



Transitions in Intellectual and Technological needs in Ukraine: impact on the university and Ukraine's traditional economic strengths

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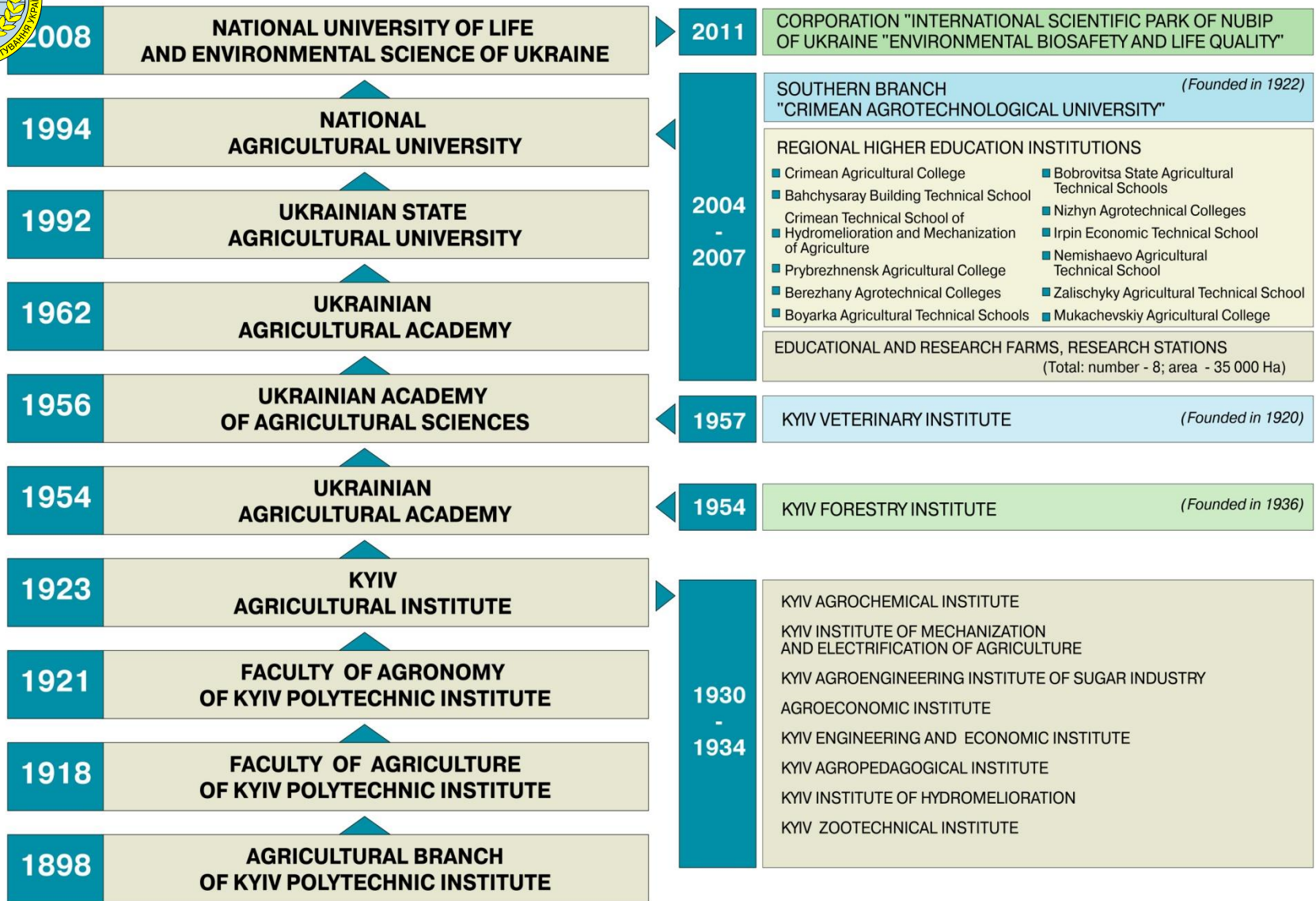


Fig. 1. MAIN STAGES OF THE EVOLUTION OF NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE

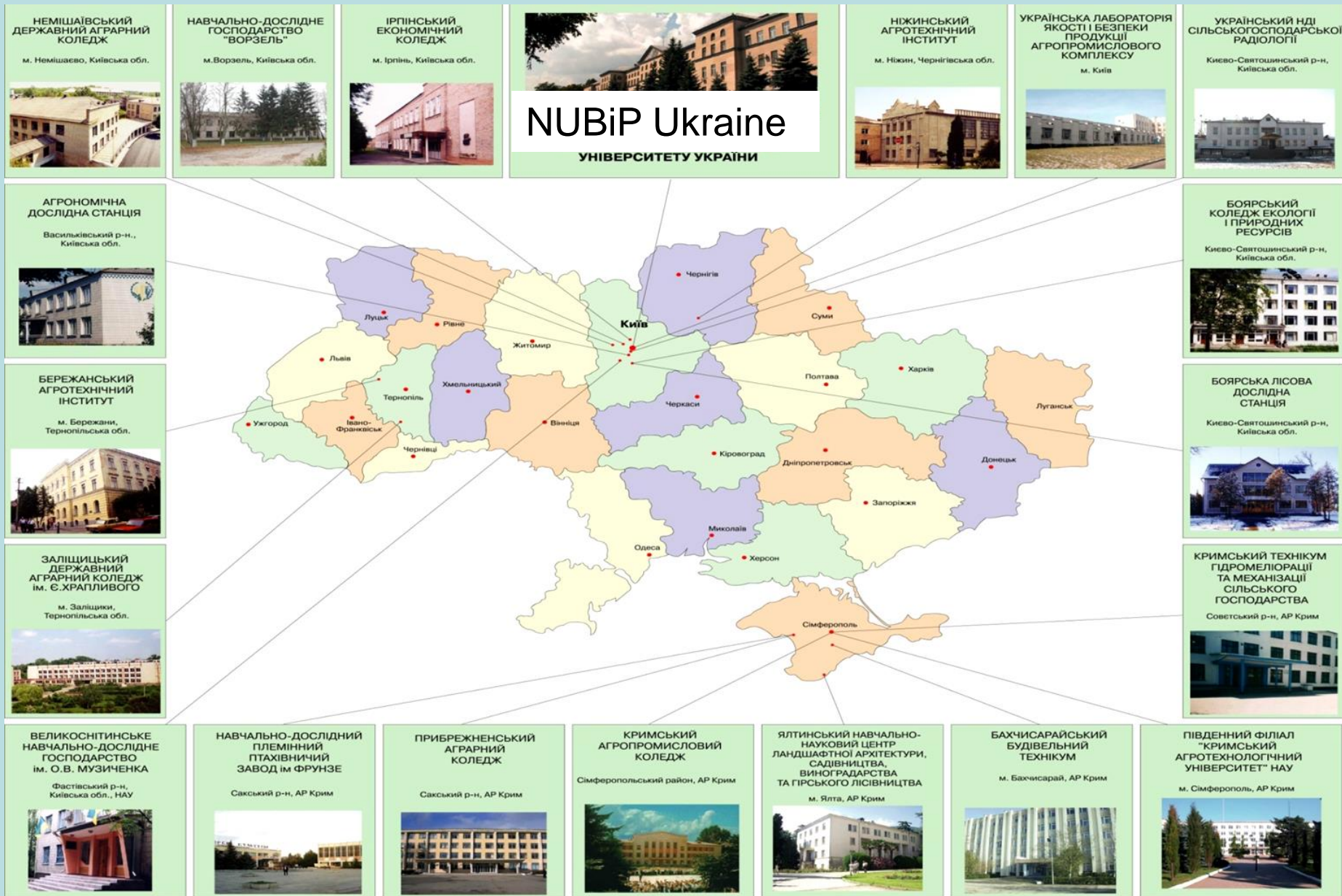


FIG. 2. GEOGRAPHY OF STRUCTURAL SUBDIVISIONS OF NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE



- During the last years according to the rating results NUBiP of Ukraine takes **1st** place among **21 Agricultural Universities of Ukraine** and is in the **Top-10** Ukrainian Universities;
- Educational activity of the University has public character **and is protected from interference** of political parties as well as religious organizations.

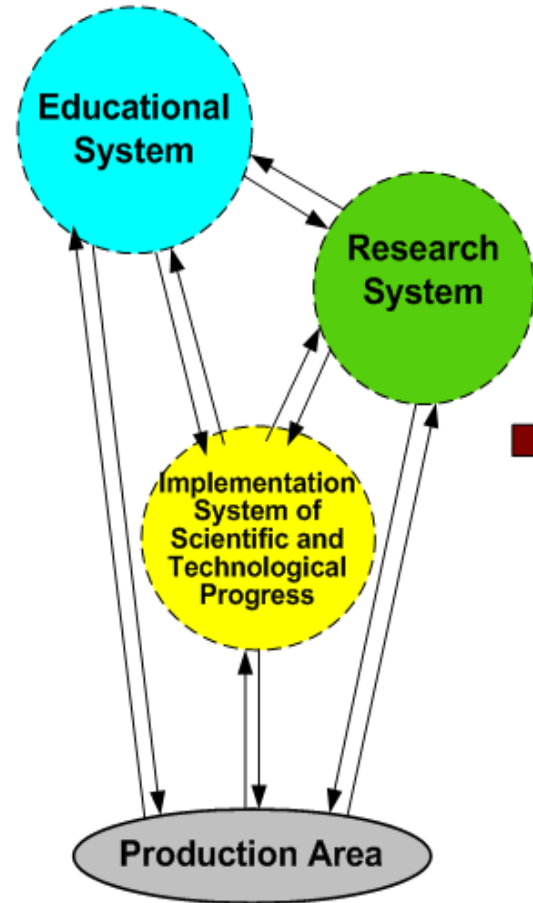


Activities and Development Strategy of NUBiP of Ukraine

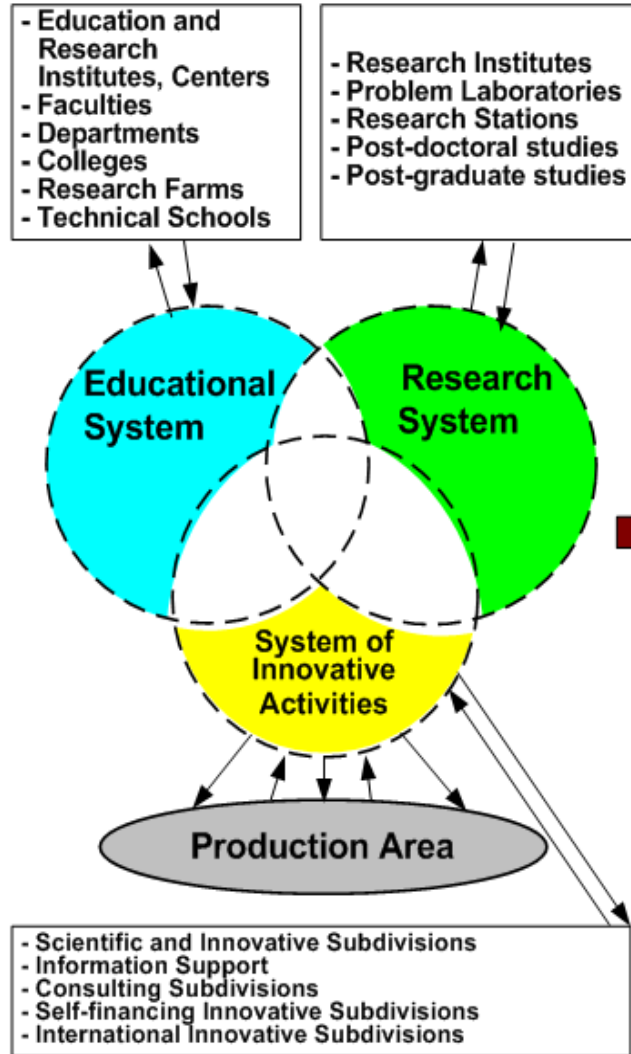
Ukrainian Agricultural Academy
(1985)

National Agrarian University
(1994)

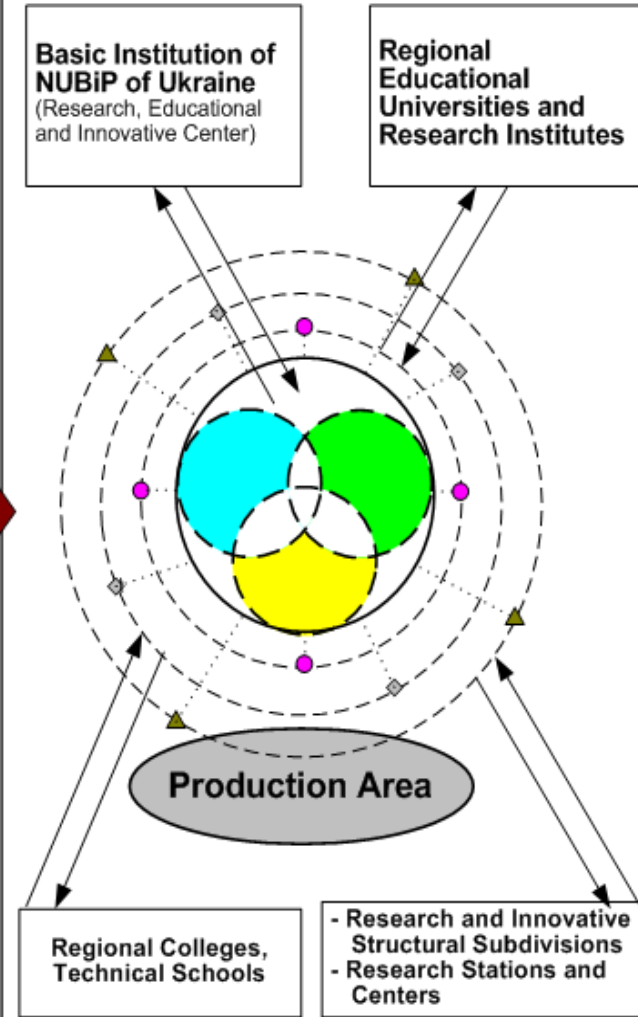
National University of Live and Environmental
Sciences of Ukraine
(2008)



Typical scheme of the University educational, scientific and service activity types interaction (by 1985)



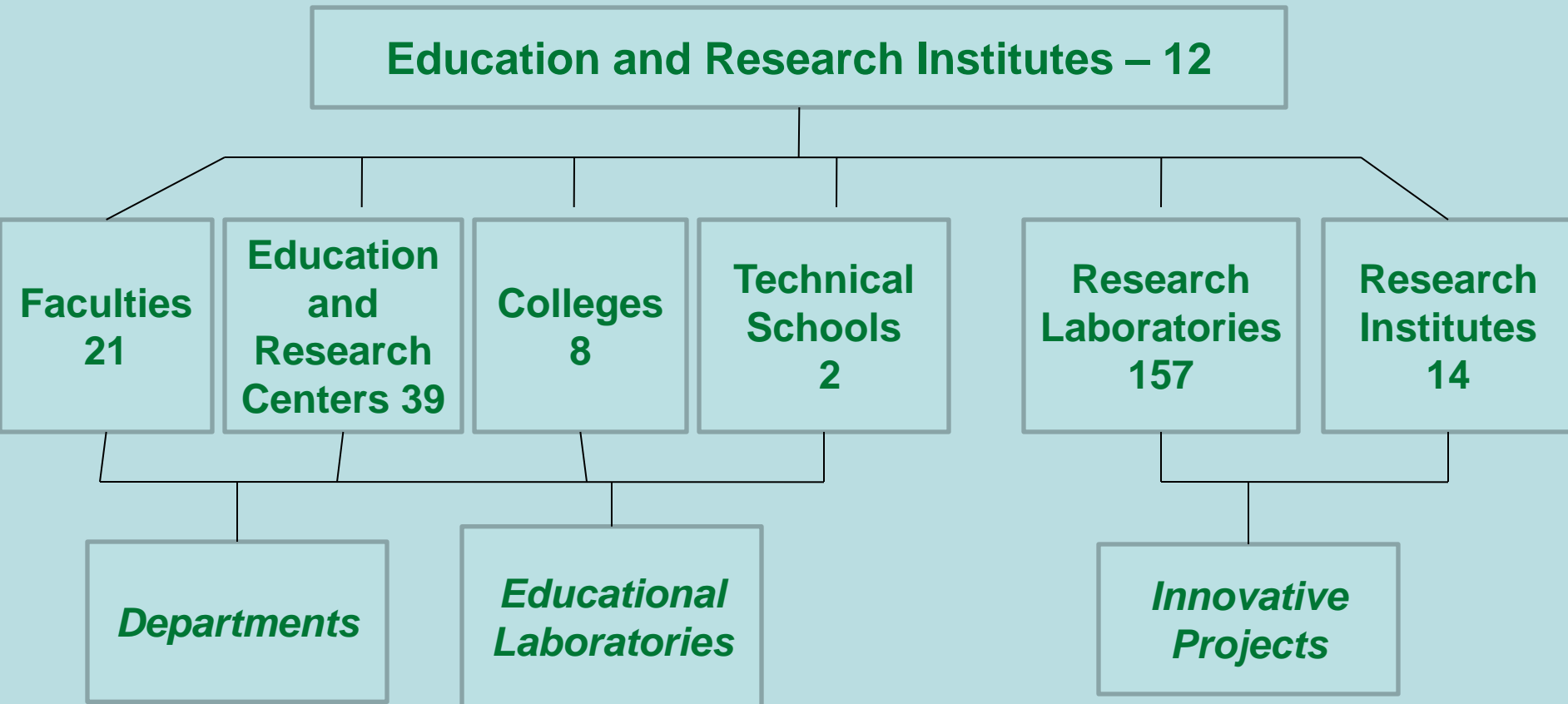
Formation of autonomous Higher Educational Establishment with integrated activity types within its structural subdivisions (by 1994)



University management system according to the principle of Educational-Scientific-Production Corporation, Concern, Technological and Scientific Park (by 2010 and for the future)



Structural Units of NUBiP of Ukraine





Education and Research Institutes of NUBiP of Ukraine:

- ERI of Natural Sciences and Liberal Arts
- Ukrainian ERI of Bioresources Quality and Life Safety
- ERI of Animal Science and Water Bioresources
- ERI of Forestry and Park Gardening
- ERI of Plant Science, Environment and Biotechnologies
- ERI of Land Resources and Law
- ERI of Veterinary Medicine, Quality and Safety of Animal Products
- ERI of Business
- Technical ERI
- ERI of Energetics and Automatics
- Ukrainian ERI of Dataware and Telecommunicational Support of Agroindustrial and Nature-Conservative Branches of Economy
- ERI of Continuing Education



Education





Nowadays there are:

- Over **39,126 students** (including Basic Institution of the University (Kyiv) - over **17 700**), namely:
- **Junior specialists** - 8,684 students in 32 specialties (in Separate Subdivisions (SS) of NUBiP of Ukraine);
- **Bachelors** - 22 520 (including SS of NUBiP of Ukraine - 15,668) for 28 majors (16 – in SS of NUBiP of Ukraine);
- **Specialists** - 3,009 (including SS of NUBiP of Ukraine - 2 230) in 27 specialties and 50 specializations (15 – in SS of NUBiP of Ukraine);
- **Masters** - 4913 (including SS of NUBiP of Ukraine - 328) in 43 specialties and over 100 majors (9 – in SA of NUBiP of Ukraine "CATU");
- **Postgraduate students** - 560 in 72 specialties;
- **Postdoctoral students** - 29 in 68 specialties.

1990

Training of Professionals of EQL "Specialist"

1. Agronomy
2. Agro-chemistry and Soil Science
3. Plant Protection
4. Zoo-Engineering
5. Veterinary Medicine
6. Economics of Enterprise
7. Accounting and Audit, Finance
8. Economic Cybernetics
9. Forestry
10. Mechanization of Agriculture
11. Electrification of Agriculture
12. Automation of Agricultural Production
13. Fruit and Vegetable Growing and Viniculture

2011

Training of Professionals of EQL "Master"



14. Technology of Production and Processing of Animal Products
15. Technology of Meat Production, Preservation and Processing
16. Technology of Fish and Marine Products Production, Preservation and Processing
17. Water Bioresources
18. Technology of Fermentative Production and Wine-making
19. Technology of Fats and Fat Substitutes
20. Quality, Standardization and Certification
21. Information Management Systems and Technologies
22. Ecology and Environment Protection
23. Ecobiotechnology and Bioenergetics
24. Selection and Genetics of Agricultural Crops
25. Finance and Credit
26. Marketing
27. Taxation
28. Management and Administration of Organizations
29. Management of Foreign-Economic Activity
30. Administrative Management
31. State Service (Public Administration)
32. Land Management and Cadastre
33. Jurisprudence
34. Social Pedagogics
35. Pedagogics of Higher School
36. Management of Educational Institutions
37. Park-Gardening
38. Woodworking Technology
39. Equipment for Forestry
40. Energetics of Agricultural Production
41. Machinery and Equipment of Agricultural Production
42. Electro-technical Systems of Power Consumption
43. Automated Management of Technological Processes
44. Traffic Organization and Control
45. Organization of Transportation

Fig. 4. RANGE OF SPECIALTIES AVAILABLE IN NUBIP OF UKRAINE (IN 20-YEAR TIME LAP)



- Basic Institution NUBiP of Ukraine
- SA "CATU" of NUBiP of Ukraine

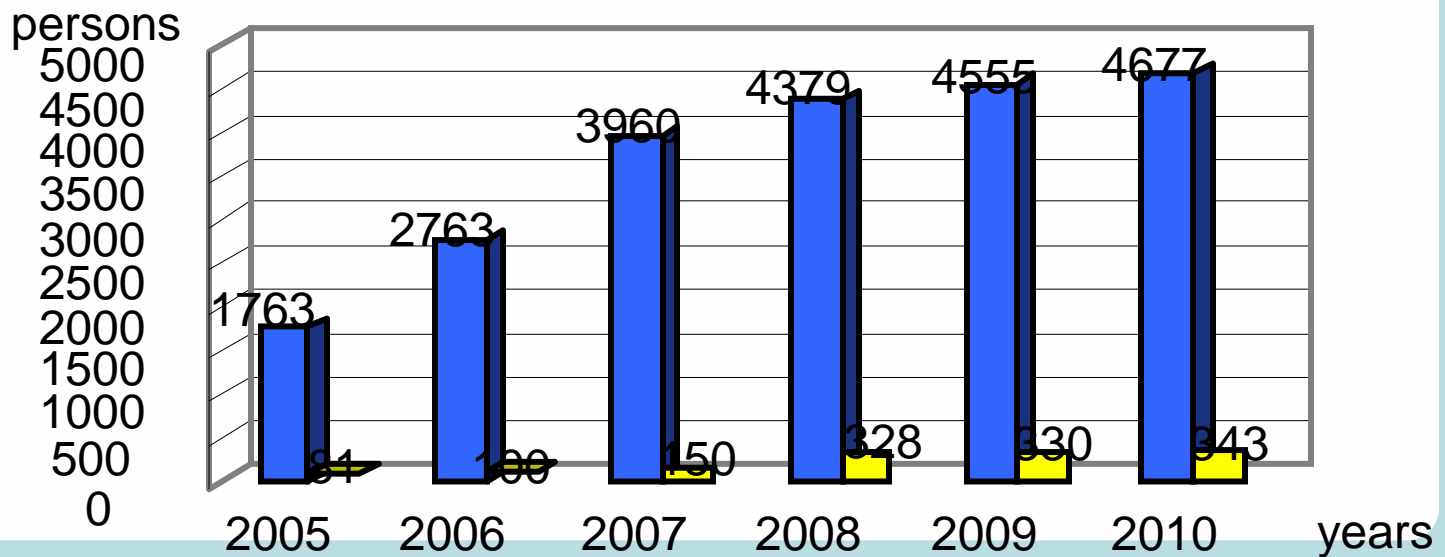


FIG. 5. THE GROWTH OF MASTER DEGREE STUDENTS' NUMBER IN NUBIP OF UKRAINE



Master Degree Study (by directions of training)

Main professional by directions within specialty		Specific Categories (by specialty)			Public Administration (by specialty)
industry-oriented (analogue of former Specialist)	research-oriented	8.000005 "Pedagogics of Higher School"	8.000001 "Quality, Standardization and Certification"	8.000007 "Administrative Management" For people with basic economic education For people with basic non-economic education	8.150001 "Public Administration"

Fig. 6. MAIN OPPORTUNITIES FOR MASTER DEGREE STUDY OFFERED BY NUBIP OF UKRAINE

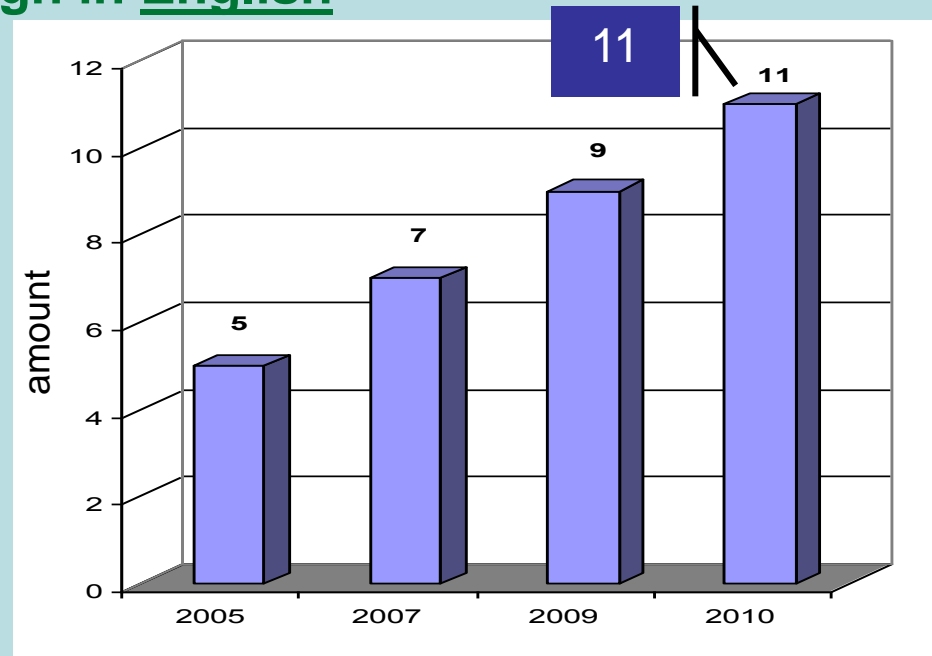


Organization of Education Process

Training of specialists in 2010-2011 in the Basic Institution

NUBiP of Ukraine has 11 programs for Bachelors and 9 – for Masters with courses tough in English

	Program	Level and years of studies
1.	Management	Bachelor's 1 - 4 Master's 1
2.	Administrative management	Master's 1 - 2
3.	Veterinary medicine	Specialist 1 - 5 Master's 1 - 2
4.	Agronomy	Bachelor's 1 - 4 Master's 1 - 2
5.	Plant protection	Bachelor's 1 - 4 Master's 1 - 2
6.	Biotechnology	Bachelor's 1 - 4 Master's 1 - 2
7.	Ecology, environment and resources management	Bachelor's 1 - 4 Master's 1 - 2
8.	Accounting and auditing	Bachelor's 1 - 2 Master's 1
9.	Finance	Bachelor's 1 - 2 Master's 1
10.	Philology (translation)	Bachelor's 1
11.	Geodesy, cartography and land management	Bachelor's 1



Years	2007	2008	2009	2010	2011
Number of faculty members with English language of instruction	62	73	85	97	105
Number of courses with English language of instruction	132	197	256	298	306



International Master's Programs with an opportunity to receive double diploma:

1. **Iowa State University**, USA: “Quality and Safety of Agricultural and Food Products and Environment”, “Bioeconomics”, “Bioenergetics”
2. **Wageningen University**, the Netherlands: “Environmental safety”, “Bioeconomics”, Biotechnology”, “Management, Economics and Consumer Studies”
3. **Humboldt University of Berlin**, Germany: “Process and Quality Management”
4. **Tokyo Agricultural University**, Japan: “International Bio-business”
5. **Weihenstephan University of Applied Sciences**, Germany: Masters of Business Administration in Agriculture (MBA)
6. **Anhalt University of Applied Sciences**, Germany: Master of Food and Agribusiness (MFA).

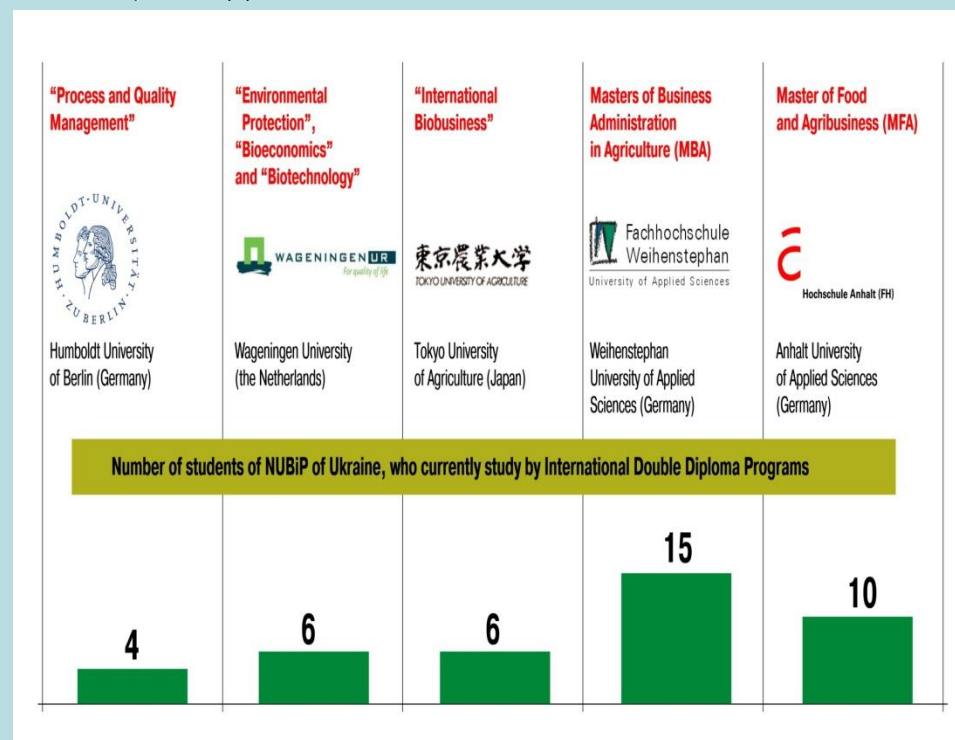


Fachhochschule
Weihenstephan



Hochschule Anhalt (FH)

University of Applied Sciences

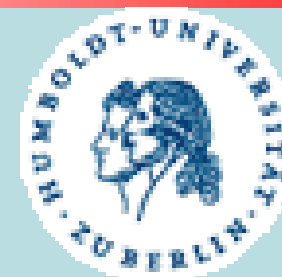




NUBiP of Ukraine signed the Memoranda of Understanding about mutual recognition of educational systems with the following Universities:

- Iowa State University (USA), 1996, 1998, 2011;
- Louisiana State University (USA), 1998, 2009;
- Humboldt University in Berlin (Germany), 2002;
- Ghent University (Belgium), 2002;
- Wageningen University (Netherlands), 2006.

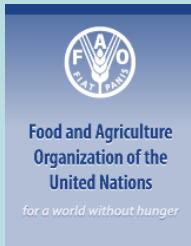
IOWA STATE UNIVERSITY



Tab. 1. INTERNATIONAL COOPERATION OF NUBIP OF UKRAINE WITH FOREIGN COUNTRIES

Studies and participation in international activities by students	150 persons / 20 countries
Participation in International practical training programs for students	700 persons / 810 countries
Scientific and pedagogical staff participated in training courses abroad	50 persons / 15 countries
Visits to foreign institutions	300 persons / 30 countries
Foreign students who currently study in NUBiP of Ukraine	60 persons / 15 countries
Professors and scientists visited NUBiP of Ukraine	400 persons / 30 countries
Cooperation within International association agreements	162 universities and organizations / 43 countries
International projects and programs for cooperation	50
International conferences, seminars, workshops	50
International exhibitions, University's scientific and pedagogical staff participated in	20

MEMBERSHIP OF NUBIP OF UKRAINE IN INTERNATIONAL ORGANIZATIONS



FAO UN

UNESCO

GCHERA

IUFRO

EAVA

FVE

WAVA

WAIVM

TPSA

NACEE

SAE International

EUROSCIENCE



- ICA: IROICA, AGRIMBA



- Horse International Federation



- The Rectors' Council of Leading Agrarian Universities of CIS Countries etc.



University preparation for International Accreditation

The main principles of the University's readiness for the international accreditation are:

- Transparency of educational process, University's mission and objectives
- International educational standards
- Improvement of education quality
- International recognition



Scientific Research





The main directions of scientific activities of NUBiP of Ukraine are the following:

- Biologization and Ecologization of Agriculture and its Sustainable Development;
- Sustainable Society Development, Ecobiotechnology and Environmental Protection;
- Quality, Biosafety, Standardization and Certification of Food and Agricultural Production and Technologies;
- Organic Agriculture;
- Economics, Marketing, Management and Biosocial Economics of Rural Areas;
- Modern Management and Finance of Agricultural Production;
- Technics, Energetics and Automatics in Agroindustrial Complex and Nature Protection Area;
- Innovative Activities and Life Quality International Standards;
- Forestry and Park Gardening;
- Phytomedicine and Veterinary Medicine;
- Information and Telecommunication Support of Agroindustrial and Nature Protection Area of Economy;
- Law and Land Resources Management.



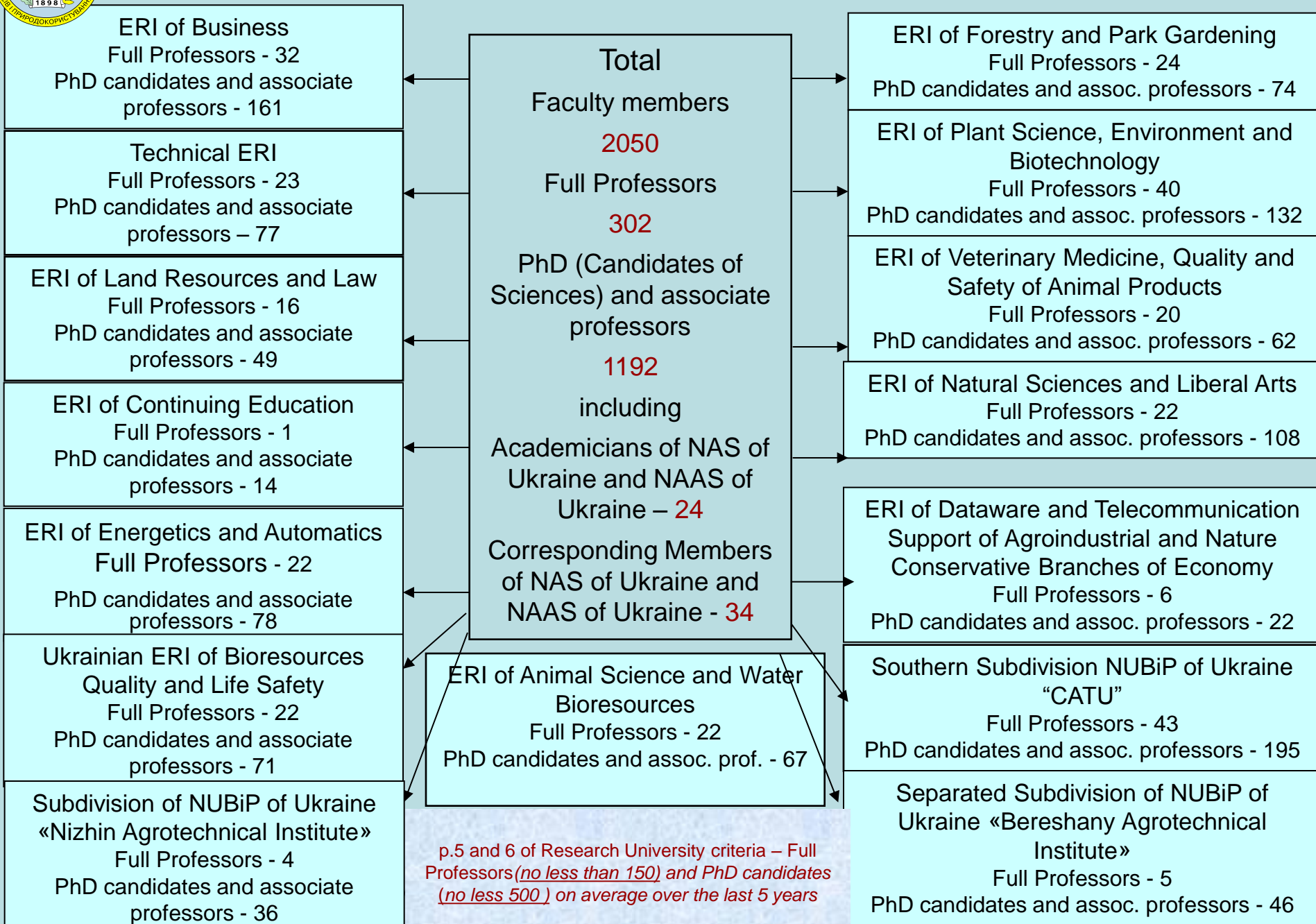
Research Institutes of NUBiP of Ukraine:

- RI of Natural Sciences and Liberal Arts
- RI of Plant Science and Sustainable Nature Management
- RI of Technology and Quality of Animal and Fishery Products
- ERI of Forestry and Decorative Horticulture
- RI of Land Use and Juridical Regulations of Property and Land Relationships
- RI of Animal Health
- RI of Economics and Management of Agroindustrial Production
- RI of Techniques and Technologies
- RI of Electrical Power System
- RI of Information Technologies in Nature Management
- Scientific and Research Project Institute of Standardization and Technologies of Ecosafe and Organic Products
- Ukrainian Laboratory of Quality and Safety of AIC Products
- Ukrainian RI of Agricultural Radiology
- RI of Seeds Science (Southern Affiliate of NUBiP of Ukraine “CATU”)
- RI of State Regulation and Advisory in the Fields of AIC and Nature Protection





Scientific Potential of NUBiP of Ukraine





Tab. 2. Key results of scientific activities in NUBiP of Ukraine, 2009-2011

Educational and Research Activities of Faculty Members	2009	2010	2011
Varieties and hybrids of agricultural plants created	7	11	5
Varieties given to State Variety Testing Services	11	5	4
Developed:			
- New technologies and technological processes	169	190	100
- New kinds of machinery, equipment, devices etc.	118	100	110
- Vaccines, serum and drugs	3	4	5
Chemically created substances	24	30	32
Introduced new developments	97	85	93
Applications to register inventions and useful models	341	263	341
Received conformation on obtaining patents	278	383	271
Received certificates and patents	285	376	240
Defended: Doctor / PhD Theses	2/82	6/87	16/78



Organic Agriculture and Food safety in Ukraine: integrated approach

soils



crops



products

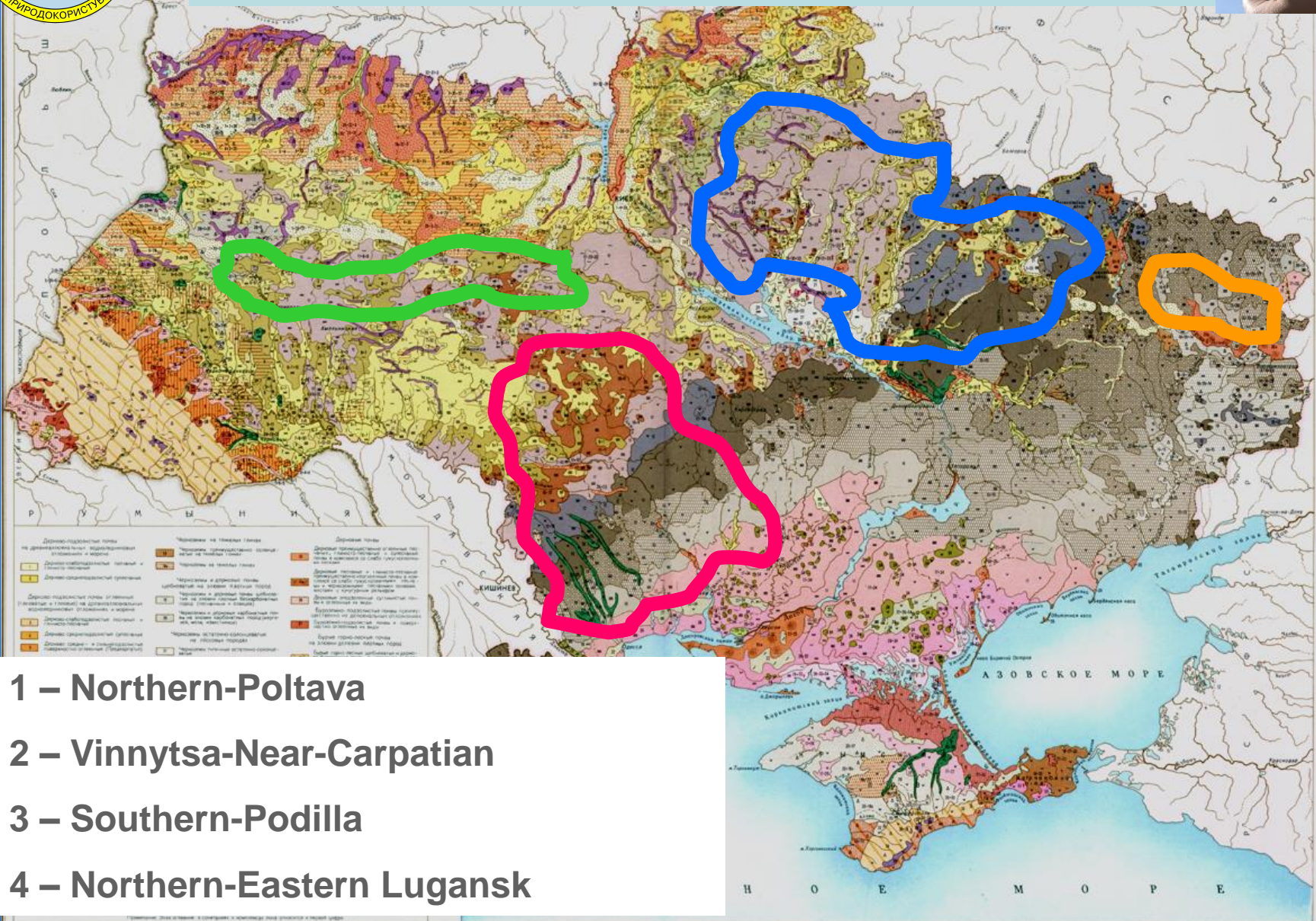


consumer





Regions of Ukraine, suitable for organic crop production



- 1 – Northern-Poltava**
- 2 – Vinnytsya-Near-Carpathian**
- 3 – Southern-Podilla**
- 4 – Northern-Eastern Lugansk**



Ukraine has very favorable conditions for ecologically safe and organic production

Broad areas of ecologically clean soils (15 mln ha)

High level of potential soil fertility

High scientific and technical potential for standardization and certification of all production levels

A concept of organic (biological) agriculture

EU's decision to purchase environmentally friendly products



Prerequisites for obtaining of ecologically safe products – ecological expertise of production chain:

- **Soil cover**
- **Technologies of crop growing**
- **Products**
- **Storage**
- **Transporting**
- **Processing**
- **Selling**



Key points of the Concept of ecologically safe production



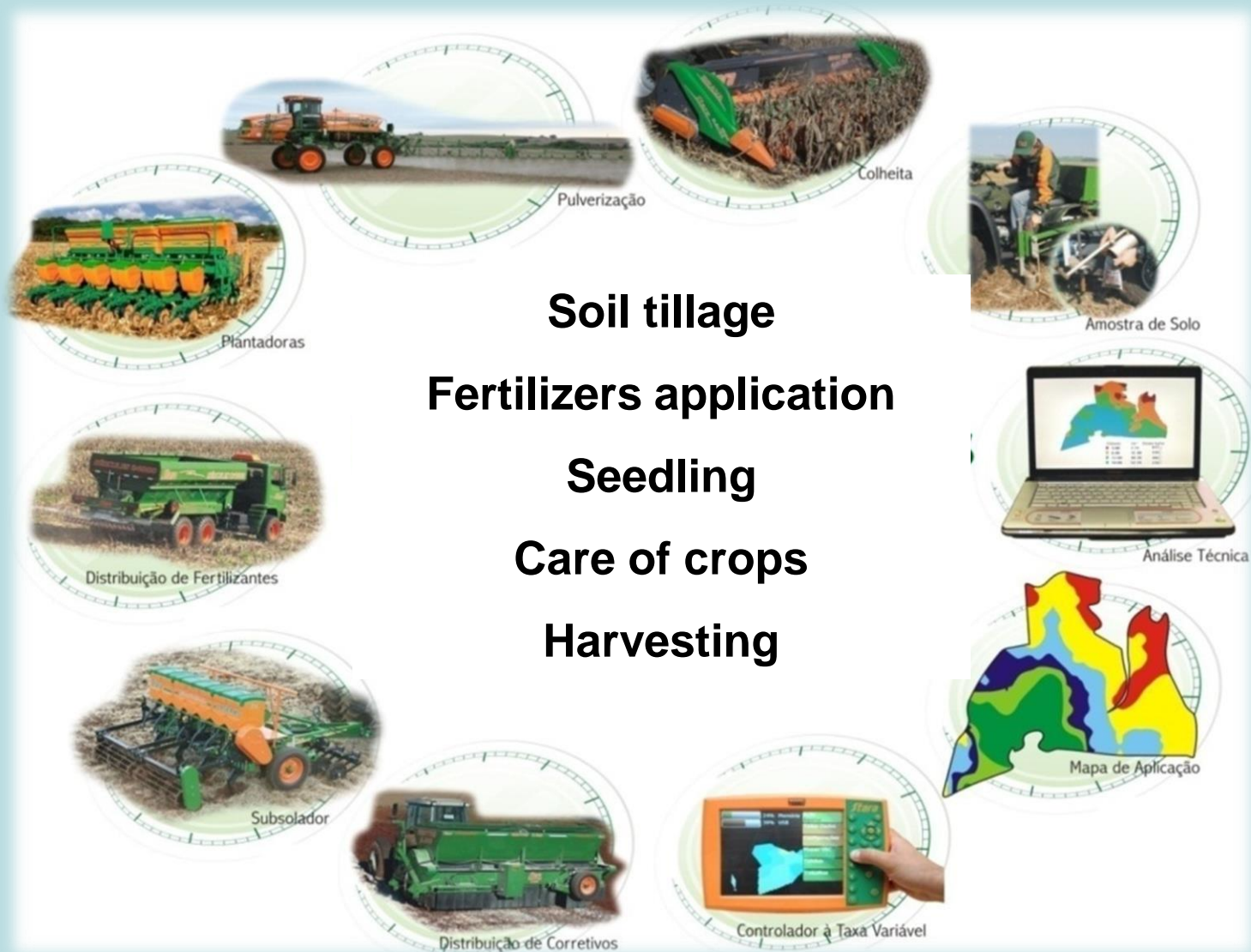
NECESSARY:

- Clean soils
- Territorial management
- Technologies of organic crops growing
- Soil fertility reproduction

FORBIDDEN:

- Synthetic pesticides
- Mineral fertilizers
- Genetically modified organisms
- Radiation irradiated organisms

Technologies of crop growing





Ukrainian Laboratory of Quality and Safety of Agricultural Products

- Ukrainian Laboratory of Quality and Safety of Agricultural Products (ULQSAP) of the NUBiP of Ukraine was created in October, 2nd, 2003
- Director – **Sergiy D. Melnychuk**
- ULQSAP is certified by All-Ukrainian State Research and Production Center for Standardization, Metrology, Certification and Protection of Consumers' Rights (Ukrmetrteststandart), which testifies **conformity to criteria of certification of the measuring laboratories of state metrological system.**
- Principles and bases of ULQSAP development concerning the requirements to management system were formed taking into account the **requirements of international standard ISO 9001:2000.**

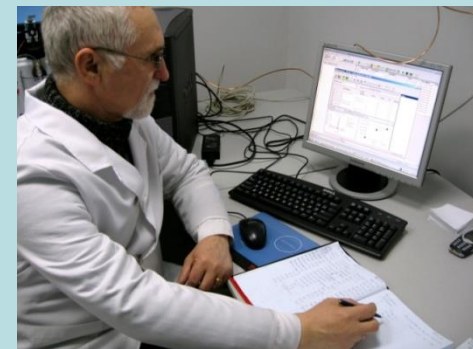




Main tasks of Ukrainian Laboratory of Agricultural Products Quality and Safety



- Creation of market conditions for the formation of safe and qualitative products
- Independent examination of agricultural products quality and safety in accordance with national and international standards
- Investigation of environmental impact and efficiency of fertilizers, pesticides, other agrochemicals, biologically active substances and additives use in agriculture, forestry
- Detection of transgenic agricultural products materials and pathogens of viral, bacterial and mycological diseases
- Development, assessment and application of genetic, molecular biological, analytical and other modern diagnostic methods of plant and animal diseases





ULQSAP



UKRAINIAN LABORATORY OF QUALITY AND SAFETY OF AGRICULTURAL PRODUCTS

www.qualtyua.in.ua

Ukrainian Laboratory of Quality and Safety of Agricultural Products (hereinafter referred to as ULQSAP) of the National University of Life and Environmental Sciences of Ukraine (NUBIP of Ukraine), (former National Agricultural University of Ukraine) was created in obedience to Order of Cabinet of Ministers of Ukraine from October, 2nd, 2003 # 584-g.

ULQSAP is certified by All-Ukrainian state research and production center for standardization, metrology, certification and protection of consumers' rights (UKrmetteststandart), which testifies conformity to criteria of certification of the measuring laboratories of state metrological system.

The quality management system of ULQSAP is developed according to requirements of DCTY ISO/IEC 17025:2005, which is identical to the international standard ISO/IEC 17025:2005.

In 2007 the National accreditation agency of Ukraine testified the competence of ULQS of AIC according to requirements of DCTY ISO/IEC 17025 by Accreditation Certificate, and in 2010 ULQSAP successfully confirmed its competence, besides having expanded the scope of accreditation.

Principles and bases of ULQSAP development concerning the requirements to management system were formed taking into account the requirements of international standard ISO 9001:2000.

The quality management system of ULQSAP in combination with system of administrative management control and system of economic maintenance forms general control system of ULQSAP.

According to the order of the Ministry of Agricultural Policy of Ukraine and the Ukrainian Academy of Agrarian Sciences from December, 29th, 2007 #966/141 NUBIP of Ukraine was given status of the enterprise (laboratory) of the genetic control – the only one in Ukraine.

News of Agriculture

- 27.09.2011 - Ukraine is prepared to export grain in large quantities to Japan
- 27.09.2011 - China is ready to invest \$ 10 billion in Ukrainian agriculture
- 27.09.2011 - State fully ensured bakery mills with grain - N. Prisyajnyuk

News of Standardization, Certification and Quality

- 27.09.2011 - Ukraine has agreed to duty-free export to the EU of 52 thousand tons of meat
- 27.09.2011 - Rules for labeling of GMO products may be toughen
- 27.09.2011 - In connection with recorded cases of cholera in Mariupol, the State Environmental Inspectorate has banned fishing in the Sea of Azov

Laboratory's News

08.08.2011 - Between 16... 21 August 2011 include JII QSAP





- **Under favorable conditions Ukraine can become a major exporter of environmentally safe products to Western Europe, to improve economic and environmental security!**

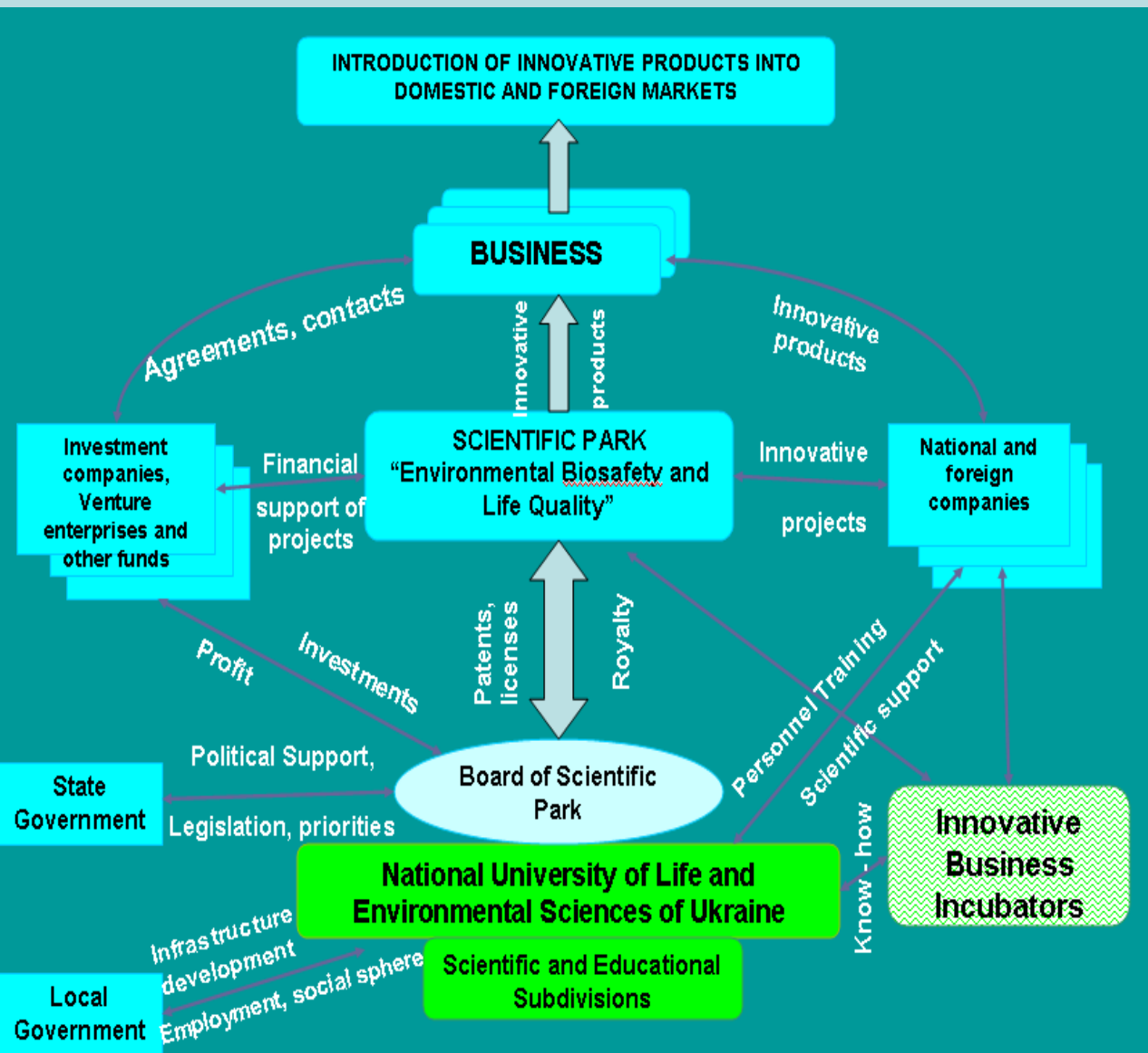


2011

- The Corporation “International Scientific Park “Environmental Biosafety and Life Quality” is being established on the basis of the NUBiP of Ukraine.
- The financial organizations which are the participants and partners of our Scientific Park have allocated significant financial funds for its functioning.



Corporation “International Scientific Park “Environmental Biosafety and Life Quality”



1. Founding documents are being prepared

2. The key objectives and development conception of Scientific Park are defined

3. Negotiations with potential partners and investors are being conducted.



"THE FARM OF XXI CENTURY"



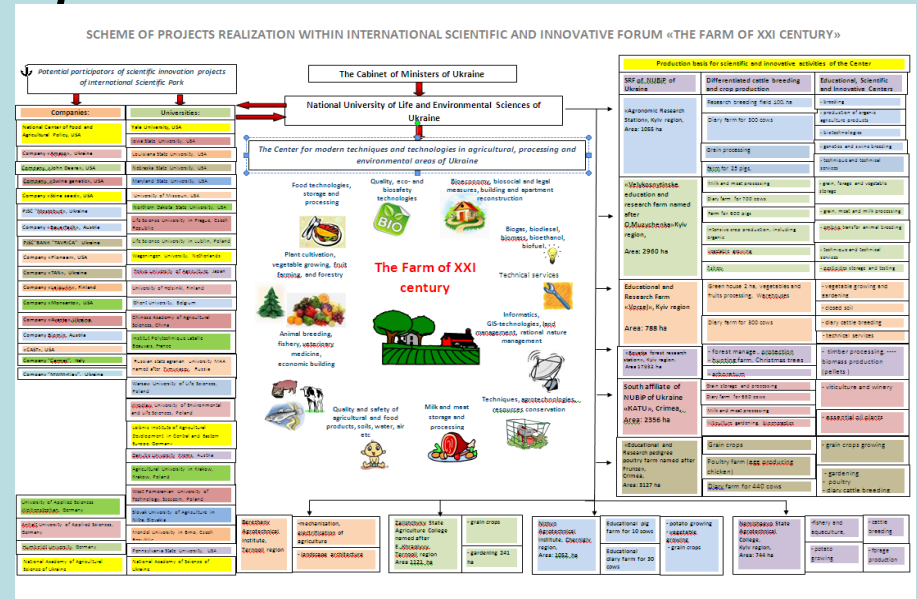


International Scientific and Innovative Forum

"THE FARM OF XXI CENTURY"

was conducted on the basis of
NUBiP of Ukraine,
 December 5-7, 2011

The key aim of the Forum: to discuss the issue of increasing Ukraine's role in world food resources enlargement by combination of public (university) and private capital owned by domestic and foreign businesses





The main ways of Forum's goals achievement are the following:

- creation on the basis of Research Farms of NUBiPU permanent International Demonstration Center for Global Scientific, Innovative and Business Achievements in Agricultural, Processing and Environmental Areas;
- implementation of joint scientific research, testing of new plant varieties, animal breeds techniques and technologies, agrochemicals, including medicines and plant protection products etc., their efficiency and safety;
- development of modern educational, research and social basis for student practical training, professional development and retraining of specialist in the area of agricultural and life sciences;
- setting up business incubators, scientific and technological parks, concerns, complexes, trade and service centers for new techniques and technology; new plant varieties and hybrids and animal breeds distribution, as well as wide implementation of new environmental management tools and remediation of contaminated soils, air and water;
- mobilization of business capital, as well as financial funds of the World Bank, FAO, UNO, EU to achieve common goals.

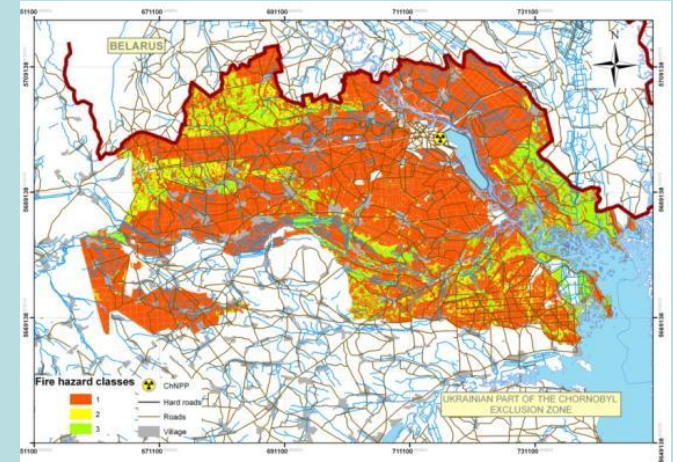


International Research and Innovative Projects that will be developed on the basis of NUBiP of Ukraine

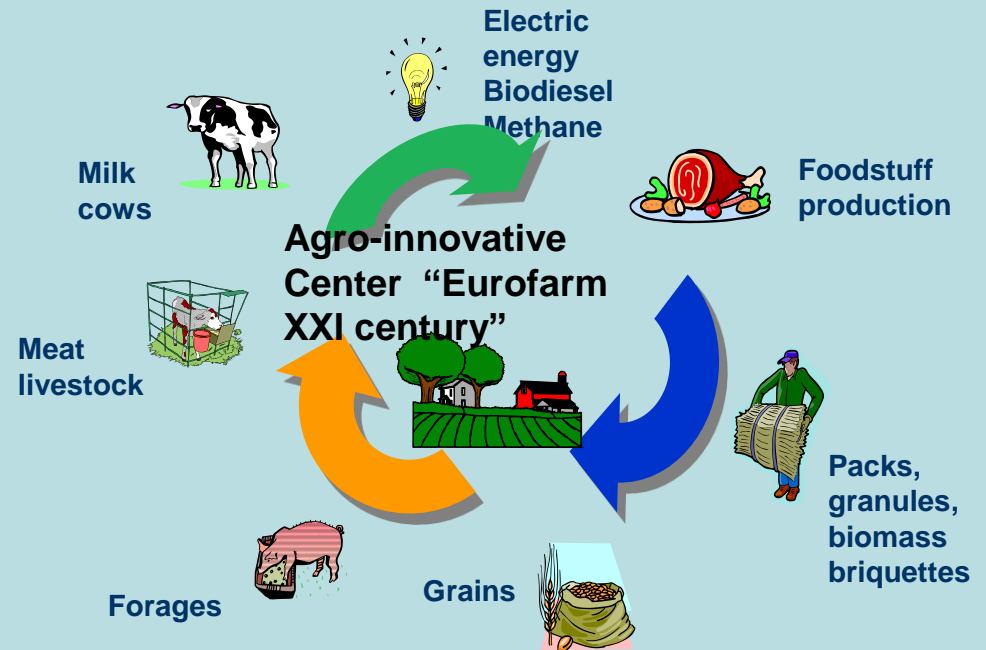




1. Reduction of Risk of Trans-boundary Migration of Radionuclide With Smoke During Forest Megafire Event in the Chernobyl Exclusion Zone



2. Agro-innovative Center “Eurofarm XXI Century”





3. Modern Ecobiotechnologies of Forestry, Wood Processing and Biofuel Production



4. “John Deere Ukraine” – NUBiP of Ukraine: present time and future



5. "The Quality and Safety of Soils, Agricultural Products: Prospects for Production of Qualitative Organic Crop Products“





6. Environmentally safe food technologies, processing and packaging of livestock and crop products



7. Development of Essential Oil Branch in Crimea peninsula

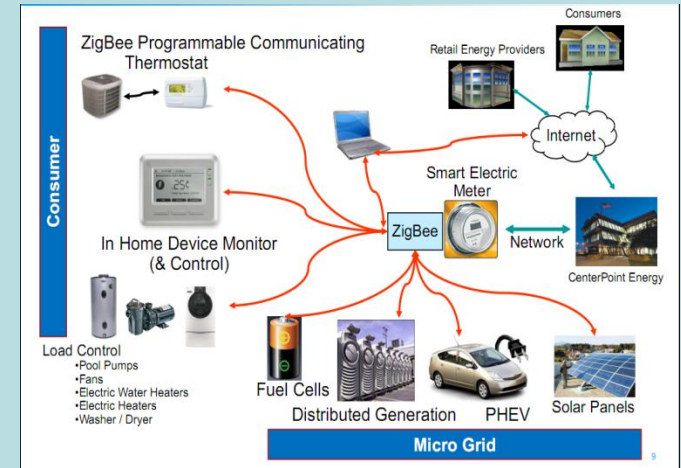


8. Support for Extension Development (e-Extension) in Ukraine with the University of Nebraska, USA





9. “SMART GRID” System - an Innovative Platform for Energy Development Based on Renewable Energy Sources



10. Molecular Diagnostics of Diseases and Biotechnologies in Livestock and Veterinary Medicine



11. Legal Support Center for Agricultural and Natural Resources' Sectors

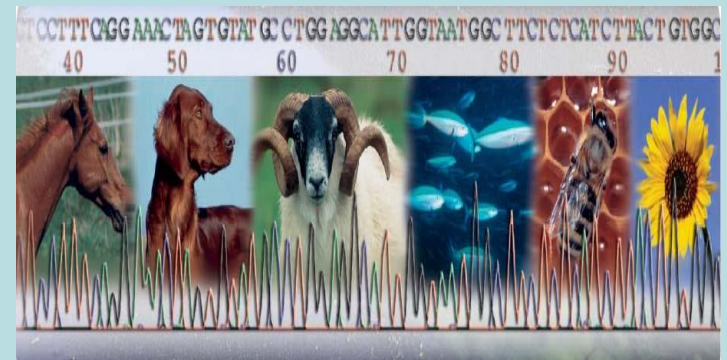




12. Creating Center for the Applied Genetics, Biotechnology and Reproduction of Animals



13. Creating a Centre for Applied Genetics, Biotechnologies and Animal Reproduction



14. Initiation of Modern Plant Breeding and Transgenes Technology Center

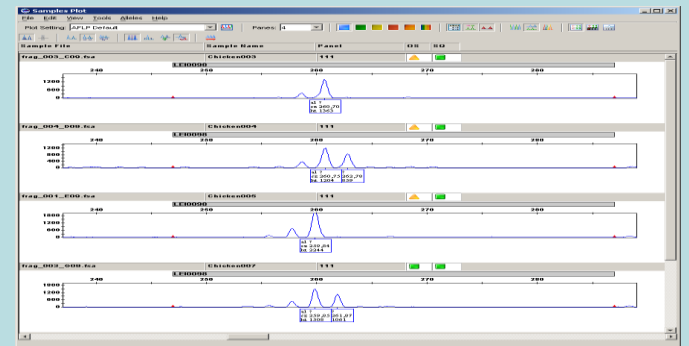
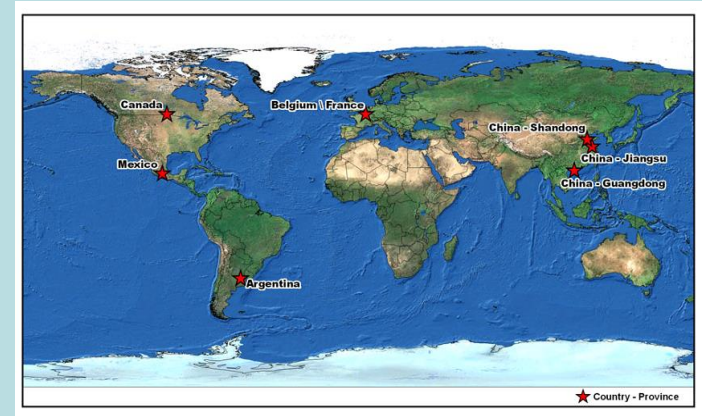




15. Satellite Data for Agriculture and Environment Monitoring

16. Organization of Modern Equestrian-Sporting Complex "GOLOSIEVO" on a Base NUBiP of Ukraine

17. Forecasting of Food and Agricultural Resources Development, Biosocial and Environmentally Safe Economics and Management in Rural Areas





NUBIP OF UKRAINE IN PICTURES (1)





NUBIP OF UKRAINE IN PICTURES (2)





NUBIP OF UKRAINE IN PICTURES (3)





**THANK YOU FOR YOUR
ATTENTION!**