General Meeting of the National Academy of Agrarian Sciences of Ukraine

On the Results of the National Academy of Agrarian Sciences of Ukraine For 2014 and the main Objectives for the Perspektyva

Report by the President of the National Academy of Agrarian Sciences of Ukraine Academician Naan Y.M. Gadzala at the meeting of the General Meeting of Nan on March 26, 2015

The past year for our country and the people of Ukraine was the most difficult since Independence, and this demanded from each of us and the Academy, in general, increased responsiveness, rapid response to the challenges and Effective use of scientific, financial and economic potential. We have fulfilled the tasks set by the President of Ukraine P.O. Poroshenko in the Strategy for Sustainable Development "Ukraine 2020", participated in activities to support our authorities - ATO participants, we did and do everything to stabilize the economic growth of our country. One of the main priorities of the Strategy for Sustainable Development Ukraine 2020 is the attraction of foreign investment and the formation of an effective model of public-private partnership, which is primarily food security and energy independence of Ukraine. Scientists of the Academy believe that the optimal model for the development of production and supply of the country's thermal energy needs through the complete replacement of natural gas with alternative sources - biogas, biodiesel and plant solid fuels. During 2014, the National Academy of Sciences held a triennial Presidium of the Academy. In addition to discussing the main results, the effectiveness of using funds and tasks for the future, the Meeting approved the "Priority Tasks of the Agrarian Science of Ukraine for 2016-2020" and identified a new procedure for the formation of the subjects of scientific research of NAAS in 2016-2020 by the General Meeting A new composition of the Presidium of the Academy was elected. At the initiative of the Presidium of the Academy in 2014, 17 proposals were developed regarding the development of agroindustrial complexes, 16 scientific and methodological and practical recommendations and 3 proposals were issued, amendments to 13 laws of Ukraine were drafted and draft state normative acts on stimulation Development and harmonization of standards and normative legal documents with European requirements. The NAAS Presidium has adopted a number of management decisions. In particular, the Coordination Council under the President of NAAS was created, the certification of employees of scientific institutions and employees of the staff of the Presidium of NAAS was conducted, and the personnel reserve of the heads of the National Institutes of Science for 2015 was formed. In 2014, 16 regulating documents on the issues of formation and implementation Subjects of scientific research, improvement of the personnel management system and management of objects of the property complex. In 2014, 23 sessions of the Presidium of NAAS took place, in which 294 issues were considered, and 12 meetings of the Bureau of the Presidium of NAAS, where 12 issues were considered. In early 2014, 5 works were announced - the winners of the contest "For outstanding achievements in agrarian science" held in 2013. The NAAN Presidium has been awarded 6 awards for the best scientific report of the young scientist of NAAS on fundamental and applied sciences in order to support talented scientific youth. - sequences ". Academic institutions of the Academy (48) performed 1683 assignments from 44 research programs (IPAs) for 2012-2015, of which 830 were fundamental and 853 were of a complex nature. 4414 scientists took part in the research, among them 336 doctors and 1627 candidates of sciences. Completed 22 applied projects.

Scientific institutions of the Department of Agriculture, Melioration and Mechanization of NAAS performed tasks from 11 scientific programs on problems of soil protection, agriculture, melioration, mechanization, conservation works, etc. In the framework of these programs, the information and information provision of rational use of soil cover and conservation of Ukrainian soil resources, enhancement of their agro-investment attractiveness has been improved. The inventory was made and the register "Stationary field experiments of Ukraine" was made. An adaptive landscape system of agriculture has been developed, which provides an increase in the productivity of 1 ha of arable land by 25%. Scientists carried out modeling of ecological risks of agricultural production, in particular through the use of pesticide complexes in agrotechnologies. An extremely important research is the assessment of greenhouse gas emissions. The criticality of ecosystems

of radioactive contaminated regions of Ukrainian Polissya is determined. According to the results of the research it was established that now the share of the territory of Ukraine with excessive and sufficient levels of humidification compared with 90 years of the last century has decreased by 16%, and the share of the territory with insufficient humidification, by contrast, has increased by 13%. Due to the increasing dryness of the climate in the southern region of the country, the probability of dry years has increased to 50-80%. Scientists have worked out the "Concept of Irrigation Development in the Southern Region of Ukraine". It is planned to restore irrigation on an area of 635 thousand hectares and to increase food production in excess of 10 billion UAH annually. A Ukrainian model of organic land-production is created, the market capacity of which is estimated at 41 billion UAH. According to the direction of bio-logistics of agriculture, methods of quality management of entomological products have been developed. Scientists of NSC "IMESG" developed a strategy and conceptual model of an adaptive system of maintenance and repair of mobile agricultural machinery, which provides an opportunity to achieve the maximum number of technical readiness in the seasonal periods of mechanized cultivation processes. In the reporting year, 14 scientific institutions of the Plant Production Department have been working on the implementation of tasks from 16 research programs. According to the results of fundamental researches by scientists of the Selection-Genetic Institute - National Center for Semenology and Class Studies, a method for determining the cold resistance and drought tolerance of maize has been developed and tested for the weather conditions optimized for the southern region of Ukraine. New directions for the selection of varieties of wheat-wax, wheat varieties with high nutritional value of grain and white wheat of the confectionery direction of use of grain, as well as varieties of lobster barley of the food direction of grain use were started. Scientists of the Institute of Vegetation named after V.Ya. Yuriev NAAN created lines of wheat with expanded hereditary variability due to remote hybridization. Establishments of the System of Genetic Resources of Plants of Ukraine conducted a scientific search and attracted 3,100 new samples of the genetic fund of agricultural crops for collections. Formed and registered 26 collections of samples of the gene pool of plants of state importance, and 208 valuable samples. The research on the selection of grain cultures was conducted in 10 scientific institutions, 186 varieties were transmitted to the State Variety Test. Selection of legume varieties is carried out in 9 research institutions. Performers of the "Oil Cultures" program have created and transferred to the State variety-planting of 9 new sunflower hybrids and 10 lines of parent components of hybrids. A fundamentally new inbound material for sunflower breeding has been created and evaluated. The co-operators of the IPA "Fodder Resources" created 7 new varieties of fodder crops and 6 varieties of soybeans. It should be noted that 75% of the crops of this strategically important crop in Ukraine are sown with domestic varieties and hybrids. In 2014, scientists of the Institute of Horticulture of NAAS to the State Register of Plant Varieties, suitable for distribution in Ukraine, have brought 2 varieties of cherries and apricot varieties. Patents for 2 varieties of strawberries - Amber and Atlantida have been received. For the mechanization of technological operations in gardening, a complex of machines has been developed that will increase the level of mechanization to 30-40%, and the productivity of the machine - in 1,5-2 times.

The scientists of the Institute of Vegetable and Nutrition Institute of NAAS in the reported year developed 12 non-traditional selection methods. They created and transferred to the State variety test of 7 varieties, 2 hybrids of vegetable and infrequent vegetable plants and 4 varieties of edible fungi. According to the results of the research, the National Academy of Agricultural Sciences Institute of Karakultura was transferred to the state testing of 6 varieties of potatoes of different groups of matured with valuable economic characteristics. In studies with sugar beet, the method of obtaining micronutrients in culture in vitro was developed. In the conditions of artificial nutrient media, natural clones of wild beet species are isolated. The method of plant multiplication of miscanthus is improved and patented. It is proved that the technology of growing high-yield energy crops on dehydrated organic-genetic soils provides annually the receipt of 25-29 t / ha of absolutely dry mass for recycling on solid fuel and obtaining a conditionally pure profit from 1 hectare 10-11 thousand UAH. In the field of livestock breeding, methods have been developed for correction of reproductive function of cows, a locally automated system for monitoring and controlling the reproduction of the herd. The development of national biotechnological methods and means for the organization of reproduction of all kinds of animals and correction of deviations of reproductive function of females has been completed. The basic parameters of the structure of gene pool micro-populations of agricultural animals for preservation of their hereditary manifolds are determined and data are updated in the European information system of biodiversity

of farm animals. The scientific institutions of the Zaporizhzhia Branch of the National Academy of Sciences have begun the implementation of a pilot project to create a modern centralized information and selection system in animal husbandry of Ukraine, since the available does not respond to international standards and practically does not work in full complexity. The proposed structure of the tribal service involves the formation of a centralized national information base for the identification, registration, production and production of animals, and the keeping of state books of breeding animals as the basis for assessing their genetic value. Scientists of the Institute of Fisheries of NAAAN first received the offspring from Danubian salmon producers for the first time in the aquaculture of Ukraine in indo-industrial conditions, and recommendations were made for the artificial reproduction of the American navy in early spawning terms. Scientists of the Academy in the field of veterinary medicine have developed systems for protection against particularly dangerous and endangered infections. A number of highly effective domestic vaccines, capable of replacing imported analogues, have been developed, and technical regulations for their manufacture have been developed. For the first time, the International Organization for Standardization certified the Scientific Research Training Center for Animal Diseases Diagnostics of the Institute of Veterinary Medicine of the National Academy of Sciences according to ISO requirements. The scientists of the Academy in the field of economics and food developed a mechanism of state-private partnership and a contractual form of relations in the agro-industrial production. The scientific approaches to the formation of the infrastructure of market circulation of agricultural land, which should provide for the organization and holding of land trades, monitoring of market turning of land plots and prices for which their sale is carried out, is substantiated. In order to transfer and commercialize competitive business innovations, a depository will be developed, based on which will be the basis with the module of preliminary ranking and document circulation of securities, in particular, security documents for objects of intellectual property. According to research results, scientists of the Institute of Food Resources of NAAS have created 21 prescription mixtures of meat preserved food products for children from 7 months. Technological regimes for obtaining low-and lactose dairy products for special and dietary nutrition have been worked out. Scientists of the Academy in 2014 participated in the elaboration of 19 draft laws, the post of the Cabinet of Ministers and presidential decrees, in particular the draft Law of Ukraine "On the peculiarities of the legal regime of land of enterprises, institutions and organizations of the National Academy of Sciences of Ukraine and agricultural research institutions and educational institutions Establishments ". Considerable attention is paid to the development of the Concept of the State Target Program for the Development of Rural Territories for the period up to 2020; Concepts of development of agricultural land use of rural territories; Proposals on measures to adapt the domestic legislation of the oil and fat industry to European norms.

The scientific approaches to the creation and functioning of the Scientific Park as a corporate association on the principles of state-private partnership, the cluster mechanism of project integration and implementation of innovational and investment business projects in the agrarian sector are developed. 658 scientific developments were implemented in 593 agroformations. According to the Law of Ukraine "On the State Budget of Ukraine for 2014" (with amendments), the Academy approved budget allocations for a general fund in the amount of UAH 437.2 million, which is 50.4% of the need. Actual financing of the general fund was 100% of the planned volume of 2014 It is important to note that the enterprises and organizations of NAAS in 2014 paid 413.7 million UAH of taxes and fees. In the reporting year, 339 applications for obtaining security documents for objects of industrial property rights were submitted to NAAS scientific institutions and 446 security documents were filed earlier. A new variety and a hybrid were transmitted for testing 101 varieties, 227 security documents were received. Of the concluded agreements on the use of intellectual property rights, the scientific institutions of the National Academy of Sciences received 22.6 million USD for 1908 license agreements and 51.3 million UAH for 4151 enterprises. Institutions of the Academy in 2014 were given 202 titles of books, of which 197 - in Ukraine. The total volume prepared by the State Publishing House "Agrarnaya Nauka" for printing and published book products and periodicals for 2014 is 591.5 oblast-type. The arch In particular, 25 titles of scientific books, 12 issues of the journal "Bulletin of Agrarian Science", 3 - the journal of English-language publications ("Agricultural Science and Practice"), 4 - the bulletin "Agrarian Science for Production", 4 original issues of the magazine "Agroindustrial Complex of Ukraine" » The total amount prepared by the National Agricultural Agricultural Library for publishing and publishing of book products and periodicals for 2014 is 556.1 oblast-type. The arch (A total of 38 names, of which 28 are book editions). During the year, with the participation of scientists on the basis of scientific institutions held 350 exercises, 121

events "Field Day", 1804 seminars and other events. The Academy has a strong scientific and cadre potential: about 4.5 thousand scientific workers, of which 336 doctors and 1627 cadets of sciences. In total, 830 graduate students (out of which 403 - with a break in production) were trained in 2014, out of 52 specialties and 34 doctors from 18 specialties. In 2014, 237 people were enrolled in the post-graduate course of scientific institutions of the Academy, in particular, in full-time study form - 135, in the doctoral program - 13 persons. Postgraduate and doctoral students' graduates were 228 and 10, respectively. 123 postgraduate students graduated from the post-graduate studies. Of graduates of the postgraduate study, 80.5% are employed at the Academy institutions. In the 21 scientific institutions of the Academy there were 24 specialized academic councils, where 151 candidate and 19 doctoral dissertations were accepted for consideration. An important direction of the Academy's work is international activity and the chosen European style of cooperation. Thus, during the year 37 new deals were concluded with the total value of UAH 7.5 million and prolonged - 198, of which 127 - creative, and 63 - costing more than 5 million UAH; 8 agreements with the payment of royalties - more than 5 million UAH. 16 grants with financial support of over 23 million UAH were executed; Partnership is proposed by 53 countries of Europe and the world. For participation in international conferences, exhibitions, seminars and forums, 201 foreign missions, internships in international scientific centers and organizations were conducted by 27 scientists of the NAAS network. The institution of the Academy was attended by 168 delegations of scientists from 53 countries of the world with a total of 1237 people. On the base of NSC "Institute of Soil Science and Agrochemistry named after O.N. Sokolovsky, an investment project for the creation of a Ukrainian-Chinese analytical laboratory was formed. Within the framework of public-private partnership, the National Academy of Agrarian Sciences of Ukraine and the American companies Agrarian Valley and Bi & Double U combined efforts to develop a program of measures for the qualitative and effective promotion of the transition of Ukraine to renewable energy sources from Attracting US investments in the amount of about 40 million dollars. USA. The latter makes it possible to effectively activate and phase-out the National Natural Gas Replacement Program through its own production of institutes of the Academy of Quality Planting Material of Bioenergy Cultures and a set of technical means. The realization of such a project is not only a program for the Academy, but also a national innovation program in which the role of scientists is key. Leading foreign scholars and entrepreneurs co-ordinate this project with Ukrainian academics and academics: R. Robertson (Professor at Harvard University), Dr. G. Shterenberg, P. Wilson from the University of Bentley, Boston (USA), Dr. K. Holzinger (Austria), Dr. V. Ros (Luxembourg) and the leadership of the Kharkov plant "MAST-IPRA".

Today, memoranda and co-operation agreements with organizations in the USA, EU countries (Germany, the Czech Republic, Poland), with the Chinese academies of sciences in the provinces of Heiludzian and Chenzyuan have been signed, which allow domestic native speakers to actively work in many projects already From 2015. Academic institutions include more than 70 leading European and international international organizations, academies, centers, societies, associations and others. International cooperation has been established with the academies of Lithuania, Belarus, Moldova, the Czech Republic, Hungary, Georgia, Vietnam, with 8 academies of agricultural profile of China. The Memorandum of Understanding on Agricultural Research was signed with the world's most powerful agricultural companies: Monsanto, Pioneer, Syngenta, seed company No. 1 in Europe, and No. 4 in the world - Limagrain. A memorandum was signed with the Association of Farmers and Private Landowners of Ukraine, a memorandum is being prepared with the Union of Heroes of the Agroindustrial Complex of Ukraine and the Agrarian Union. During the year NAAN scientific institutions cooperated fruitfully with 28 institutes of the National Academy of Sciences of Ukraine, 4 with the agencies of the Ministry of Agrarian Policy and Food and 16 with other agencies and agencies. At scientific institutes NAAN functioned 124 chairs, joint with higher educational institutions of Ukraine III-IV levels of accreditation, where in 2014 more than 4 thousand students studied. In the work of the joint chairs functioning on the basis of 25 institutes of NAAS and created by 70 higher educational institutions, participated 666 scientific and pedagogical workers, among them 488 doctors and candidates of sciences, in particular, 264 nautical workers of institutions NAAS, among them - 205 doctors and candidates of sciences. Effective work of the experimental base is an important link on the way of approbation of scientific research. The Academy currently employs 152 experimental farms. In their land use there are 385.4 thousand hectares of agricultural land, of which arable land is 340.6 thousand hectares. The result of the economic and financial activity of state enterprises of research enterprises in general on the network of the Academy in 2014 is profitable, the amount

of profit is 72.3 million UAH. The most profitable are state-owned enterprises: Askaniiske - UAH 5.9 million; The Pioneer Institute of Irrigated Agriculture - 5,1; Experimental farm of the Institute of rice - 4 thousand UAH and more. In the enterprises of the Academy, 42,300 tons were produced for the purpose of implementing the secondary and basic seed of winter crops; Certified seed - 17,5 thousand tons; 11 thousand tons of barley and 6,4 thousand tons of barley have been prepared for the implementation of dairy and basic seeds of spring cereals and leguminous plants (without corn). At the same time, the work on advertising and directions of sales of produced seeds is required for radical changes. In a number of DPDH, new scientifically based technologies of production were introduced, resulting in milk hopes for cows on the farms of the Academy averaging 4947 kg per year, which is 318 kg more than the average for farms in Ukraine. Efficiently worked and achieved high productivity indicators for cow experimental farms: Mironovsky Institute of wheat - 8274 kg, Askaniiske Institute of Irrigation Agriculture - 7293 kg and others. During 2014, 13 state-owned enterprises of research facilities overcame the 6,000th milestone. At the same time, the work of a number of DPDGs is ineffective because of the lack of close cooperation with in-house institutions, which has become the subject of criticism from the public, politicians and executive authorities. However, even under such difficult conditions, the experimental base remains an effective testing ground for scientific production of academics, the creation of which in the near future should be brought into line with the program documents of the Government and the President of Ukraine with the aim of more effective scientific and methodological support of the industry in terms of economic and energy Crises of the present. Special attention should be paid to the safety of life and health of a person, which is impossible without the protection of socially vulnerable groups of population, as well as the safe state of the environment and access to quality drinking water, safe food products. It is necessary to emphasize the main directions of the Academy's work in perspective, which are envisaged in the Program of the President of Ukraine "Strategy for Sustainable Development" Ukraine 2020 ", the Government Action Program and the provisions of the Coalition Agreement. The main vector of development is the conduct of structural reforms and, consequently, the improvement of the living standards of compatriots. In this context, it should be noted that agrarian science requires radical changes.

The Academy has developed and approved the Model of scientific and organizational transformations and innovation and investment development, which includes: approving the conceptual principles of the reformation of agrarian science on an innovative basis, which determine the conditions for the real transformations and make their imitation impossible, form the basis for the subsequent Innovation and investment development; Carrying out structural transformations of the scientific-organizational system with the distribution of scientific institutions in the budget and state-public sector (sectoral and regional), the consolidation of land-property complexes by them, in view of the tasks of science and their ability to effectively manage; Creation of the Scientific Park on the basis of NASA's regional scientific and innovation centers for the transfer of science-intensive technologies and innovation-investment projects; The formation of clusters for the joint production of seed, tribal and other high-tech resources, cultivation, processing and implementation of science-intensive and commodity agricultural products, food and biological resources. Primary tasks for the implementation of the Model: to complete the optimization of the network of native institutions and their experimental production base taking into account their scientific potential, financial condition and prospects for further development (such work in neighboring Poland was conducted in 1996); To form national and branch scientific and methodological centers on the basis of scientific institutions and research enterprises in agriculture, plant growing, animal husbandry, self-supporting selection and technological complexes for the production of seed, tribal and other knowledge-based resources; To reform the regional scientific and innovation centers with a network of regional scientific and production complexes to provide testing in the regions of Ukraine of scientific and innovative products of NAAS in the system of Science Park and production clusters; To attract investment funds through the mechanism of the Scientific park to create industrial complexes for processing seeds, machinery and tractor park, processing, storage and transportation of agricultural products. Land consolidation by industry and regional research and production complexes should be accompanied by program-targeted competitive conditions for the use of the experimental production base. An obligatory condition for the institution, which is subordinated to the experimental farm, must be an obligation to place at these areas of science-intensive production in the amount of at least 25% of the total production. At least 10% of the volume of sales of production should be deducted for financing science, in general, not less than 1 -2 thousand UAH per 1 hectare. Realization of the Model will allow: to double the funding of science

(from 350 to 730 million USD) due to the increase of extra-budgetary funds from the self-supporting activity of scientific-industrial complexes; Restore economic capacity, restructure and repay debt obligations, eliminate social tensions and create conditions for further development of the experimental and production base of agrarian science; To concentrate the innovative potential of science, high-tech production and trans-ferro-technological infrastructure on ensuring the competitiveness of the agroindustrial complex, the development of industries and regions of agrarian production on an innovative highly profitable basis. The present and realities of the time require the scientists to bring even greater energy and energy to the benefit of Ukraine's development. Consequently, despite the difficult military situation in Ukraine, which has affected the budget financing of all parts of society, particularly agricultural science, it is necessary to unite efforts for the successful and timely completion of the tasks of NAAS research programs for 2011-2012. And the realization of scientific researches within the limits of the priorities set forth by us for 2016-2020 years.

Resolution of the General Meeting of the National Academy of Agrarian Sciences of Ukraine, Kyiv, March 26, 2015
On the results of the activities of the National Academy of Agrarian Sciences of Ukraine for 2014 and the main tasks for the future

After hearing and discussing the report of the President of the Academy Academician NAAN Y.M. The NAAS General Assembly notes that the Academy's research institutions in 2014 carried out 1683 assignments from 44 research programs, of which 853 were fundamental and 830 applied. In 2014, the scientific institutions of the National Academy of Sciences have submitted 337 applications for the receipt of protective documents for industrial property rights objects and received 451 security documents, taking into account applications submitted in previous years. The most effective work in this direction was the Institute of Water Problems and Melioration of the National Academy of Sciences, whose scientists submitted 22 applications and received 31 patents; National Scientific Center "Institute of Mechanization and Electrification of Agriculture" - 24 applications and 10 patents; Institute of Veterinary Medicine of NAAS - 17 applications and 13 patents. Scientific institutions of the National Academy of Sciences have transmitted for the variety testing in 2014 samples of seeding of 101 new varieties and hybrids and received 227 security documents for previously edited materials. The most effective in the lecturing work for the reporting year were: the State Institution of the Institute of Agriculture of the steppe zone NAAN, whose breeders received 30 applications and received 75 security documents; Selection-genetic institute - National Center of Seed and Selection Studies - 17 applications and 23 security documents; Institute of Plant Science named after V. Ya. Yuryev NAAS - 2 applications and 42 security documents. In 1908, licensing agreements for the use of intellectual property objects by scientific institutions of the National Academy of Sciences of Ukraine received 22.6 million UAH and 51.3 million UAH - for 4151 state-gift contracts. It should be noted the effectiveness of work on this issue of academic institutions of the Academy: Selection-Genetic Institute - National Center for Seed-Necessity and variety studies, which received 6635.0 thousand UAH for 595 licensing agreements, the Institute of Plant Science named after V.Ya.Jurev - 4557,8 thousand for 338 agreements, the State Institute of the Institute of Agriculture of the steppe zone of NAAS - 3388,0 thousand UAH for 105 licensed agreements. In the field of economics and food, a number of new and amended amendments to existing legislative and regulatory acts on ensuring the economic foundations of competitive agricultural production and investment attractiveness of the processing industry and agriculture, including projects: the laws of Ukraine - 16 ; State agricultural development programs and rural areas - 2; Resolutions of the Cabinet of Ministers and decrees of the President of Ukraine - 3. Academic institutions of the Academy in 2014 were issued: 202 books (5 of them in foreign countries); 137 scientific journals; 65 intercollegiate thematic collections; 61 bulletins. The total volume of the "Agrarian Science" published by the State Publishing House and the published book products and periodicals for 2014 is 591.5 of the registration and publishing worksheet. In the reporting year, at the expense of the state order, 830 assistant rants were trained (403 of them with a separation from the production) with 52 specialties and 34 doctoral students from 18 specialties. With 21 scientific institutions of the Academy there were 24 specialized academic councils. 151 candidate's and 19 doctoral dissertations were defended and reviewed. In order to perform fundamental research, applied scientific and scientific-technological developments in the general fund of the state budget in 2014, 404.4 million UAH were allocated, of which: 60% was spent on basic research; Applied developments - 36%; Preparation of scientific personnel - 3,5%; On

preservation of objects that make up national property, publishing activity, development of scientific infrastructure - 0,5%. Inflationary processes and the necessity of constant indexation of wages in the conditions of reduction of NAAN budget financing (by 50% of the need) led to the use of 90% of the general fund budget for social expenditures.

Thanks to the introduction of scientific development, the improvement of production technologies to the special fund of the Academy amounted to 207.5 million USD, or an average of 1 UAH of funds of the general fund of the state budget received 50 cents of own revenue. It amounts to 27.9 thousand UAH per employee, and 4 thousand UAH to 1 ha of experimental plot of land. At the same time, the Presidium of NAAS aims scientific and production teams of the Academy to overcome some negative tendencies. There is a continuation of the aging of scientific staff. Not enough young scientists are staging in the world's scientific institutions. A number of academic institutions in the reporting year have attracted less than 10 cents per 1 UAH of the budget financing to the special fund. In the State Register of Plant Varieties, suitable for distribution in Ukraine, the share of varieties and hybrids of agricultural crops of breeding of NAAS decreases annually. There is a steady tendency of annual contraction in Ukraine of crops of domestic hybrids and expansion of foreign ones, in particular corn, sunflower, winter rye, sugar beets. The work of many research farms is ineffective. Taking into account the above, the General Meeting of the National Academy of Agrarian Sciences of Ukraine RESOLVES: 1. Report of the President of the National Academy of Agrarian Sciences of Ukraine Academician NAAN Y.M. Gadzala "On the results of the activities of the National Academy of Agrarian Sciences of Ukraine in 2014 and the main tasks for the future". 2. Presidium of NAAS: • before May 1, 2015, to decide on the reform of the Academy's scientific and experimental base; • By June 15, 2015, to complete the development of research programs for 2016-2020, significantly reducing the number of programs; • to take necessary measures to strengthen the material base for research, in particular, improving the efficiency of research facilities; • To raise before the Cabinet of Ministers of Ukraine the decision on the priority of growing and proliferation of domestic varieties of plants and breeds of animals, granting of subsidies and privileges to state farms that use domestic breeding achievements in the fields of plant growing and livestock breeding; • To file a petition to the Ministry of Agrarian Policy and Food of Ukraine on accelerating the development of a system of national regulatory and normative documents in the agricultural sector in the face of new economic and political challenges, harmonized with the legal and regulatory framework of the European Union; • Initiate the draft Law of Ukraine "On the accession of Ukraine to the International Agreement on Plant Genetic Resources for Food and Agriculture" by the Verkhovna Rada of Ukraine; • To initiate the implementation of the pilot project "Modern system of breeding in livestock production of Ukraine" in front of the Ministry of Agrarian Policy and Food of Ukraine and to facilitate the creation of National Reference Laboratories based on scientific institutions with the provision of functions for the final diagnosis of highly dangerous infectious diseases of animals ; • initiate the development and signing of an intergovernmental agreement on cooperation between European countries and Ukraine in the field of adaptive agriculture and production of organic agricultural products and biological raw materials; • coordinate the attraction of NAAN scientific institutions to the EU program on research and innovation "Horizon 2020"; • To carry out organizational and normative legal work on the conclusion of a contract for 2015-2017. The National Academy of Agrarian Sciences of Ukraine with the authorized structures of the Embassy of the United States of America in Ukraine on the implementation of the Program for the Reduction of the Biological Threat in Ukraine - Technical Assistance.

3. The branch of the Academy will take measures to implement scientific and scientific-experimental tasks for 2015 and include in the list of priority tasks of scientific research for 2016-2020: a) separation of agriculture, melioration and mechanization: • development of high-performance adapters Agricultural systems in the context of climate change, aimed at increasing the competitiveness of agricultural production, ensuring food security and increasing the country's export potential; • development of the system of aerospace monitoring of agrarian resources for adaptation of agrarian production to climate change, determination of the state and forecasting of the agroecosystem's productivity in the near and far-off prospects; • Improvement of the methodology of research in the field of land reclamation, scientific and technological provision of regulation of water balance of territories and water quality in aquatic ecosystems; • Implementation of the concept of heating the rural areas based on local renewable biofuels. B) Separation of planting: • application of modern methods of biotechnology, genetic engineering, molecular markers, tissue culture to accelerate the breeding process

for creating more perfect forms of plants with increased product quality and resistant to biotic and abiotic factors; • development and use of biotechnological methods for the diagnosis of viral diseases, improvement of technologies for the healing of infected with viruses of seed and native material; • creation of modern adaptive technologies for cultivating agricultural cultures that will prevent the negative effects of stresses of different nature, increase the processes of photosynthesis of plants and increase their biological productivity; • development of modern ecological and effective methods of protection of crops from crops from pests, diseases and weeds in biological systems of agriculture; • concentration of efforts of scientific groups on research on the cultivation of bio-raw materials for the production of bioethanol, biodiesel, solid biofuels, biogas. C) Division of zootechnics: • development and use of modern genomic selection methods, genetic engineering and biotechnology for purposeful development of farm animal populations; • substantiation of the most effective directions of using nanomaterials in animal husbandry; • creation of innovative resource-saving technologies and equipment for the production of livestock products; • development of a system for assessing the quality of various types of feed and livestock products obtained by intensive and extensive technologies.

D) Division of veterinary medicine: • activation of the activities of scientific and production centers of veterinary medicine institutes created by the joint order of the Academy and the State Veterinary and Phytosanitary Service of Ukraine with the aim of increasing the efficiency of prediction, diagnosis, prevention and control of animal emergencies; • completing a set of measures for conducting accreditation, certification and certification of leading scientific laboratories in accordance with international requirements of ISO / IEC 17025: 2005; • activation of the work on the formation of the "Concept of Development" of the Ukrainian-American Co-operation in the field of reducing biostage and ensuring the establishment of laboratories BSL-3 and BSL-2. E) The separation of agrarian economics and food-stuffs: • scientific support of investment attractiveness and growth of foreign economic activity of the agrarian sector in the conditions of Ukraine's integration into the European Union; • scientific and methodological support for completion of land reform in Ukraine and improvement of state administration in the field of land resources and land use; • Organizational and economic principles of building a national system of financial and credit provision of agrarian development; • ensuring sustainable development of agrarian production and rural areas; • effective systems of quality and integrated processing of agricultural raw materials for the production of food products of high nutritional and biological value.

E) Division of scientific support of innovative development: • development of methodological and organizational principles for the formation of the technological platform "Agrotechnopolis"; • introduction of the model and organization of the creation of the Science Park in the NAAS system; • development and implementation of mechanisms for implementation of the Scientific Park projects, promotion of investment attraction, development of cluster project associations for the production of competitive agricultural products and food; • scientific substantiation and provision of organizational and methodological support for the effective functioning of agrarian science on the basis of a combination of opportunities and benefits of scientific and production and innovation-but-entrepreneurial activity. 4. For the valid members (academicians) and correspondent members of NAAS, in pursuance of the statutory duties: • to intensify participation in the management of the NAAS through the coordination and implementation of fundamental and applied scientific research on the world level in the identified priority areas and the strengthening of their influence The results on the innovative development of the agrarian sector of Ukraine's economy; • to facilitate the expansion of the information-analytical and scientific-expert activity of the National Academy of Sciences, ensuring its key role in the implementation of scientific forecasting of the development of the agro-industrial complex; • ensure active discussion and implementation of proposals for the implementation of the reformation processes of agrarian science to implement the basic provisions of the program documents of the President of Ukraine and the Government, the Verkhovna Rada of Ukraine (Coalition Agreement of the Verkhovna Rada of Ukraine VIII convocation, "Reforms 2020 Strategy" of the President of Ukraine, the Government Action Program Ukraine for 2014-2024). 5. Directors of academic institutions of the Academy: • develop measures for financial and personnel support for the implementation of the tasks of the scientific research programs of the NAAS for 2015; • To ensure the development of research programs for 2016-2020 in the framework of the main priority tasks of scientific researches of the National Academy of Sciences of Ukraine for 2016-2020; • Take practical steps to increase extrabudgetary revenues based on the use of the Institute of Intellectual Property created by the Institute and the experience of leading academic institutions of the Academy; • to intensify work on the

preparation of scientific courses of higher qualification, especially for the priority areas of scientific research; • To strengthen the participation of scientists in international projects and grant researches of educational institutions of the EU countries. 6. Directors of state-owned enterprises of research facilities of scientific institutions of the Academy: • ensure the implementation of statutory tasks of the experimental enterprises of the Academy; • to develop measures for obtaining a competitive price for high-quality seeds and elite animals produced by the enterprise; • increase the level and profitability of 1 hectare of arable land to a level exceeding the regional (district) level. 7. The control over the implementation of this resolution should be placed on the President of NAAN Y.M. Gadzala.

President Ya.M. Gadzalo Vice President - Chief Scientific Secretary AS Zarishnyak