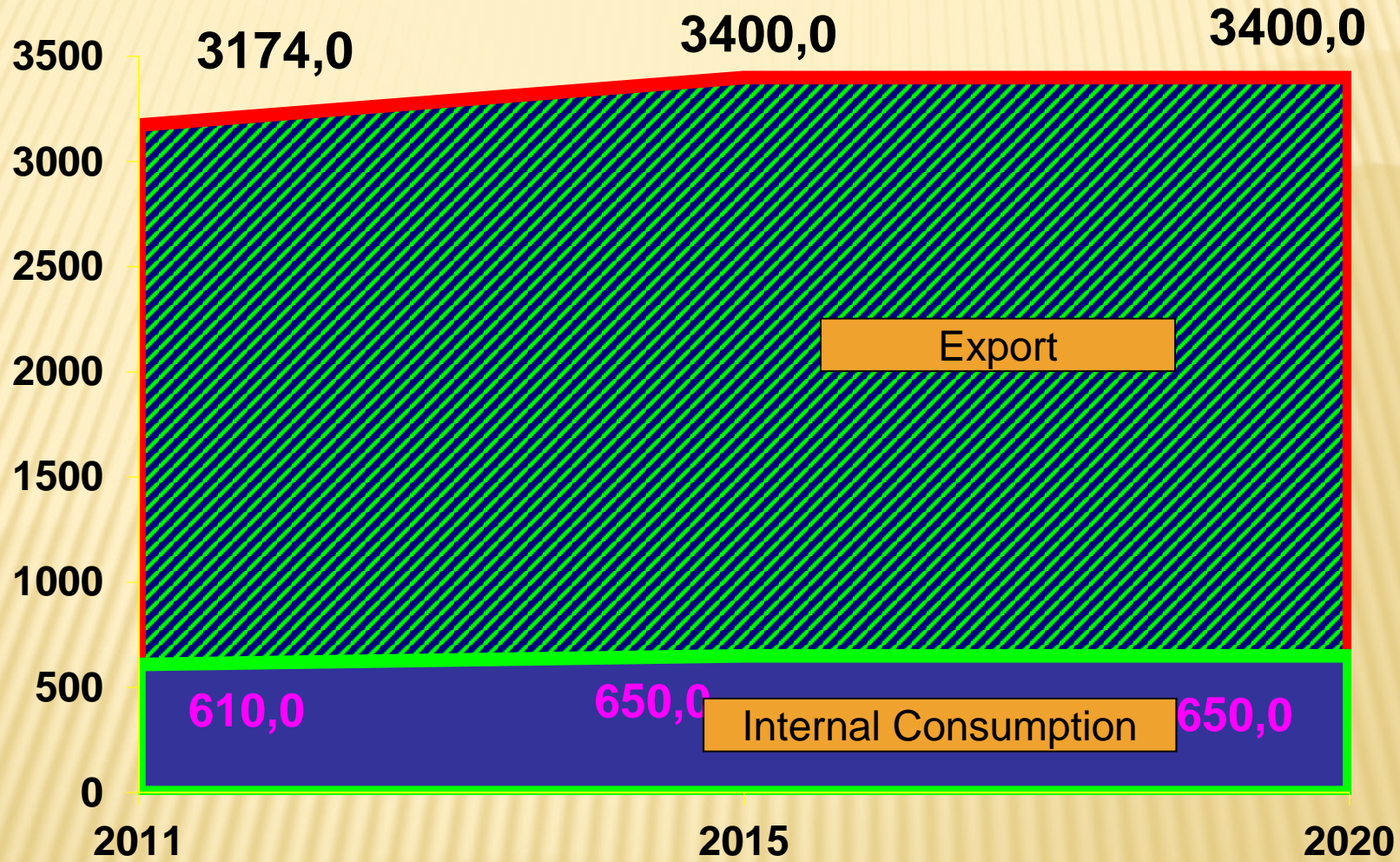
- **including from agriculture - 5.0 billion USD;**
- **from the food industry and processing - 35.0 billion UAH.**

SUNFLOWER SEEDS PRODUCTION

	2011	2015	2020
AgEnterprises, %	84	86	89
Households, %	16	14	11



Sunflower Oil Production and Consumption, mio. tones



■ Production

■ Internal Consumption

Analysis of the social and demographic features of agriculture

Strengths

- ✓ Equal placement of the rural population on the territory of Ukraine
- ✓ Rural community as the traditional life type
- ✓ Cultural and ethnic development of rural areas;
- ✓ **Attractiveness of rural allocation for substantial part of society**

Opportunities

- ✓ Increasing population density in the Ukraine
- ✓ **Attracting investments in rural infrastructure**
- ✓ Monuments of History and Culture Reinnovation
- ✓ Development of transport infrastructure
- ✓ The increase in budget funding rural development

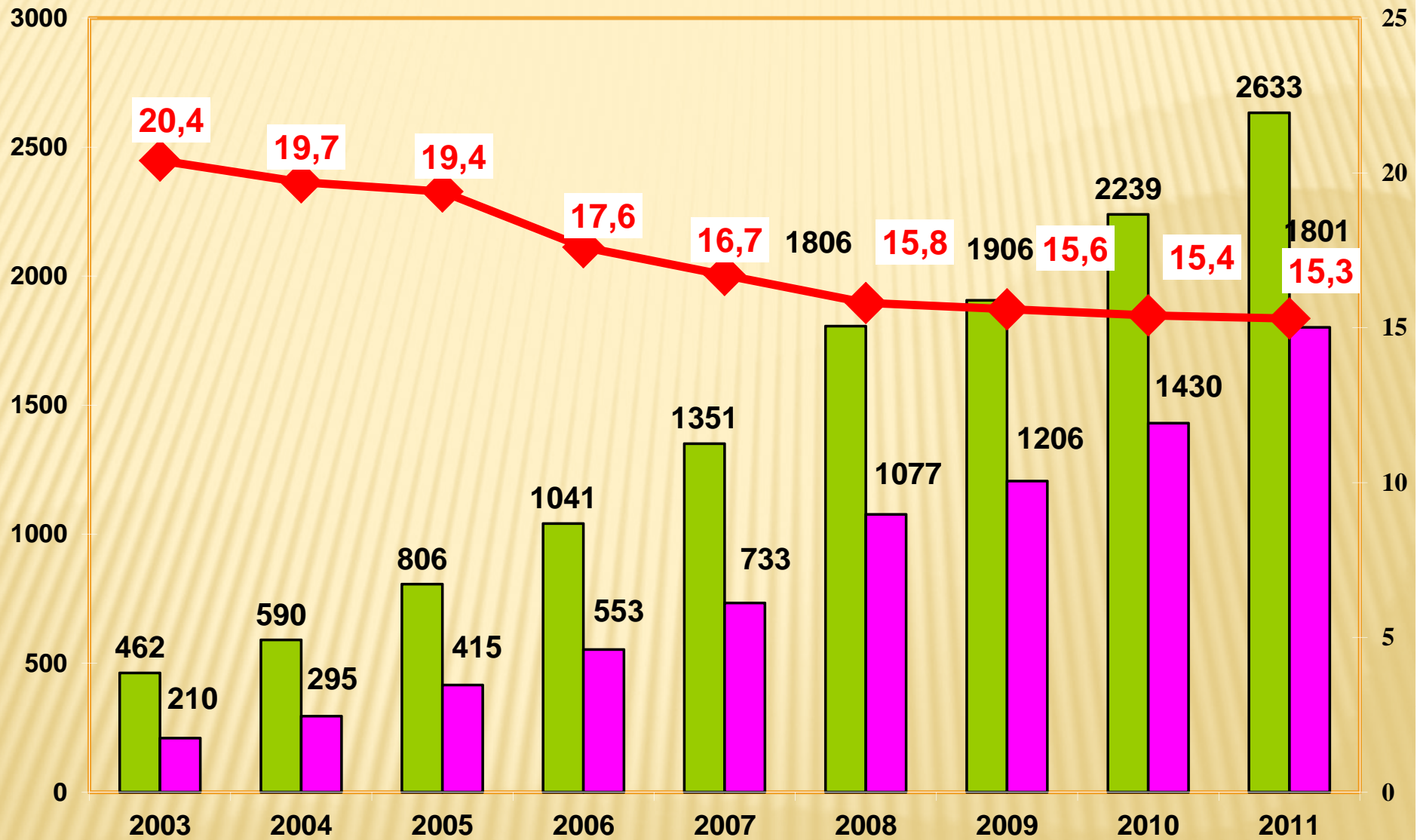
Weaknesses

- ✓ Low availability of villages by district hospitals, child care centers, elementary schools, cultural institutions, water and gas
- ✓ Low wages in the industry (40%)
- ✓ **Emigration of rural youth population**
- ✓ Reducing rural employment

Threats

- ✓ The disappearance of the administrative structure of villages
- ✓ **The decline of social infrastructure in rural areas**
- ✓ Reducing demographical potential of the village
- ✓ The decrease in the birth rate of the rural population and the increase in mortality in rural
- ✓ The spread of social evils of society, including alcoholism.

Average monthly wage and employment in agriculture

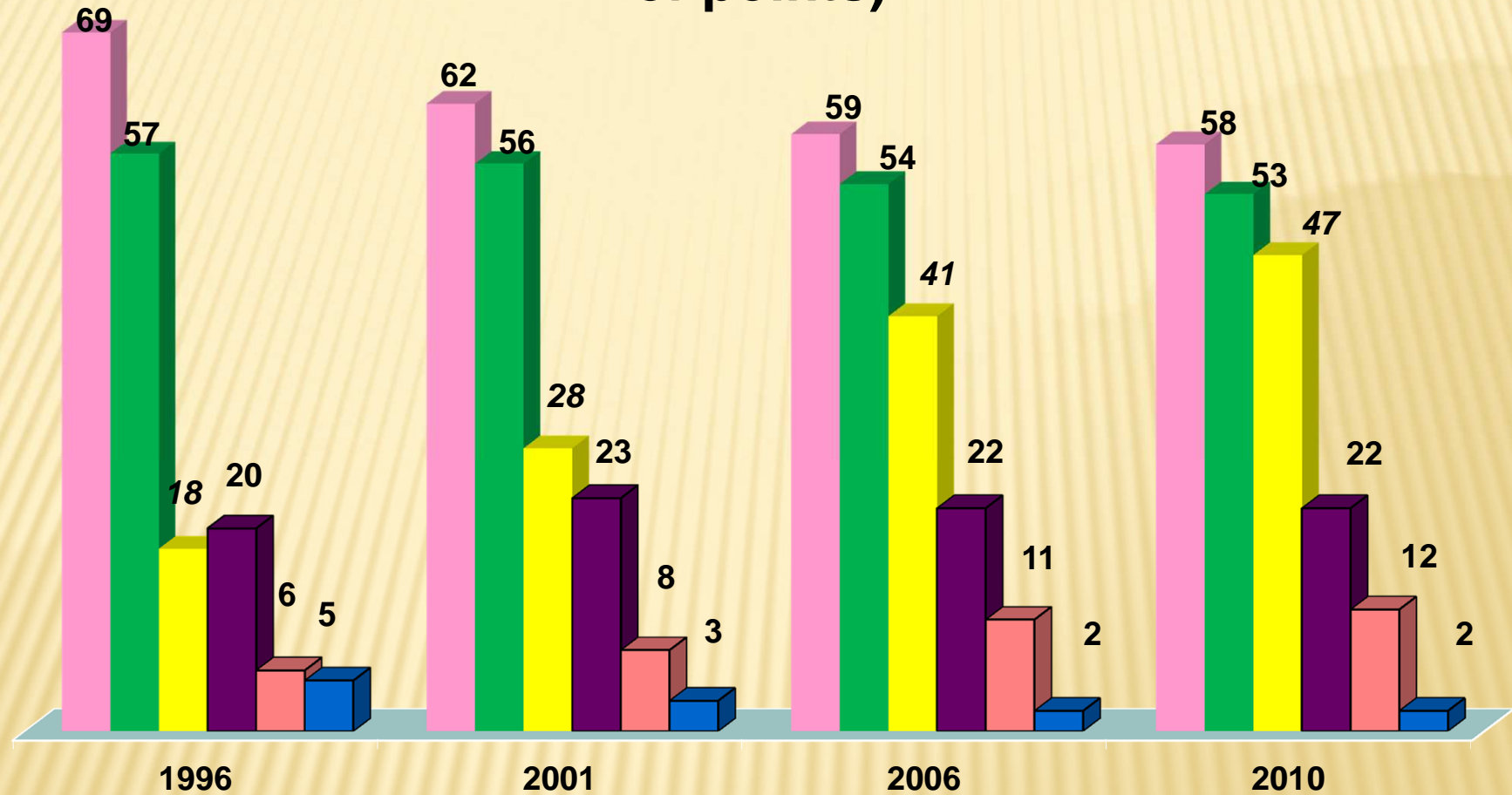


■ Average Monthly Rate, UAH

■ Average Monthly Rate in Agriculture, UAH

◆ Employment in Agriculture

Level of villages social infrastructure (in % of total number of points)



■ Cultural Centers ■ Health Posts ■ Pipelines ■ Plumbings ■ Ambulances ■ Hospitals

Analysis of ecological and recreational functions of agriculture

Strengths

- ✓ **Favorable natural and climatic conditions**
- ✓ The development of organic production
- ✓ The variety of relief in rural areas
- ✓ Recreational opportunities of natural landscapes
- ✓ High culture farming in agricultural production
- ✓ A large proportion of manual labor in households

Opportunities

- ✓ Increasing opportunities to improve the environment in rural areas
- ✓ Increasing opportunities for the production of environmentally friendly products including households
- ✓ Forest expansion and shelterbelts, laying of new and reconstruction of old parks

Weaknesses

- ✓ Low level waste disposal in towns and cities
- ✓ Lack of villages organized places for landfills
- ✓ Lack of government programs on clean natural water in rural areas
- ✓ Low water quality in centralized water systems, particularly in the southern regions of Ukraine

Threats

- ✓ The level of tilling;
- ✓ The growth of contamination in rural area
- ✓ Increasing the number of settlements that are under the influence of natural disasters

The overall environment indicator

Index of state land resources (I_{зр}):

- coefficient of ecological stability (K_{смаб});
- coefficient presence of hazardous waste (K_{вiдх}).

Index of water resources (I_{ер}):

- proportion of contaminated water in a total volume of effluents into water bodies (K_{забруд});
- specific annual water consumption for domestic and drinking needs (K_{зоспум});
- the ratio of consumption to available resources (K_{водосп})

Index of air conditions (I_{амм}):

- load factor territories emissions of pollutants into the air (K_{амм})

The overall indicator is absolute and defined the objective of monitoring the environment in certain regions of Ukraine

$$I_{\text{интеграл}} = \sqrt[3]{I_{\text{зр}} I_{\text{ер}} I_{\text{амм}}}$$

Scale integrated coefficient for the Environment

Conditions	Index	Conditions	Index
Crisis	0,000 – 0,200	Satisfied	0,601 – 0,800
Critical	0,201 – 0,400	Favorable	0,801 – 1,000
Stressful	0,401 – 0,600		

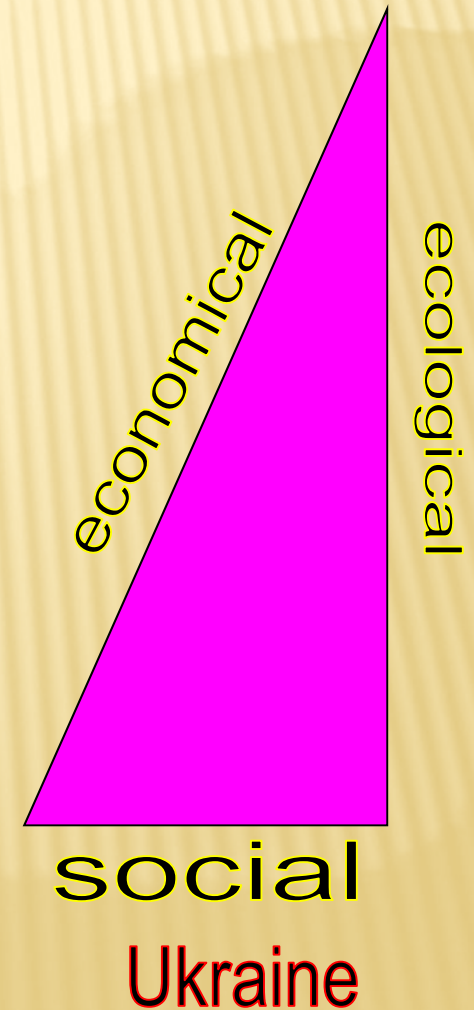
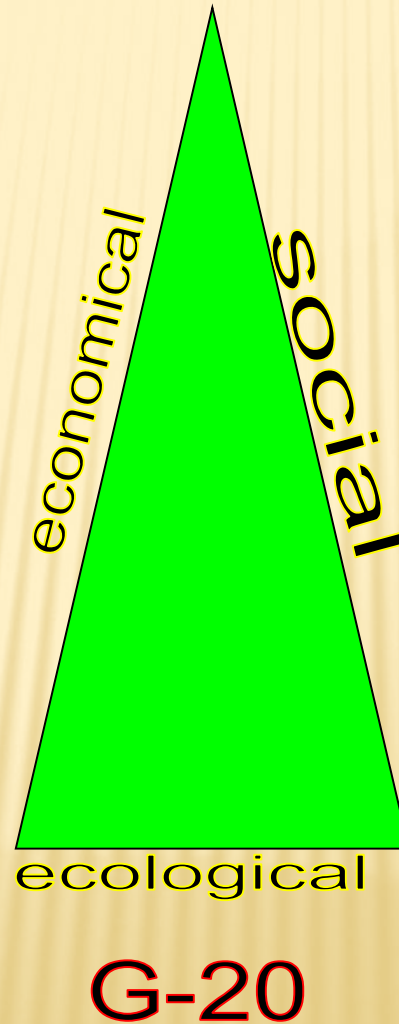
Index of environmental protection and health of the population for Ukraine (2010)



Synthesis conclusion

- ✦ During the last decade there has been a general tendency to increase in agricultural production, especially crop. Livestock production is growing, however, is in critical condition ranching industry (continuing reduction in the number of cattle, including cows);
- ✦ **Agricultural production is efficient, competitive, and non subsidized, investment – attractive;**
- ✦ The ecological condition in agriculture still positive;
- ✦ Social infrastructure continues to decline and decay. (esp. the level of transport infrastructure of rural areas);
- ✦ **Reducing the labor employment in rural areas;**
- ✦ **Deepening demographic crisis in rural areas;**
- ✦ The need for the introduction of principle - a new approach to the utilization of the consequences of life of the rural population;
- ✦ The need to determine on the future of residential features that disappear from the map of Ukraine.

Types of agricultural economics balancing the functions of agriculture



Strategic Objectives:

- **Create conditions for efficient production activities of business entities in order to increase production volumes to meet the needs of the population of Ukraine and the world market**

(the Law of Ukraine "On the agriculture of Ukraine");

- **Provide the affordability of food to the consumer**

(the Law of Ukraine "On the food security of Ukraine");

- **Keep the indicators of safety and quality of food**

(the Law of Ukraine "On the safety and quality of food")

Socio - economic indicators of the Strategy implementation

Indicators	2011 /base	2015	2020
Gross output, bln. UAH (2005 prices)	100,5	149,5	189,5
Gross added value in agriculture, bln. UAH	42,9	86,5	122,1
Product Consumption per capita, kg			
Meat and meat products	52 / 85	76,7	91,1
Milk and dairy	205,4 / 390	281	380
Eggs	290 / 290	300	300
Share of organic lands (certified) in total, %	0,7	5	7
Share of organic production in gross, %	...	7	10
Export of agricultural products, bln. USD.	11,9	17,5	34
Export, 000 tones:			
cereal	14239	28900	33500
meat and meat products	48	84,9	506
milk and dairy	956	1165	3462
Profit rate in agriculture, %	4,1	≥15	...
AgEnterprises Income Allowance, bln. UAH	14,2	34,6	51,9

Priorities of the Strategy implementation – Crop Protection

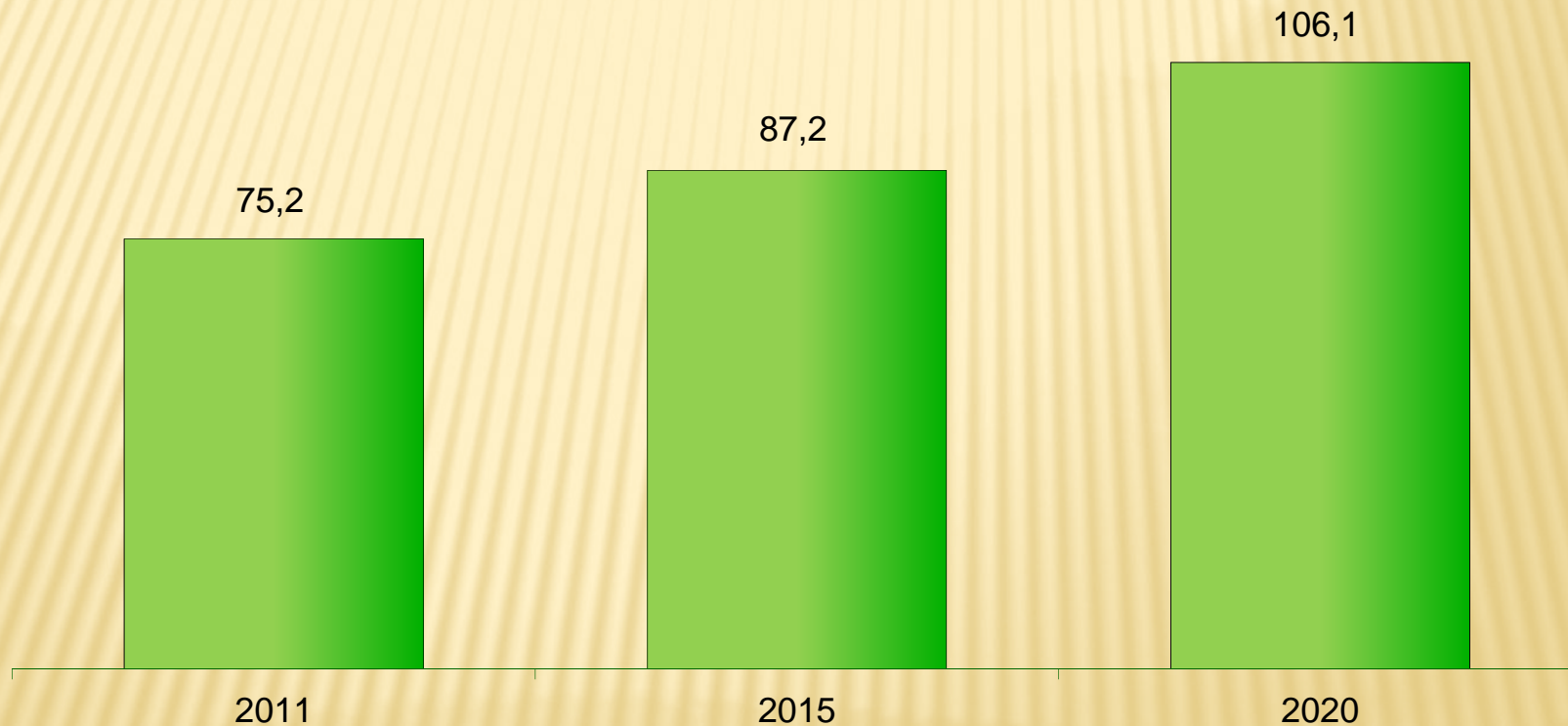
Goal - to increase the crop production based on average rates achieve crop yields .

Ways to achieve :

- **increase the level of intensification of production through additional investments in processes of agricultural products;**
- **increase the economic potential of agro-ecosystems that secure the complex of organizational - technological measures through the implementation of production standards and agricultural passports;**
- **providing agricultural gene pool of highly varieties and hybrids of domestic production;**
- **widespread use of energy-saving, innovative, eco-saving production technologies**

Strategic objectives and development indicators – crop production

- Changes in the structure of crops by natural - climatic zones
- Creation of soy - corn belt in the steppes of Ukraine
- Ensure sufficient supply for bioethanol production
- Increase in organic production



Gross output of agriculture, bln. UAH (all categories)

Priorities of the Strategy implementation – animal production

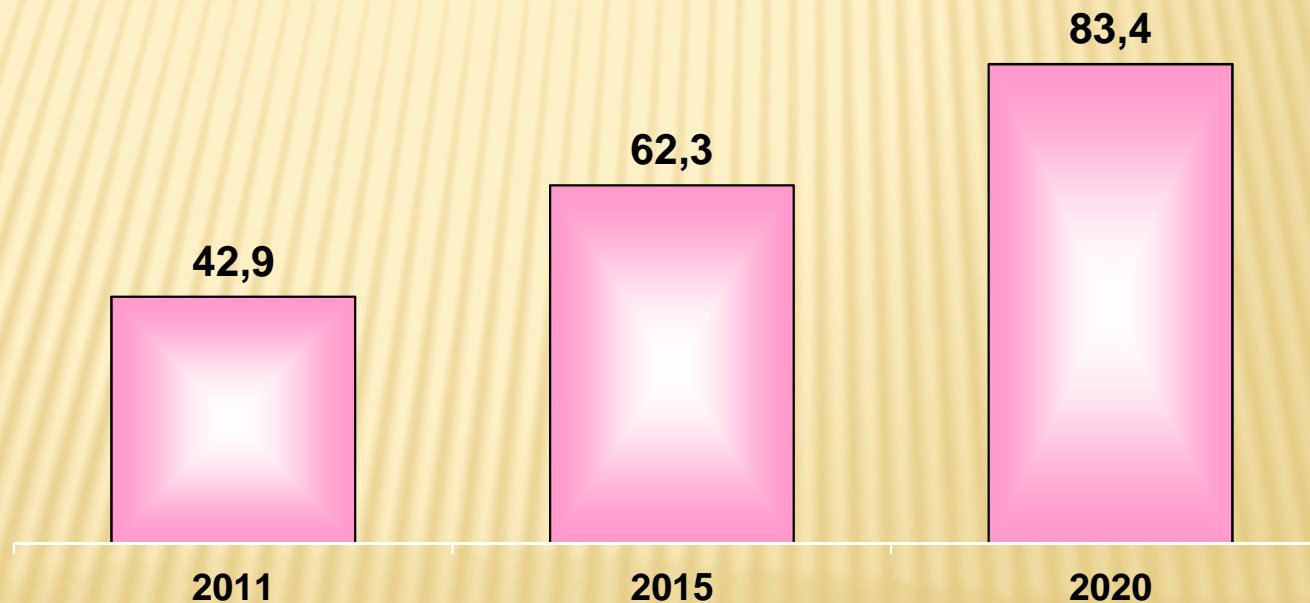
Goal - to increase livestock production by individual segments of the market based on average rates achieve productive efficiency of animals with active government support area.

Ways to achieve :

- intensification of the poultry industry with the active development of external segments of poultry and eggs ;**
- extensive development of pig production while increasing the level of field intensity and diversification of the production of quality products processing;**
- extensive development of the field of animal husbandry with emphasis on small and medium-sized farms in the rural industrial cooperation;**
- stimulation of sheep with the deepening of specialization in**

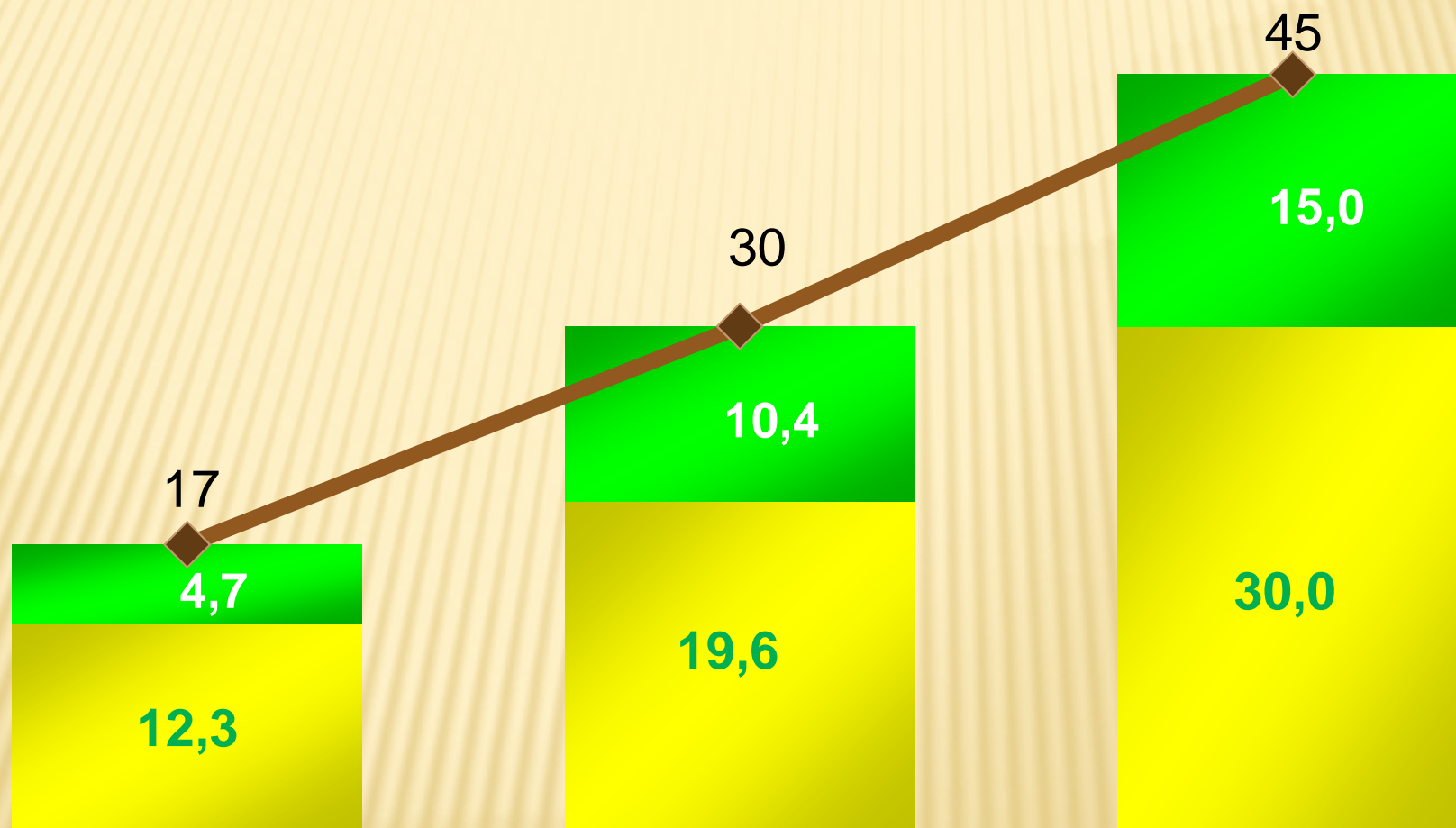
Strategic objectives of the field of animal development indicators

- *An increase in livestock numbers due to the extended reproduction of the herd;*
- *Creating the optimum size of farms and farms of all forms of ownership and management;*
- *Increasing the productivity of livestock and poultry by improving existing and creation of new breeds and types and methods of their content;*
- *Restructuring feed industry, improve forage production.*



**The volume of gross output in the livestock
(in comparative prices of 2005, bln UAH)**

Dynamics of agricultural producers needs, bln UAH



2011

2015 forecast

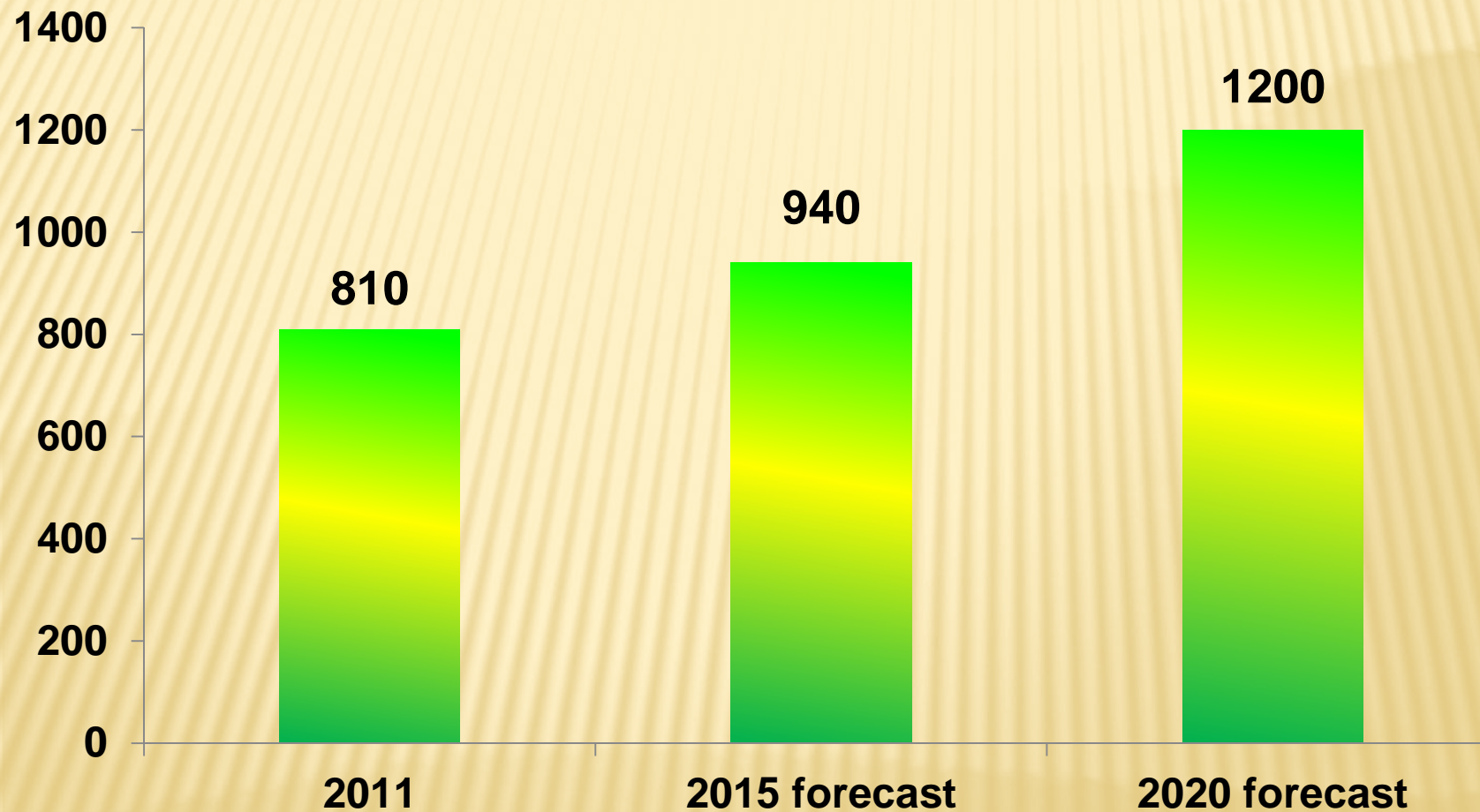
2020 forecast

Own

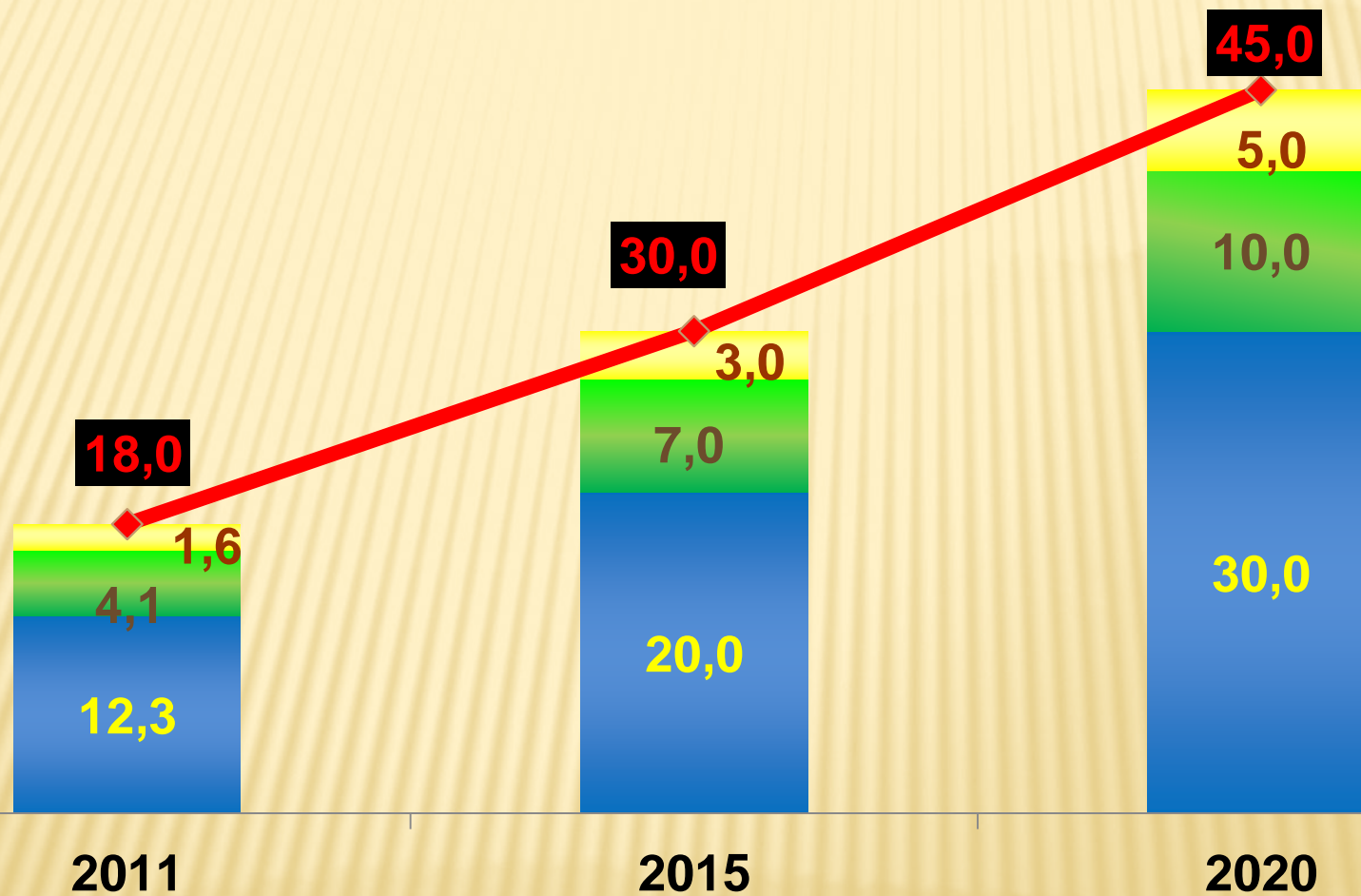
Involved

Needs

Foreign direct investment in agriculture, hunting and related services, mio. USA



Forecast of investments in fixed assets and major sources of financing, bln. UAH



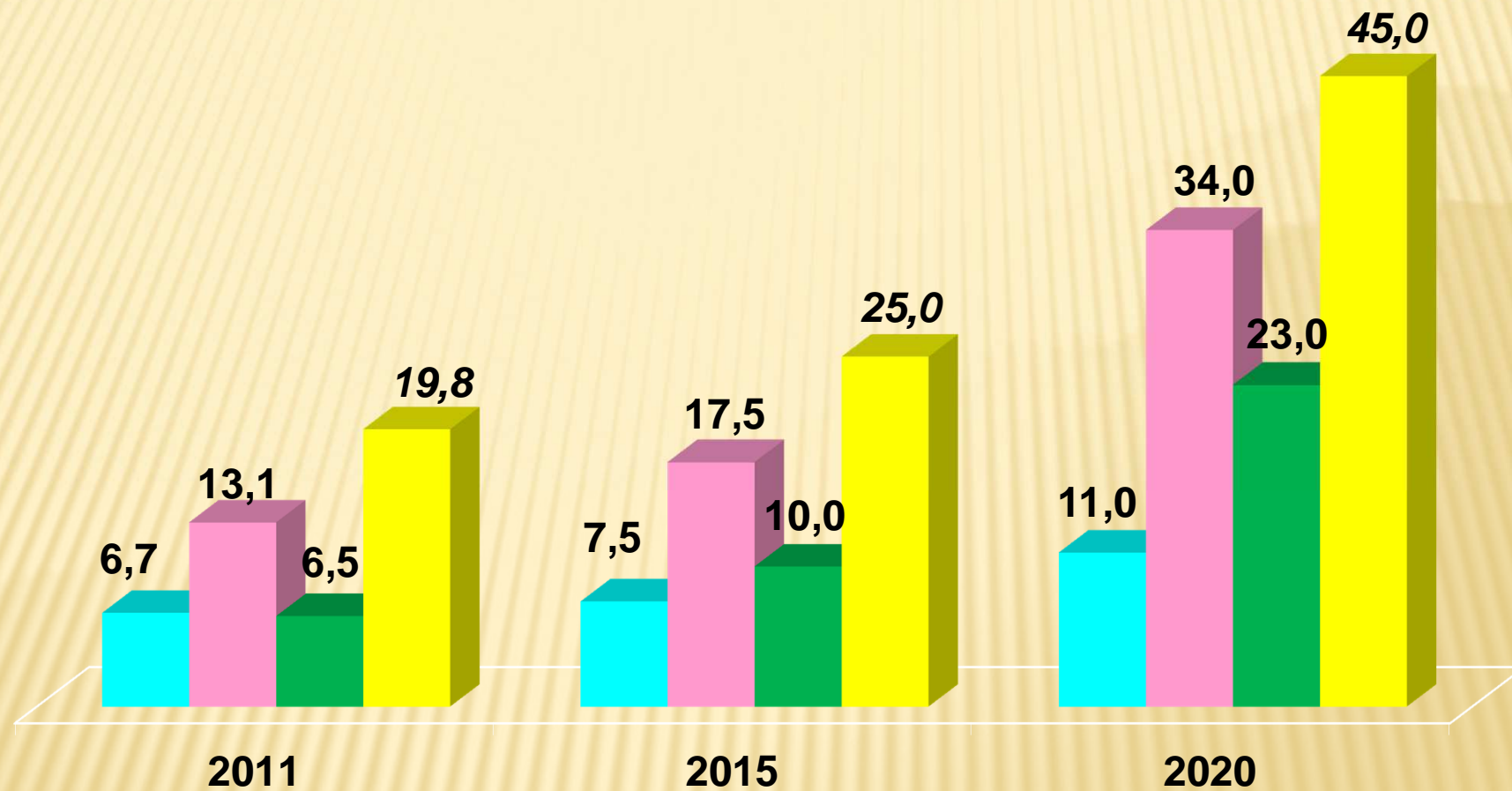
Own

Longterm Credit

Other

Total

Foreign trade of agri-food products, billion. USD



Import

Export

Balance

Turnover

Thank You for Your Attention!



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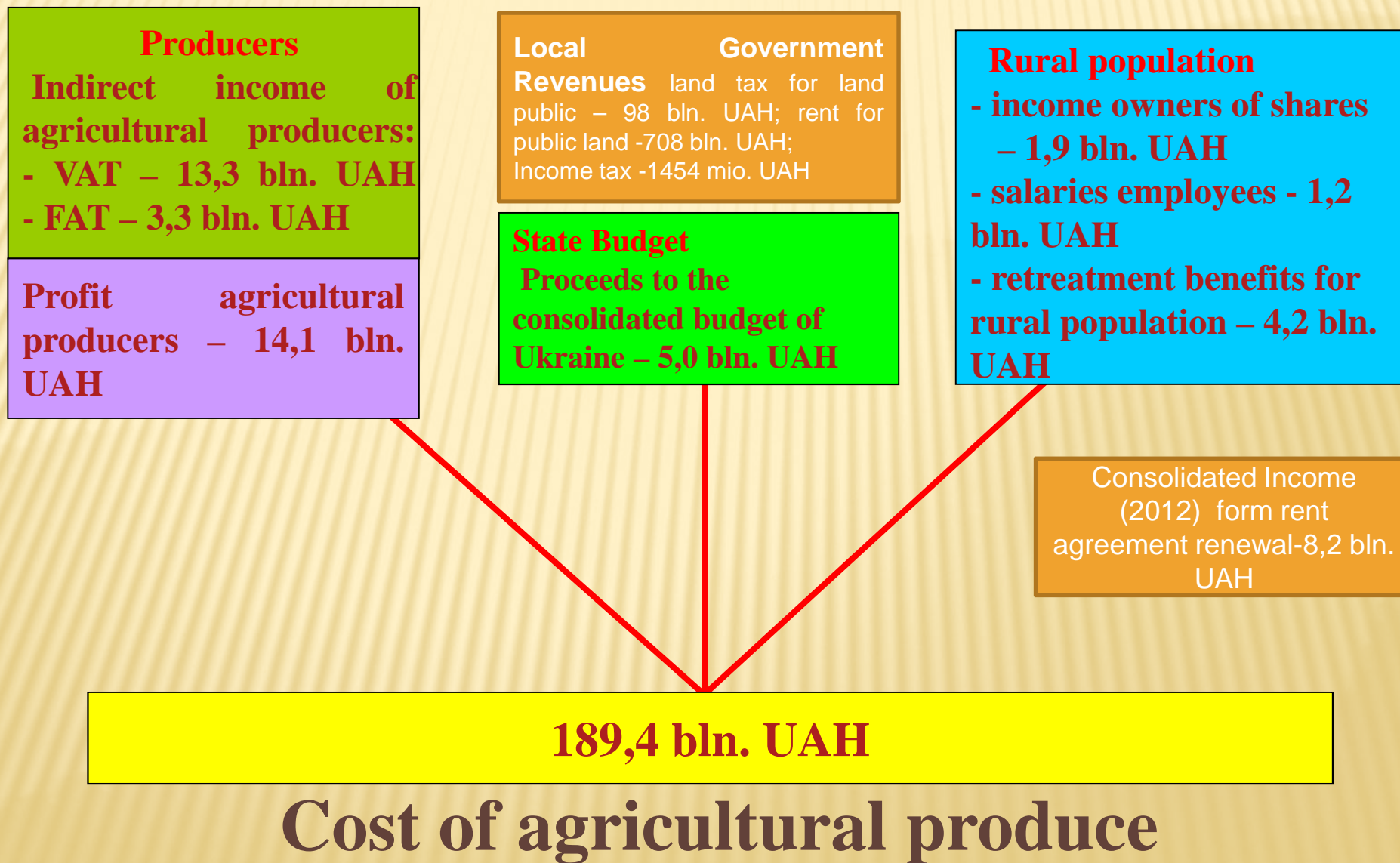
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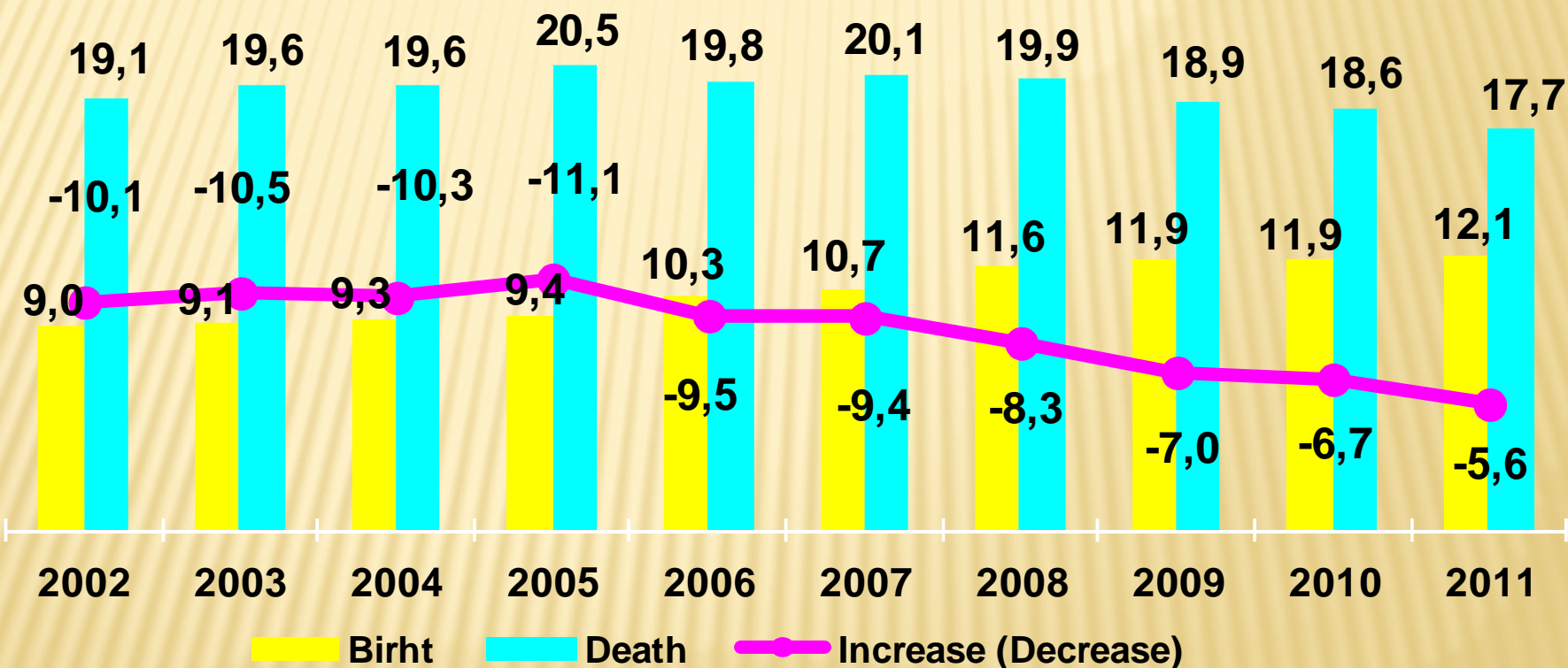
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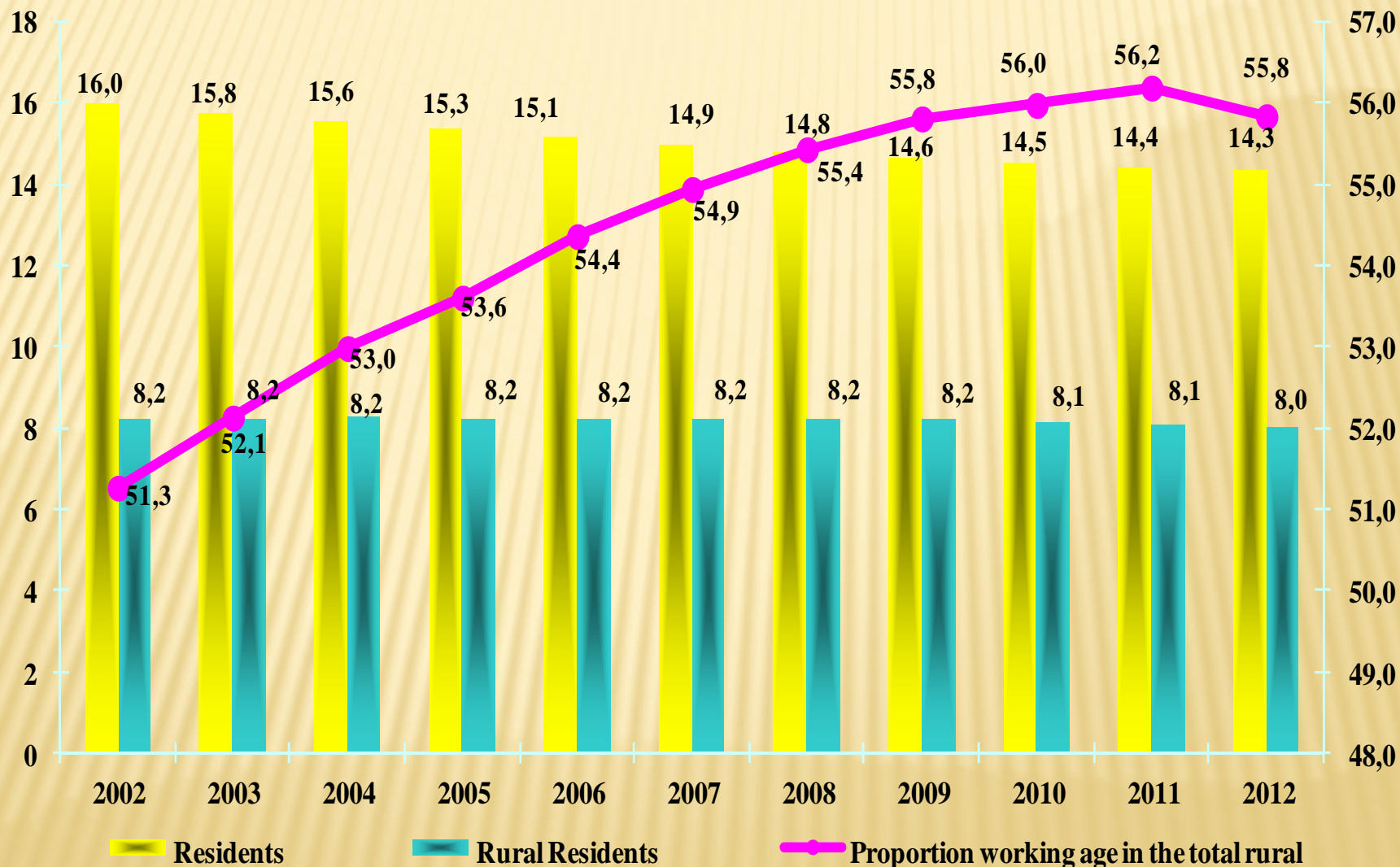
The economic impact of agricultural production for interest groups, 2012



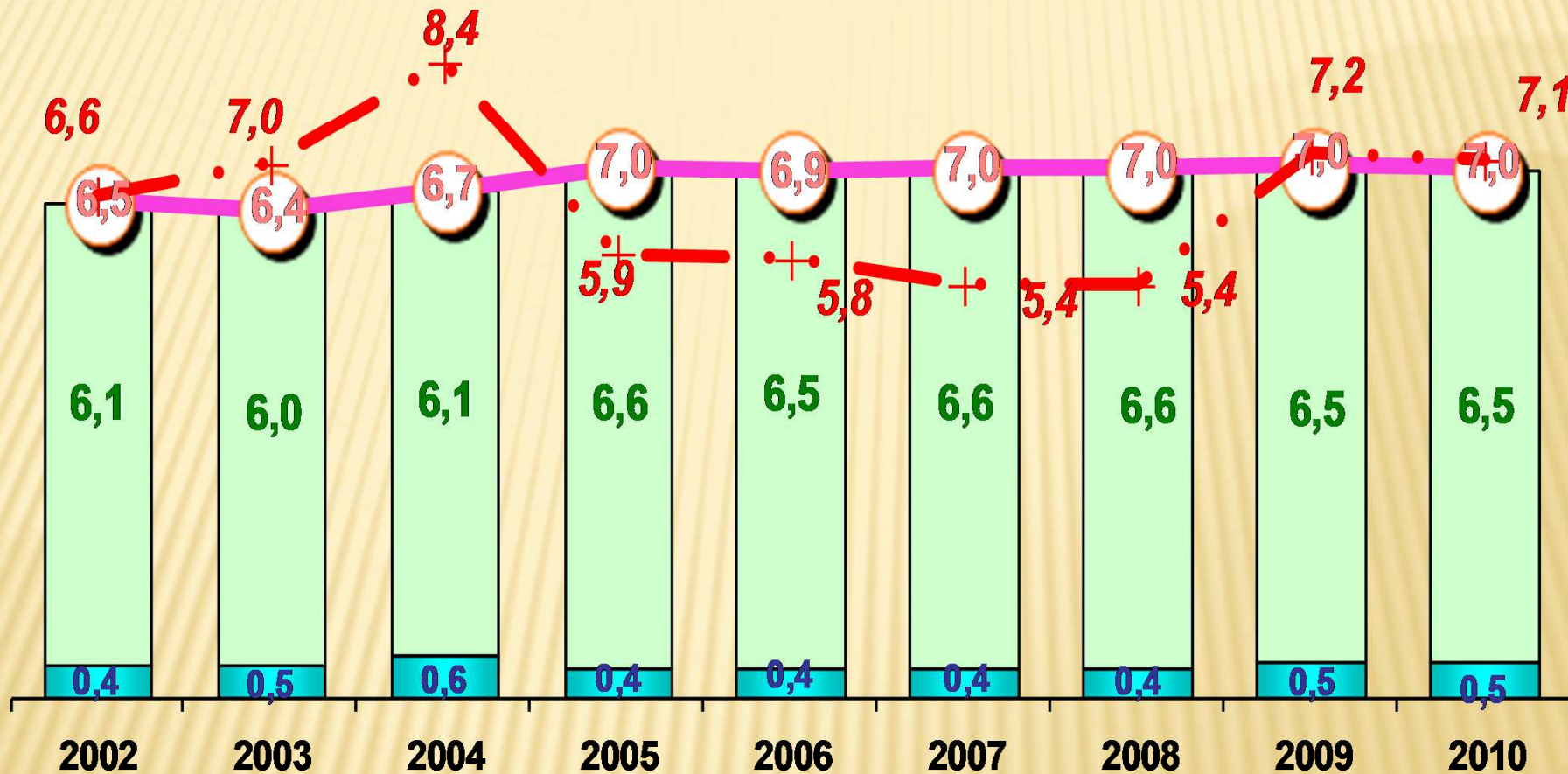
THE BIRTH, DEATH RATE AND NATURAL INCREASE (DECREASE) RATES OF THE RURAL POPULATION, (PER 1,000 PEOPLE)



CHANGES IN THE NUMBER OF PERMANENT RURAL POPULATION (AS OF JANUARY 1, MIO. PERSONS)



The economically - active rural population (mio. persons aged 15-70 years)



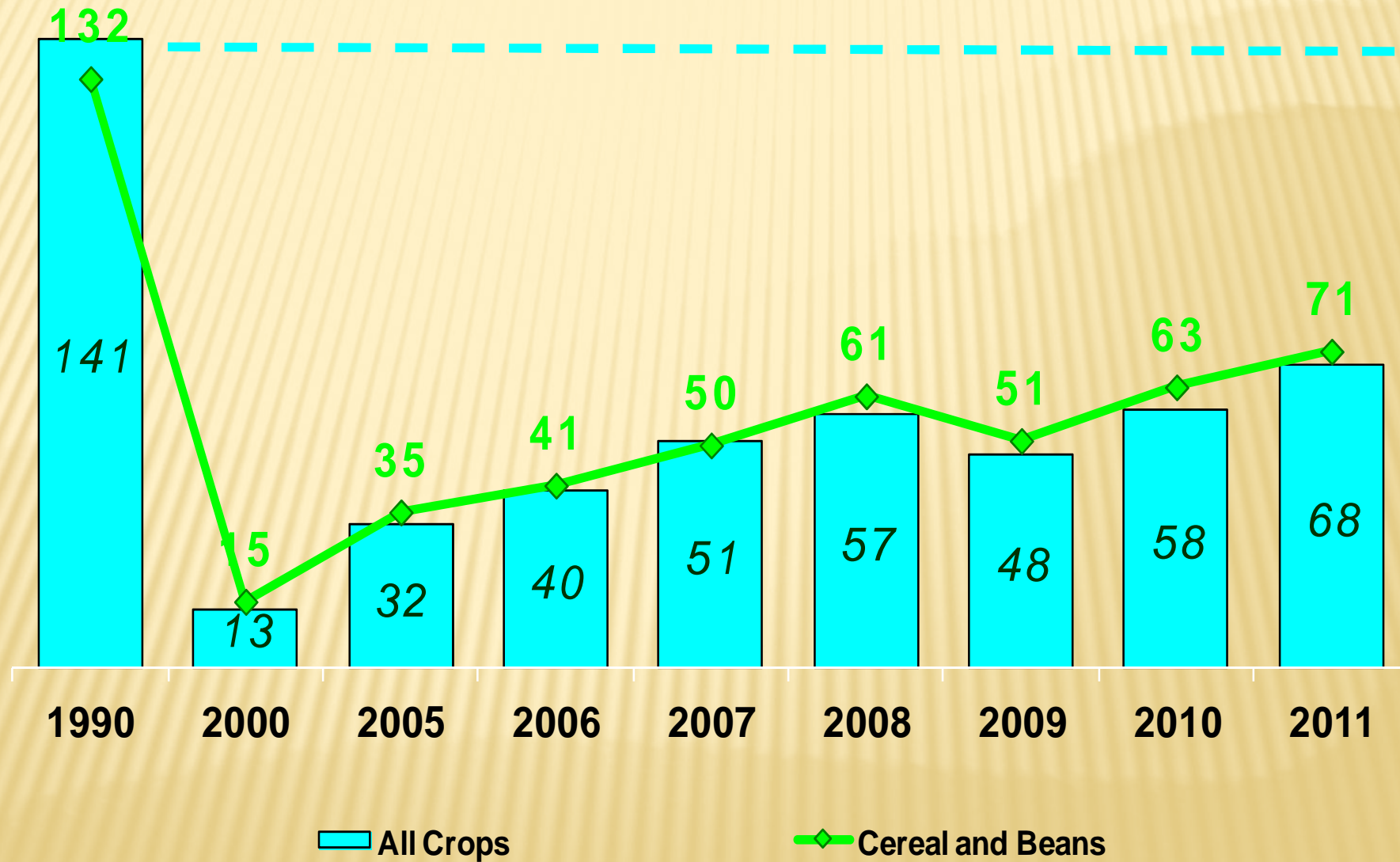
Employed

Unemployed

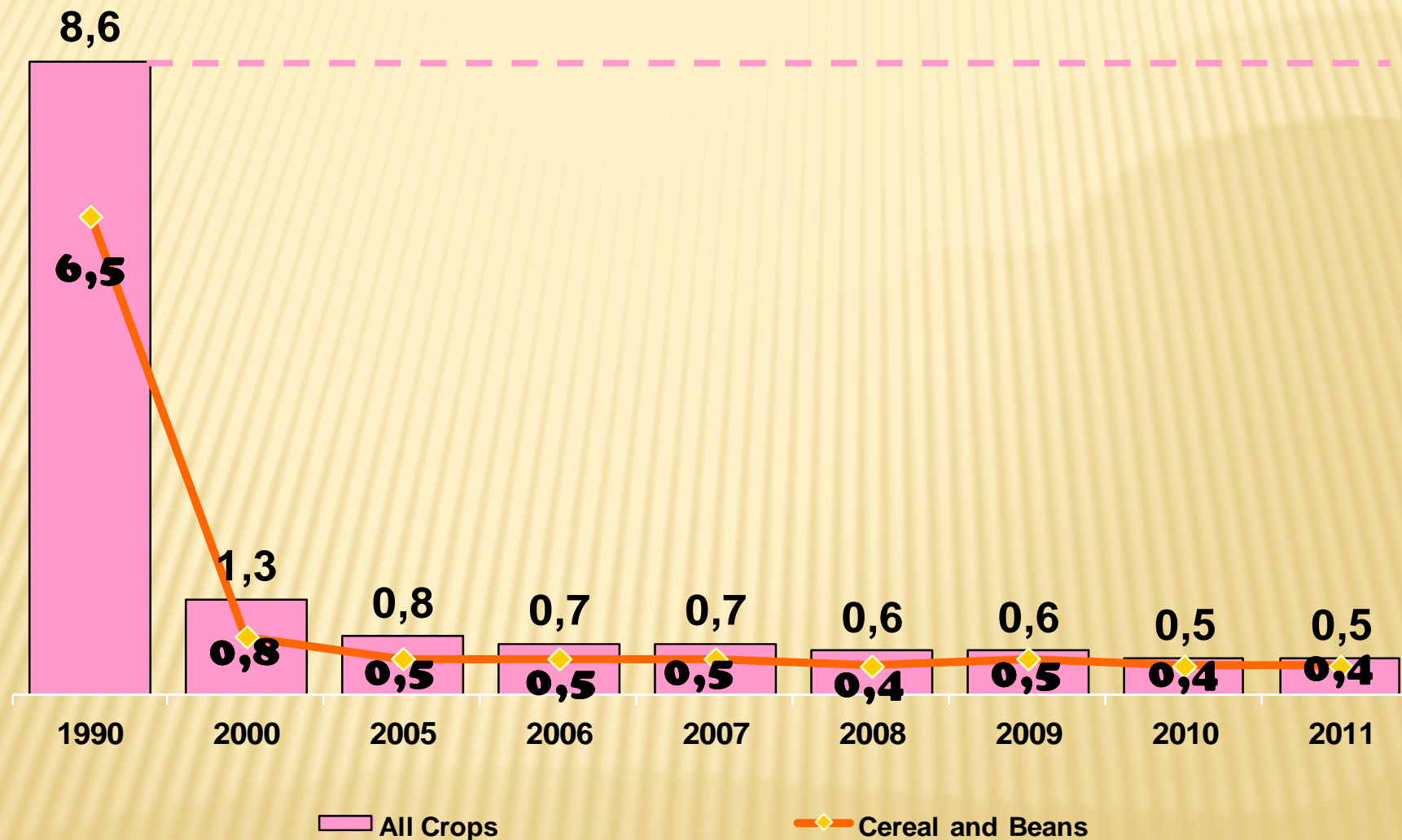
Economic active, total

Employment Rate, %

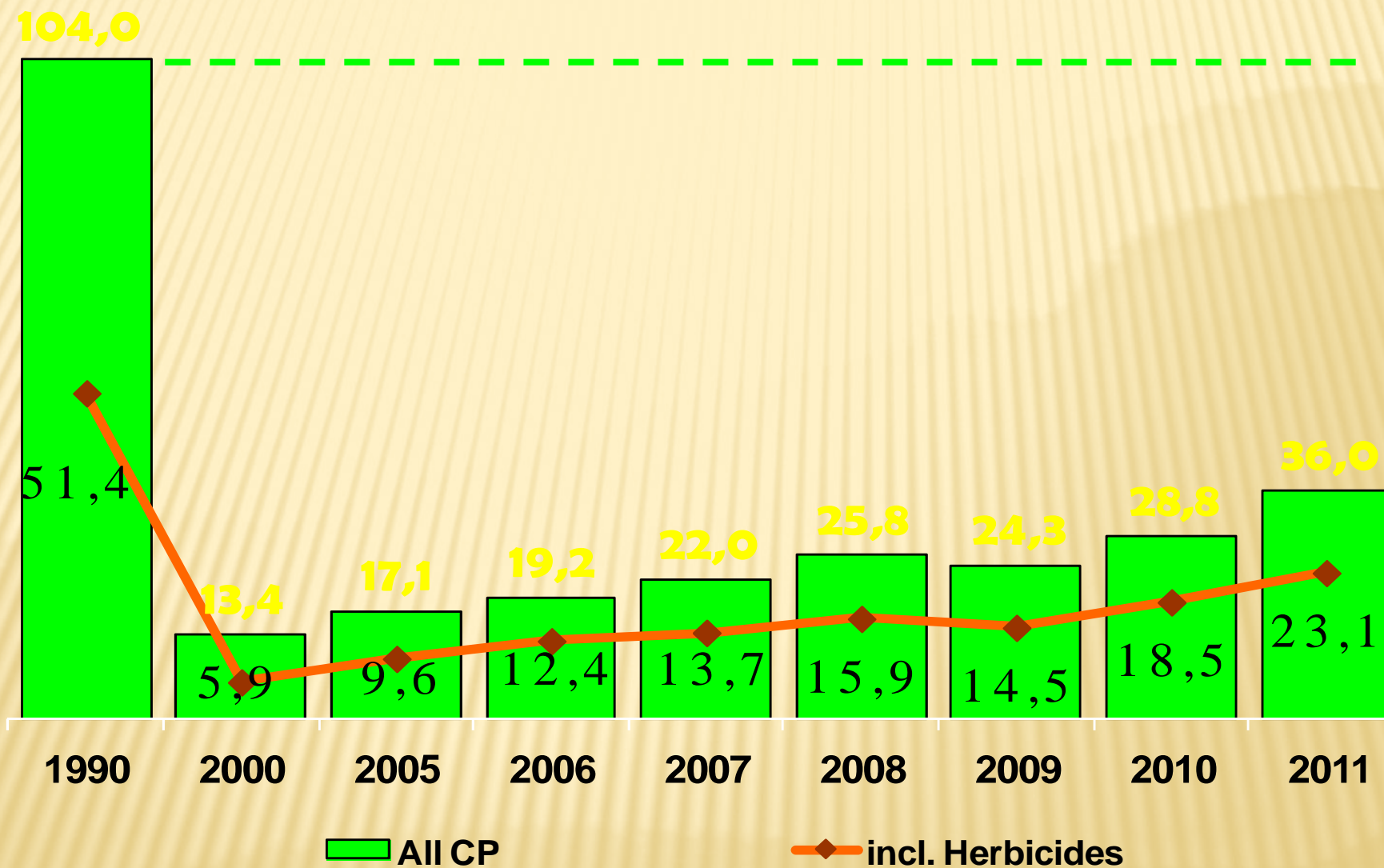
Fertilization kg of nutrients per 1 hectare



Organic fertilizers, kg of nutrients per 1 hectare

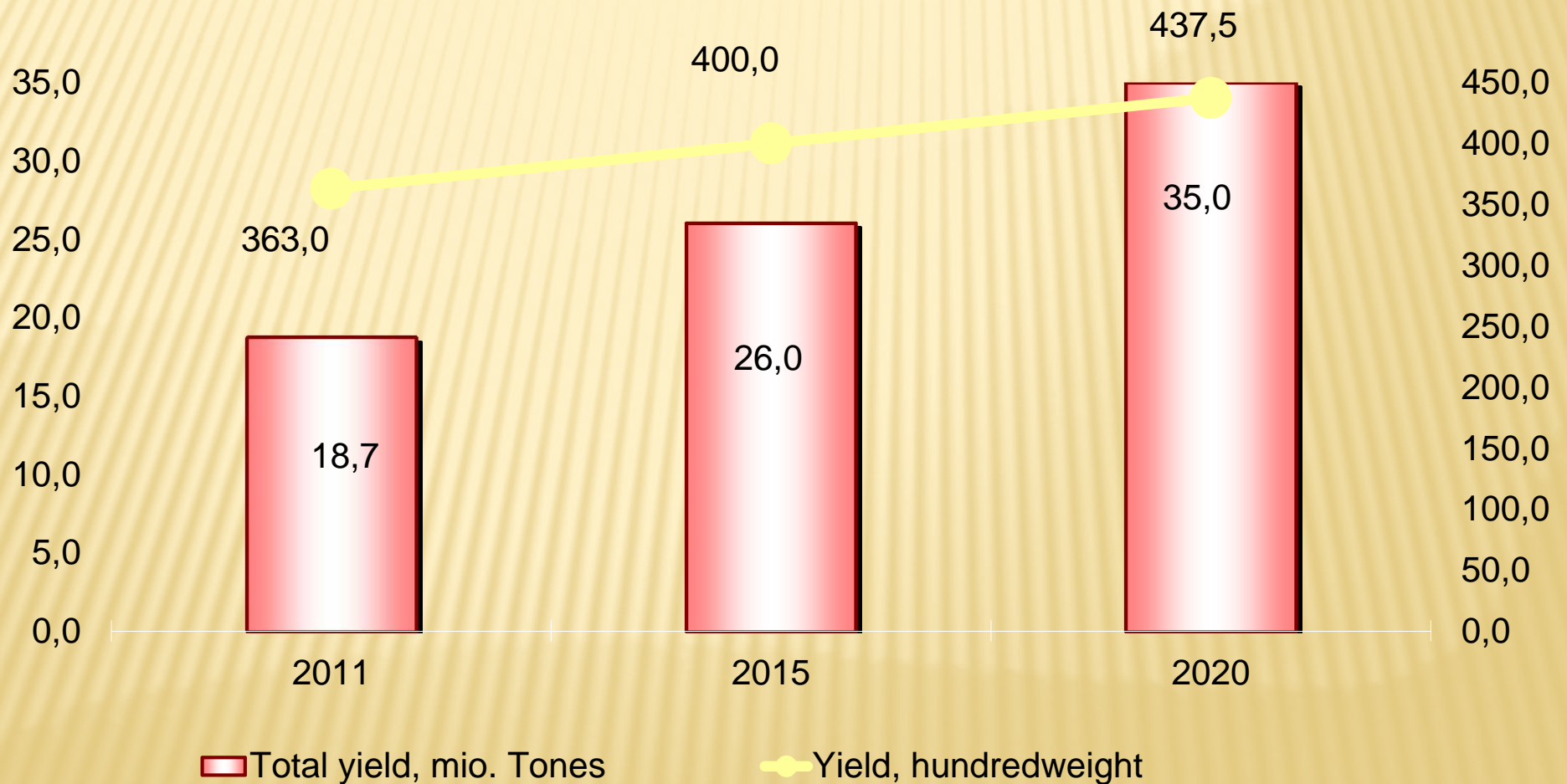


Plant protection, thousand tons

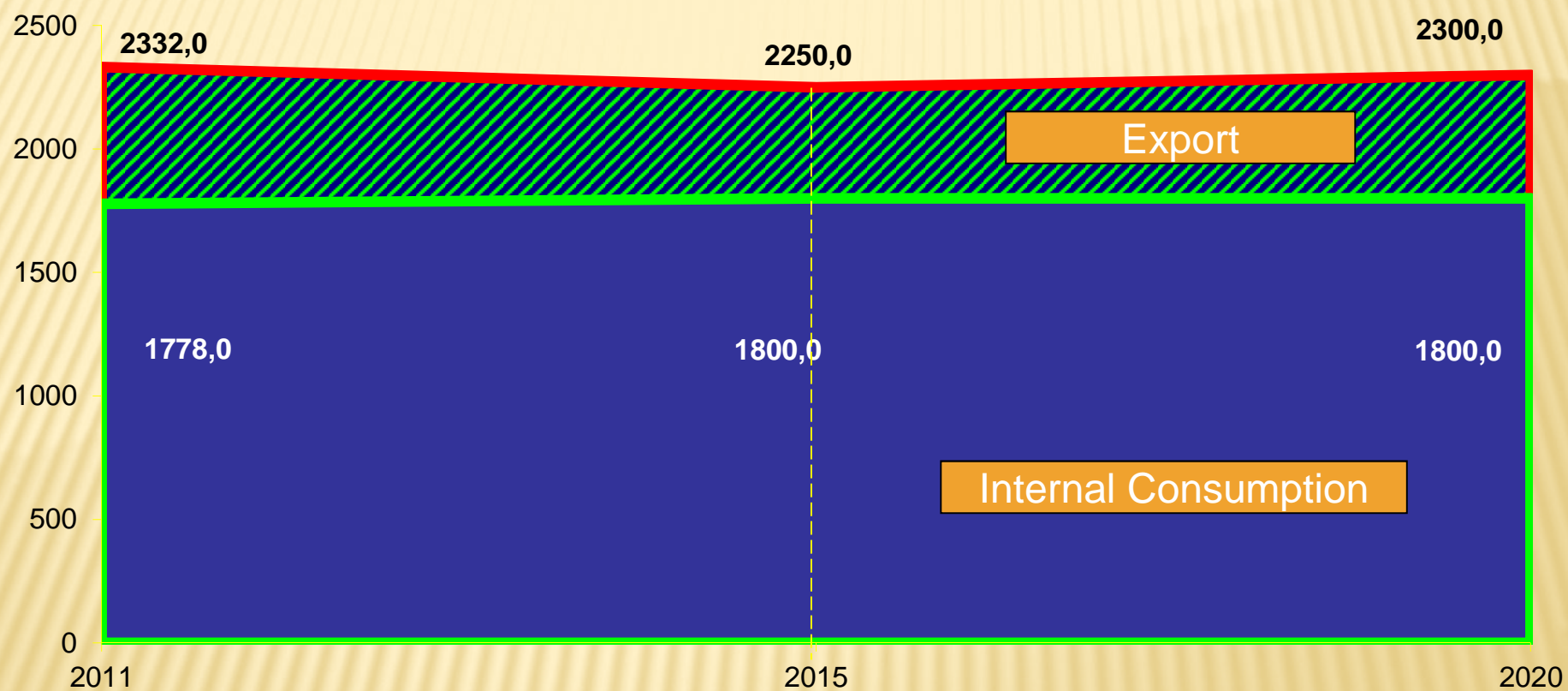


Sugar beet production

	2011	2015	2020
AgEnterprises, %	91,4	91,0	89,0
Households, %	8,6	9,0	11,0



Sugar Production and consumption in Ukraine, mio. tones



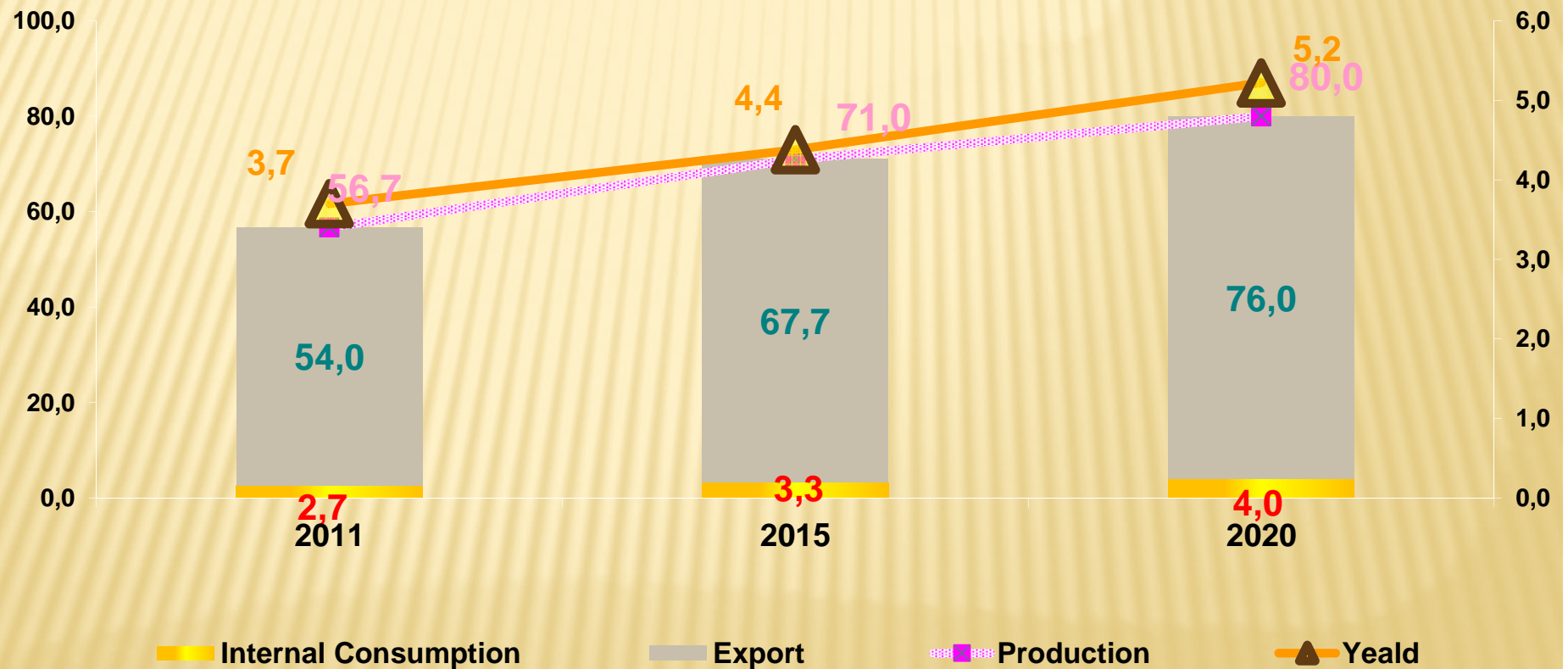
■ Production

■ Internal Consumption

CEREAL PRODUCTION AND CONSUMPTION

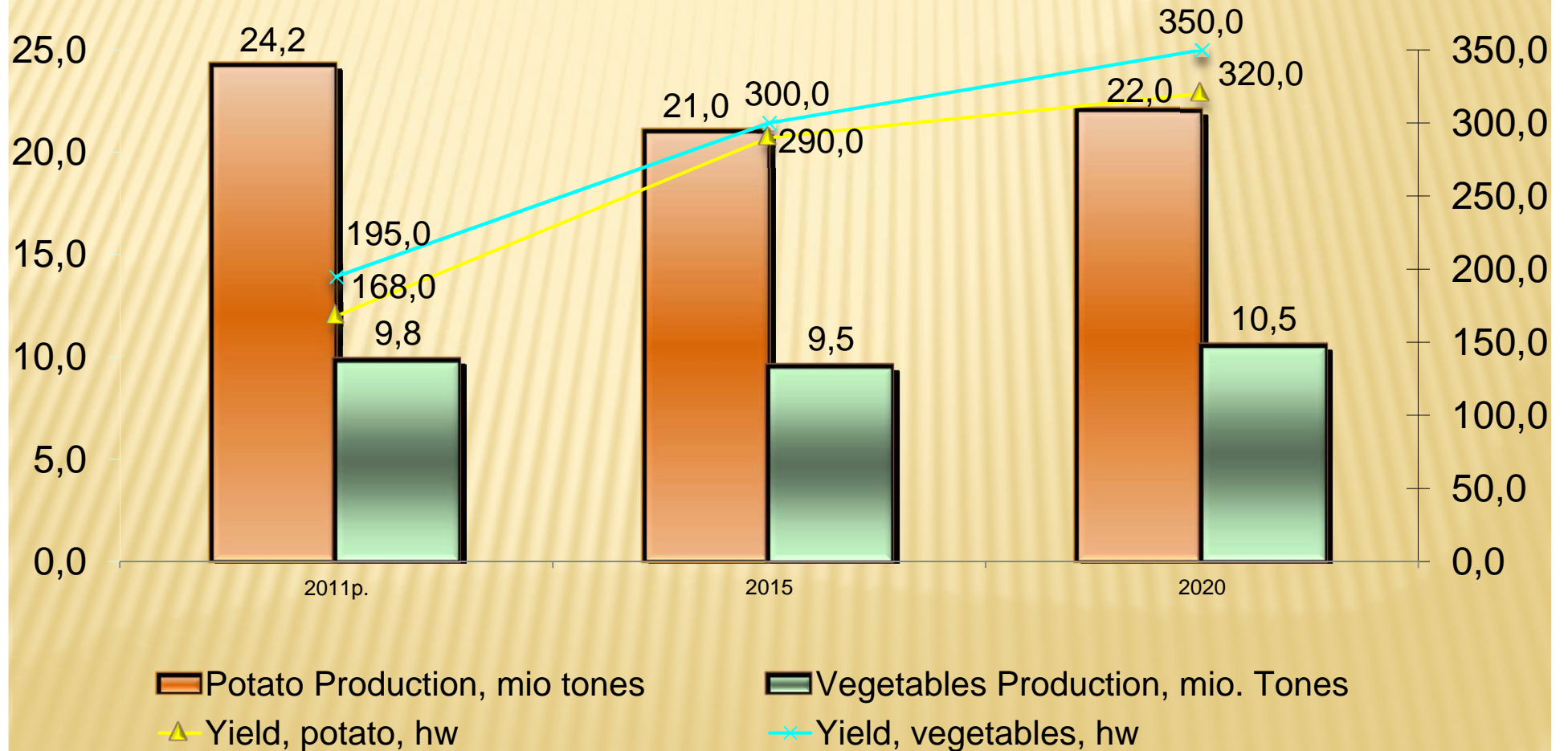
Note: cereal production in 2011 was 1.242 tones per person

Cereal Production	2011	2015	2020
AgEnterprises, %	78	83	85
Households, %	22	17	15

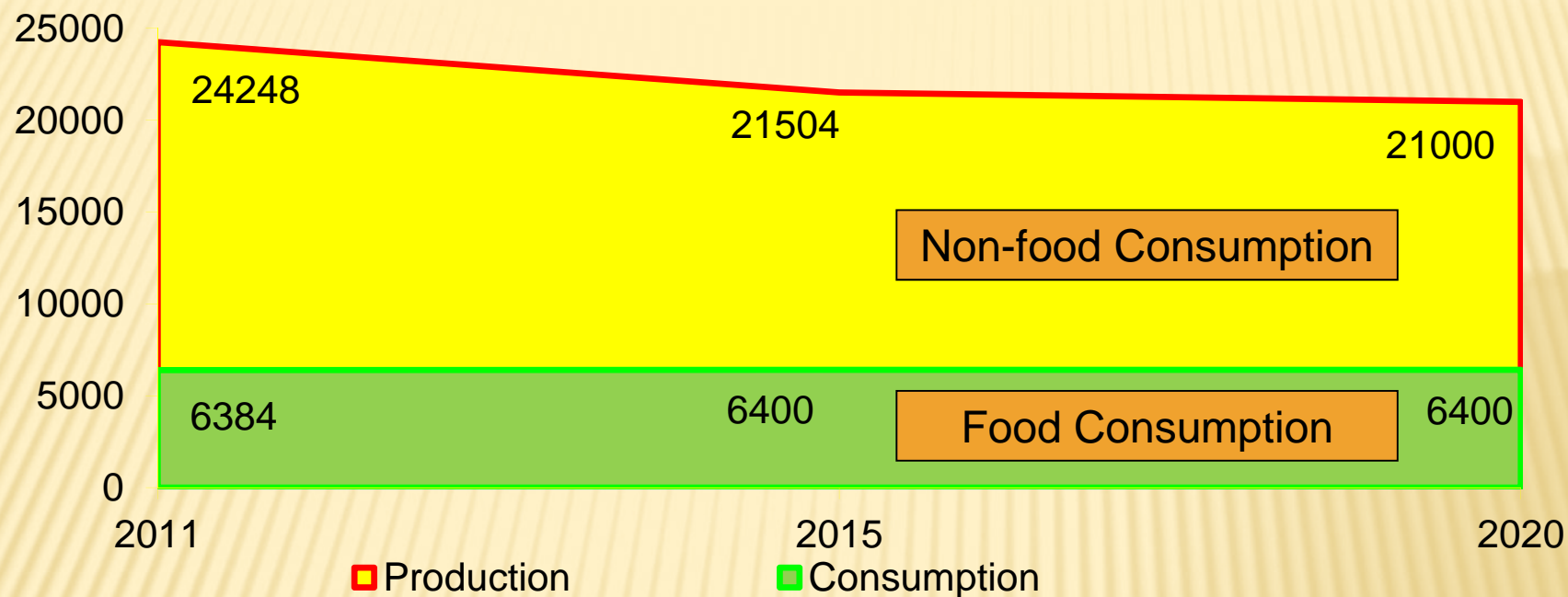


Potato and Vegetables Production

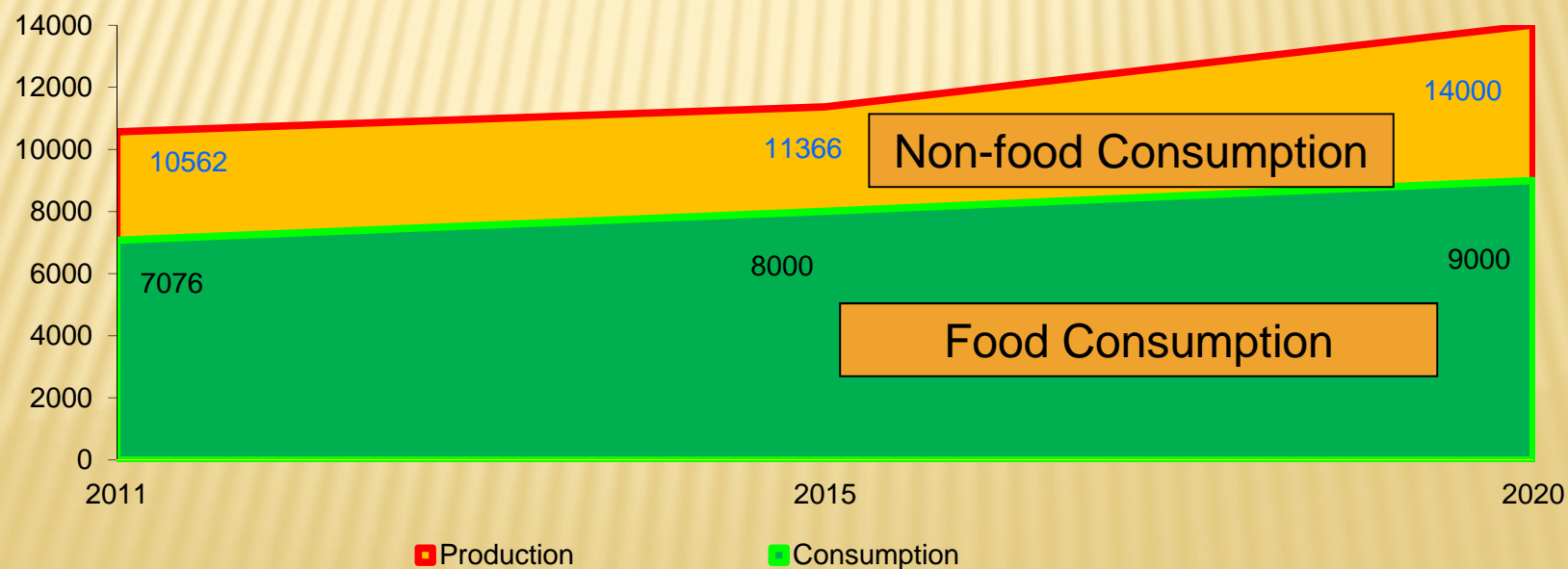
Potato	2011	2015	2020	Vegetables	2011	2015	2020
AgEnterprises, %	3	4	6	AgEnterprises, %	18	19	22
Households, %	97	96	94	Households, %	82	81	78



Potato Production and Consumption in Ukraine, mio tones

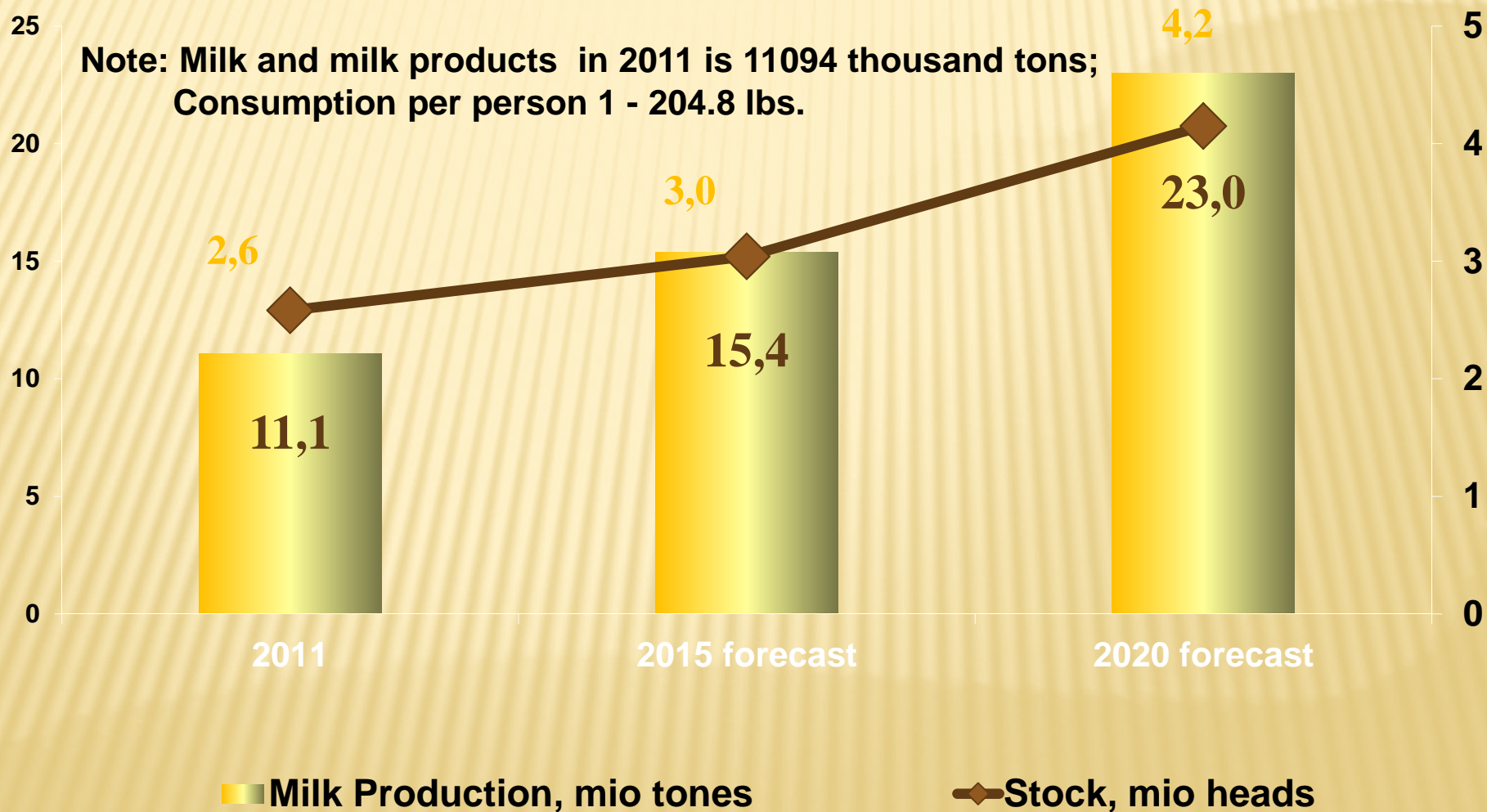


Vegetables and melons production and consumption in Ukraine, mio tones



MILK AND COW HERD SIZE IN ALL CATEGORIES

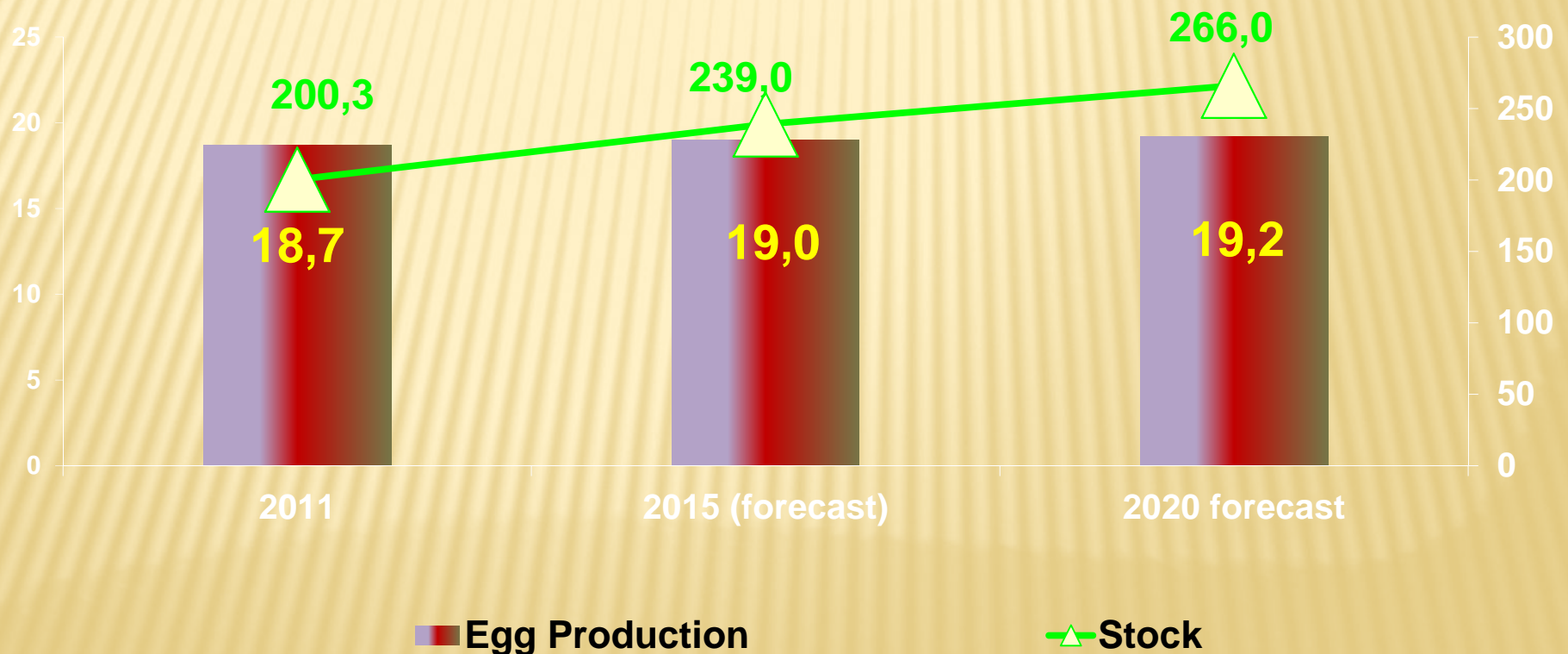
Milk Production	2011	2015	2020
AgEnterprises, %	21,0	31,0	52,0
Households, %	79,0	69,0	48,0



EGG AND POULTRY NUMBERS IN ALL CATEGORIES

Egg production	2011	2015	2020
AgEnterprises, %	62,6	63,0	63,0
Households, %	37,4	37,0	37,0

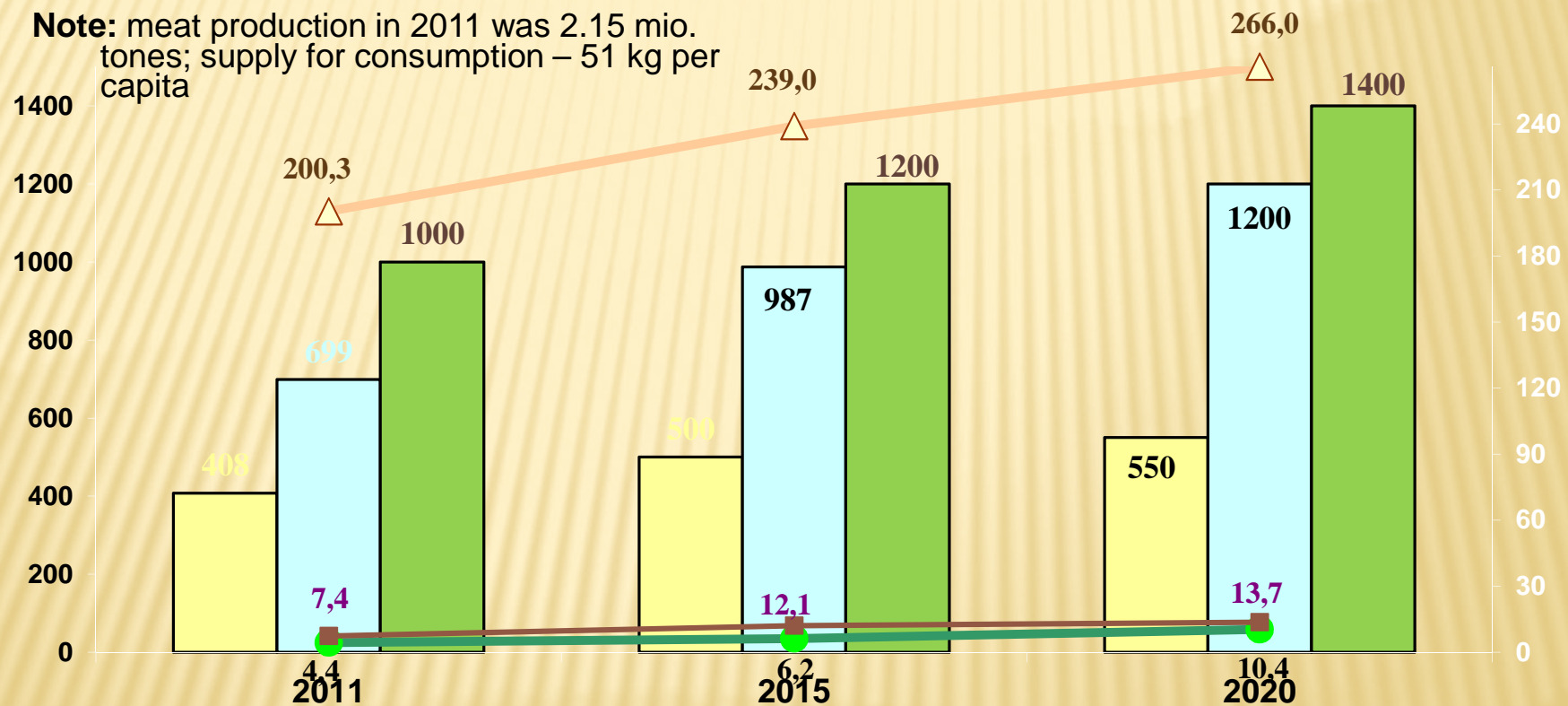
**Note: egg production in 2011 is 1 079 thousand tons;
Supply for consumption per 1 person - 310 pieces**



MEAT PRODUCTION AND STOCK

	2011	2015	2020	2011	2015	2020	2011	2015	2020
	Beef and Veal			Pork			Poultry		
AgEnterprises, %	26,5	30,0	67,0	43,0	43,0	42,0	800	80,0	79,0
Households, %	73,5	70,0	33,0	57,0	57,0	58,0	200	20,0	21,0

Note: meat production in 2011 was 2.15 mio. tones; supply for consumption – 51 kg per capita



Beef and Veal, 000 tones

Pork, 000 tones

Poultry, 000 tones

Poultry Stock, mio heads

Cattle Stock, mio heads

Pork Stocks, mio heads

PROPOSALS TO INCREASE THE GREENING OF RURAL AREAS

- introduction of separate collection of solid waste;
- organization of recycled materials points;
- providing tax incentives to institutions and organizations that will deal with solid waste;
- creation of waterproofing to landfills;
- use of landfill gas;
- natural elimination of waste from landfills;
- improving the system of collecting and transporting garbage to destinations;
- organization of the monitoring and control of treatment of solid waste.