# FEDERAL STATE BUDGETARY EDUCATIONAL INSTITUTION OF HIGHER EDUCATION "STAVROPOL STATE AGRARIAN UNIVERSITY"

APPROVED

Rector of FSBEI HE

Stavropol State Agrarian University professor, Academician of the

Russian Academy of Sciences

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2017

#### **REPORT**

ON SELF-INSPECTION OF THE EDUCATIONAL PROGRAMS CLUSTER IN THE TRAINIG DIRECTIONS OF:

«Ecology and Nature Management» (05.03.06, 05.04.06), «Earth Sciences» (05.06.01), additional educational programs of occupational retraining «Environmental Protection and Ecological Safety of Production»

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#### **INTRODUCTION**

The importance of the specialists' training quality increases under present conditions of modernization of the national education system. The purpose of this report is to identify the conformity of the implementation of the educational programs cluster in the field of the training «Ecology and Nature Management» (05.03.06, 05.04.06), «Earth Sciences» (05.06.01) at FGBOU VO «The Stavropol State Agrarian University» to the European standards and recommendations (ESG) of the European Association of Quality Assurance in higher education (ENQA) in the following areas:

- the policy and strategy of quality assurance of education;
- the system of development, approval, monitoring and improving the basic professional educational programs (hereinafter BPEP);
- the process of admission, training, scholastic achievements and recognition of student achievements;
  - the competence of the teaching staff;
- the sufficiency and availability of training resources and students' support system;
- the information management system, informing the public about the education quality;
  - -the procedures for the BPEP internal and external monitoring.

Self-inspection is a necessary preliminary step in the external examination of the basic professional educational programs (BPEP). The purpose of the self-inspection is to establish training quality conformity of the graduating students accredited by the BPEP to the standards and criteria of the international professional- and- public accreditation of the National Center of public-and-professional accreditation.

During self-inspection, the analysis of the content, level and graduating students' training quality accredited by the BPEP and the conditions of their implementation has been carried out, also the strengths and weaknesses of the training activities have been identified; the dynamics evaluation of the BPEP development, the state of the material and technical base, the training level conformity to the FGBOU VO requirements has been estimated.

## I. GENERAL INFORMATION Table 1 – GENERAL INFORMATION about OO

Full title OO	Federal Government Budget Educational Institution of Higher Education «The Stavropol State Agrarian University»					
Founders	Ministry of Agriculture of the Russian Federation					
Founded	1930 the Institute of sheep breeding 1933 the North-Caucasus zootechnical Institute 1944 the Stavropol Agricultural Institute 1994 the Stavropol state agricultural academy 2001the Stavropol state agrarian university					
The current state accreditation status						
Location	Stavropol, Zootechnical lane,12					
Rector	Vladimir Ivanovich Trukhachev					
License	Series $N^{0}90\pi01$ $N^{0}$ 0008917, registration $N^{0}1887$ of 20.01.2016. Duration – permanent					
State accreditation	Certificate of state accreditation Series 90A01 Nº0001847, registration Nº1754 of 17.03.2016. Duration until 29.04.2020					
Number of students	9699 out of them: full-time 5199 full-time-part-time 40 part-time 4460					

#### Table 2 – Information about OP submitted to the accreditation

Educational programs	«Ecology and Nature Management» (05.04.06), «Ecology and Nature Management » (05.03.06), «Earth Sciences» (05.06.01) Additional educational programs of occupational retraining «Environmental Protection and Ecological Safety of Production»
Level of training / normative period of training	master / 2 года academic bachelor / 4 года researcher, teacher-researcher / 3 года
Structural unit (head)	The Faculty of Ecology and Landscape Architecture (dean -Alexander Nikolaevich Esaulko, doctor of Agriculture, professor)
Graduating Departments (heads of the graduating departments)	Ecology and Landscape Construction (Svetlana Vasilevna Okrut, PhD, Biology, associate professor)
Term examination	28-30 March, 2017 г.
Responsible for accreditation	Elena Vasievna Khokhlova, head of the Educational Quality Management Centre Alexander Nikolaevich Esaulko, dean of the Faculty of Agrobiology and Land Resources; Ecology and Landscape Construction; Julia Alexandrovna Mandra, PhD, Biology, associate professor of the Department of Ecology and Landscape Construction

Table 3 – Key figures of students' admission on the educational programs that are included in the Cluster 05.00.00 «Earth Science»

Title of the educational programs		2013	2014	2015	2016
		F/P	F/P	F/P	F/P
05.03.06 Ecology and Nature		25/0	25/0	25/0	25/0
Management					
Specialization «Nature Management»		25/0	25/0	25/0	25/0
05.04.06 - Ecology and Nature		10/0	5/0	10/0	15/5
Management					
Program «Agro-ecological Monitoring»		10/0	5/0	7/0	10/5
Program «Innovative Technologies in the		-	-	3/0	5/0
field of Energy Conservation and					
Ecological Monitoring»					
05.06.01 - Earth Sciences		1/0	•	1/0	-
Scientific specialization 03.02.08		1/0	-	1/0	-
«Ecology (according to industries)»					
Total in Cluster		36/0	30/0	36/0	40/5
Additional educational programs of	-	-	-	-	2
occupational retraining «Environmental					
Protection and Ecological Safety of					
Production»					

\*Note: F - full-time training; P - part-timing training.

### II. CONFORMITY TO THE PROFESSIONAL AND PUBLIC ACCREDITATION OF THE NATSAKKREDTSENTRA

### 2.1 Standard 1. Policy (objectives, development strategy) and procedures of the quality assurance of the educational program

Professional school of bachelors, masters and PhD students for the enlarged group 05.00.00 «Earth Sciences» occupies a stable niche in the field of specialists training in the sphere of ecology and nature management.

Cluster programs in the areas of training 05.03.06 «Ecology and Nature Management»; 05.04.06 «Ecology and Nature Management» 05.06.01, «Earth Sciences»; as well as the professional training program «Environmental protection and ecological safety of production» are realized at the Faculty of Ecology and Landscape Architecture at FGBOU VO the Stavropol State Agrarian University.

The strategy of economic and social development of the Stavropol Territory in the field of natural resources and environmental protection up to 2020 points to the need to create a comprehensive high-tech system of ecological monitoring of nature management objects on the principles of interaction of public authorities, nature management subjects and research- educational sector of the Stavropol Territory. The Faculty of Ecology and Landscape Architecture is an important link in the realization of the above objectives of the Strategy.

On the basis of the innovative laboratories, the researches on the development of quality control technology of environment, assess of the status of specially protected areas, regulation and reduction of environmental pollution, the development of rehabilitation and

reconstruction programs of anthropogenic disturbed ecosystems are carried out. The Faculty provides training for the graduates of environmental specialization, with professional knowledge, adaptable to conduct nature conservation activities under various conditions of the North Caucasus region.

The University developed the Quality Policy and it was approved by the Rector of the University, and it is reviewed and updated annually.

The University Mission is to extend the boundaries of knowledge and learning, to provide training of graduate -professionals, to improve the quality life of the population in the south Russia.

In accordance with the University Mission, the Mission of each educational program in the cluster programs 05.00.00 «Earth Sciences» is clearly defined (http://www.stgau.ru/obschinf/information/oop/).

The goals and objectives have been formulated; the documents regulating the content, organization and quality control of the training process have been developed and approved in each cluster educational program 05.00.00 «Earth Sciences» (05.03.06 «Ecology and Nature Management» specialization «Nature Management», 05.04.06 «Ecology and Nature Management» master programs «Agro-ecological monitoring», «Innovative technologies in the field of energy saving and environmental monitoring»). These documents are available on the University website can be accessed from anv (http://www.stgau.ru/obschinf/information/oop/). The resource support of the educational programs, methods to achieve and adjust goals and tasks of the educational programs are indicated there.

Strategic and tactical objectives and tasks of the University are presented in the Program of strategic development and increase of competitiveness of FGBOU VO the Stavropol State Agrarian University in 2014-2018 years. Strategy, objectives, policy and plans of the university are informed to the staff via:

- quality policy, clearly presented in all units of the university and on the University website;
- plans of the organizational departments and individual teachers' plans.

The mission, the concept of development, program goals and objectives has been developed in accordance with the University Mission strategic development and Program of the increase competitiveness for each Cluster educational program. For example, the direction **mission** of training «Ecology and Nature Management" is to perfect to train skilled personnel in the field of environmental protection, and rational nature management owing to the quality improvement of the research and training processes, to create the conditions for students, masters, undergraduates, and professors by means of the development of environmental science, material and technical base, interaction with enterprises in the sphere of nature management and nature conservation.

#### **Exclusivity of the educational program:**

- high educational status obtained at the University in the regional community and a large number of loyal potential customers;

- constantly developing and building up powerful resource potential (innovative laboratories: Environmental Monitoring, Landscape Design, Agro-chemical Analysis, Soil Monitoring, personnel), providing introduction of high technologies in various sectors of the economy;
- the internationalization of teaching and research activities via participation in the international projects and programs (Tempus Net Water, Tempus Rudeco, Tempus GreenMa, Erasmus SARUD) and, as a result, creating an impression of the image of educational programs in the world educational space.
- the coordination of the theoretical and practical projects with regional programs to preserve natural resources of the Stavropol territory, the North Caucasian Federal District;
- constantly improving teaching staff as a result of the employment function and career development, allowing the University to provide incentives for young and energetic talents;
- the university partnership developed system with target groups of business community, authority regional structures (Ministry of Natural Resources and Environmental Protection of the Stavropol Territory), government agencies (Management of especially protected areas of the Stavropol Territory, the Stavropol Center for Hydrometeorology and Environmental Monitoring, the Laboratory Center for Analysis and Engineering Measurement, etc.).
- the impact on the formation of the regional environmental policy via membership in the public councils and boards of the relevant government agencies.

To develop the BPEP, the departments' staff that trains graduates on educational programs, students, graduating students, and representatives of the professional associations is involved. The final revision of the BPEP is approved by the Rector of the University and is signed by the representatives of the faculties (dean's office, heads of the departments).

The undergraduates and students take an active part in the Faculty management in the form of weekly monitors' work, monthly intermediate assessment, meetings of the educational committees, organization of cultural and sporting events, in the organization to keep public order and sanitary conditions of the surrounding areas, in work of the Accommodation Student Council and etc. In the framework of the student self-government, a clear structure of interaction and cooperation with all unities involved in educational work at the university is determined.

Implementation of the program educational goals is done by:

- annual planning the faculty and department work, teachers' individual plans to achieve the objectives of the Program of strategic development and increase of competitiveness of FGBOU VO the Stavropol State Agrarian University in 2014-2018 years.
- controlling over the work implementation of the faculty and department plans, teachers' individual plans;
- an annual analysis of the Faculty staff work to reach their goals. For example, according to the results of 2015-2016 academic year, it was found that all objectives in the quality field had been achieved;

- adjusting the long-term plans to develop the Cluster educational programs.

The Faculty development program, containing the objectives and tasks of the Cluster educational programs, is available in all Faculty departments and is allocated in the Internet.

The methods to achieve the goals on educational programs are developed and approved: in the Regulations on the internal institutional quality control of the training at FGBOU VO the Stavropol State Agrarian University – (planned (comprehensive) or operational (control) checking up educational and methodical work of the departments and dean's offices, departments control of classes, current, operational and planned individual control of classes); in the Regulations on the score-rating system of students' assessment of academic progress studied by educational and professional programs at FGBOU VO the Stavropol State Agrarian University; on students' intermediate assessment at FGBOU VO the Stavropol State Agrarian University; on postgraduate students' assessment (the applicant) for the next academic year; on test and examination procedures at FGBOU VO the Stavropol State Agrarian University and others.

According to the monitoring of objectives achievement, the educational commission meetings are carried out, where decisions are made with respect to those students who have deviations to achieve the objectives. To assess postgraduate students' results, the departments or Faculty Academic Council meetings are conducted.

In order to ensure an effective management system at FGBOU VO the Stavropol GAU, the quality management system of education was created, is operated and is being continually improved. The system meets the requirements of the international standards ISO 9000 and quality management principles.

To improve the quality realization of educational programs, surveys of students, graduates and employees are widely used, which are conducted by the Marketing and Social Research Department of the Education Center of Quality Management.

Internal-institutional documentation meets the requirements of the normative and legal acts regulating the activities in the field of education of the Russian Federation:

•the Federal State Educational Standard of Higher Education (FGOC VO) on training of 05.03.06 «Ecology and Nature management» (bachelor level), approved by the Order of Ministry of Education of Russia of 11.08.2016 № 998;

•the Federal State Educational Standard of Higher Education (FGOC VO) on training of 05.04.06 «Ecology and Nature management» (master level), approved by the Order of Ministry of Education of Russia of 9.23.2015 № 1041 (as amended on 20.04.2016.);

•the Federal State Educational Standard of Higher Education (FGOC VO) on training of 05.06.01 «Earth sciences» (the training level of highly qualified personnel), approved by the Order of Ministry of Education of Russia of 30.07.2014 № 870 (as amended on 04.30.2015.);

•the Federal Law «On Education in the Russian Federation» dated 29 December 2012 № 273-FZ;

•the Order of Ministry of Education of Russia on December 19, 2013 № 1367 «On approval of the organization and implementation of educational activities on educational programs of higher education – bachelor' programs, specialty programs, masters' programs»;

•the Order of Ministry of Education of Russia on September 12, 2013 g.№ 1061 «On approval of the lists of specialties and areas of training of higher education»;

•the Order of Ministry of Education of Russia on June 29, 2015 № 636 «On approval of the procedure of the government final examination for educational programs of higher education – bachelors' programs, specialty programs and masters' programs»;

The order of the Ministry of education and science of the Russian Federation No. 1383 "About approval of the regulations on practice of the students mastering the main professional educational programs of the higher education" of November 27, 2015.

The main intra-high documentation is hosted on a web site of university (<a href="http://www.stgau.ru/sveden/document/">http://www.stgau.ru/sveden/document/</a>).

Development and rendering educational services in programs of the main and postgraduate education is performed according to a quality management system. At departments there is all planning, organizational and administrative and reporting documentation:

- 1) Educational and methodical complexes of disciplines, including complete set of working programs of disciplines and practice; funds of estimative means; the materials establishing content and an order of carrying out intermediate and final assessments; a complete set of methodical and organizational and methodical materials on practice, research work and a State Final Examination;
- 2) Work plans of department, including individual work plans of teachers;
- 3) The minutes of proceedings of departments on which questions of a quality excellence of training of graduates in the directions of preparation 05.03.06 "Ecology and environmental management" profile), "Ecology (environmental management 05.04.06 environmental management" (the master programs "Agro ecological monitoring", "Innovative technologies in the sphere of energy saving and environmental control"), 05.06.01 of "Science about Earth" are regularly considered (Ecology (on industries) program); according to the program of occupational retraining "Environmental protection and an ecological safety of production".

Educational programs of the Cluster are intended for documentary and methodical ensuring implementation the Federal state educational standard of the higher education and on this basis development in the studying personal qualities of students, and also forming of the common cultural, all-professional and professional competences promoting successful performance on a preparation profile. The concept of the main program of higher education is based on competence-based approach to

the expected results of training and oriented to the solution of the following tasks:

- orientation on a multi-level education system;
- choice by students of individual educational trajectories;
- practice-oriented training allowing to combine fundamental knowledge with practical skills in the direction of preparation;
- forming of readiness of graduates of university for vigorous professional and social activity.

One of the leading factors of successful functioning of a quality management system of the Stavropol state agricultural university is the organization of system feedback with internal and external consumers, partners and other concerned parties. Systemically organized feedback allows determining timely areas for improvement of key and auxiliary processes and a point of growth in activities of university.

Information on educational programs and their achievements is posted on pages of faculties on the website of university (<a href="http://www.stgau.ru">http://www.stgau.ru</a>) and is available to a wide range of users. Also this information is published in brochures, university newspapers and magazines, gift editions about university, in the reference media about institutions of higher education.

The technique of involvement of concerned parties (administration, graduates and representatives of professional students, communities) in determination of the purposes and the strategy of educational programs of a cluster consists in the following: by the order of the dean of faculty are created temporary or permanent work groups; following the results of their activities for acquaintance of personnel and students the draft of the document offered by a working group is transferred to the interested structural divisions; after collection of offers and notes the meeting of a working group which decision is brought to the attention of interested persons is held; the academic council of faculty considers and approves the document which final version is posted on the website of faculty; in each structural division the corresponding seminars (meetings, proceedings, conferences) on acquaintance with the document are held. For example, temporary work groups were created: on preparation of the development program of faculty for 2014-2018, etc. Also permanent work groups work.

For studying of opinion of personnel and students annually:

- 1. Meetings of a management of university and faculty with teachers, students and graduate students will be organized.
- 2. Sociological surveys are conducted. Results of these polls are analyzed and applied to adjustment of educational and educational processes of higher education institution. For example, questioning of students of each educational program of the cluster and employers regarding updating of educational process, entering of adjustments into curricula and working programs is annually carried out.
- 3. Annually the rector of university holds open meetings with students. On all questions irrefragable answers are given, measures for enhancement of educational, scientific and educational processes are applied.

For studying of opinion of professional communities' heads and leading experts of the entities are attracted on faculty for:

- developments of educational programs (for example, head of department of the analysis of state of environment and long-term programs and plans of the Ministry of Natural Resources and Environmental Protection of Stavropol region, Doctor of Medical Sciences Korovin A. A. took part in development of curricula in the directions of preparation 05.04.06, and 05.03.06; Lysenko I. O., Doctor of Biological Sciences, Professor, the chief specialist of Department of the Federal Service for Supervision of Natural Resource Usage across North Caucasus federal district took part in development and enhancement of curricula).
- participations in work of State Examination Board (for example, in 2016 in the directions of preparation 05.03.06 and 05.04.06 the deputy director on scientific work of the Stavropol research institution of agricultural industry, the doctor of agricultural sciences, Godunova E. I. is approved as the chairman of State examination board. The branch director of "Center of the laboratory analysis and technical measurements for Southern federal district" "The center of the laboratory analysis and technical measurements for Stavropol region" Babansky M. S., the head of department of ecological designing, regulations and environmental protections of State unitary enterprise in Stavropol region "State center of monitoring of the environment and address with waste" Bobrysheva M. V., the head of the security department, control and supervision of use of objects of an animal and flora of Ministry for protection of the environment and natural resources of edge Trautvayn I. G. were members of State examination board); according to the program of retraining "Environmental protection and green production" the leading engineer of the branch "Center of the laboratory analysis and technical measurements for Southern federal district" Center of the laboratory analysis and technical measurements for Stavropol region Sledenko S.A. was appointed the chairman of final certifying commission.

While executing educational programs of the cluster of national and regional requirements for a quality assurance are considered:

- implementation of the development program of university based on regulating documents of the federal and regional level;
- development of the intra high school documents regulating educational process based on regulating documents of the federal and regional level. For example, Regulations on an order of holding a State Final Examination according to educational programs of higher education to programs of a bachelor degree, programs of a specialist program and master program, developed according to requirements of the Federal state educational standard, recommendations of educational and methodical department and so forth documents;
- control of quality of training of graduates (current, intermediate, final assessment, Internet examination, etc.);
  - processing of the state accreditation, etc.

The analysis of structure of preparation according to the main educational programs of bachelors (05.03.06 "Ecology and environmental management"), masters (05.04.06 "Ecology and environmental

management"), graduate students (05.06.01 of "Science about Earth"), the program of occupational retraining "Environmental protection and an ecological safety of production" allows to draw conclusions that educational services are provided taking into account regional requirements; stable set is provided. All this testifies to appeal of educational programs and their competitiveness in education market.

### Conclusions according to the standard 1: Strengths:

- 1. Coordination of educational programs and scientific and practical projects with regional programs of preserving natural resources of Stavropol region and North Caucasian federal district;
- The developed system of partnership with target groups of business community, regional structures of the power, participation of representatives of production in forming of structure of educational programs, development and deployment of policy of a quality assurance of education.

#### **Areas for improvement:**

- 1. Placement of all standard legal documents and local acts regulating educational activities in an open entry to the Internet, including use of the English-language version.
- 2. To represent in mass media more widely (the Internet, magazines, newspapers, etc.) data on the directions and results of development of educational programs of the cluster.

### 2.2. Standard 2. Procedures of development and approval of educational programs

Coordination of educational process in higher education institution, preparation of regulating documents, monitoring, control of development and implementation of educational programs at university is performed by control center of educational process.

Development and approval of programs of additional education is performed through Institute of additional professional education taking into account requirements of professional standards (in case of their availability).

The academic commission of faculty actively works, considers and represents to statement curricula of the directions of preparation, and also working programs of disciplines, the practice. In case of development of curricula the local regulating documents existing in the Stavropol state agricultural university which regulate educational process are considered including:

- Regulations on an order of the organization and implementation of educational activities for educational programs of higher education to programs of a bachelor degree, programs of a specialist program and master program in the Stavropol state agricultural university.
- Regulations on educational programs of the higher education programs of a bachelor degree, programs of a specialist program and master program and programs of a postgraduate study;
- The provision on the current control of progress and intermediate certification of students in the Stavropol state agricultural university

according to educational programs of higher education - programs of a bachelor degree, programs of a specialist program and master program;

- The provision on mark and rating system of assessment of knowledge of the students studying according to educational programs of higher education in the Stavropol state agricultural university;
- The provision on the choice by students of subject matters at development of educational programs of higher education in the Stavropol state agricultural university;
- The provision on contact work of the student with teachers in the Stavropol state agricultural university;
- The provision on the organization of independent work of students in the Stavropol state agricultural university according to educational programs of higher education programs of a bachelor degree, programs of a specialist program and master program;
- The provision on the organization and carrying out the practice of the students mastering educational programs of higher education (programs of a bachelor degree, programs of a specialist program and master program) in the Stavropol state agricultural university;
- The provision on an order of holding a State final examination according to educational programs of higher education to programs of a bachelor degree, programs of a specialist program and master program in the Stavropol state agricultural university;
- The provision on performance and protection of final qualification work in the Stavropol state agricultural university;
- The provision on fund of estimated means for the current control of progress and carrying out intermediate certification of students for discipline in the Stavropol state agricultural university;
- The provision on the program of practice and fund of estimated means for carrying out intermediate certification for practice in the Stavropol state agricultural university;
- The provision on formation of fund of estimated means for a State final examination in the Stavropol state agricultural university;
- Regulations on term papers (projects) of students of the Stavropol state agricultural university;
- Regulations on ensuring educational process with educational editions and other library and information resources in the Stavropol state agricultural university;
- A provision on development, statement and change of curricula of the main professional educational programs of the higher education in the Stavropol state agricultural university;
- Regulations on implementation of optional subjects and elective courses in the Stavropol state agricultural university;
- Regulations on an order of teaching physical culture in the Stavropol state agricultural university;
- Regulations on a DE teaching package of course unit in the Stavropol state agricultural university;
- Strategy for quality assurance of training of graduates in the Stavropol state agricultural university;

- Regulations on the academic commission in the Stavropol state agricultural university;
- Regulations on education board of the Stavropol state agricultural university;
- Regulations on the organization of educational process for disabled people and persons with limited opportunities of health in the Stavropol state agricultural university;
- Regulations on Institute of additional professional education of the Stavropol state agricultural university;
- A procedure and the organizations of educational activities for additional educational programs in the Stavropol state agricultural university;
- Regulations on advanced training of scientific and pedagogical workers, administrative and managerial and educational support personnel of the Stavropol state agricultural university;
- Regulations on a training of scientific and pedagogical employees of the Stavropol state agricultural university;
- Regulations on issue of documents by results of development of additional professional and additional general education programs in the Stavropol state agricultural university;
- Regulations on forming of fund of estimative means for a State final examination in the Stavropol state agricultural university;
- Regulations on electronic training and use of remote educational technologies in educational process in in the Stavropol state agricultural university;
- Regulations on acceptance on training in programs of additional education in the Stavropol state agricultural university;
- Regulations on carrying out the appeal in case of acceptance on training and holding a final assessment according to programs of additional professional education in the Stavropol state agricultural university;
- Regulations on practical training by students according to programs of additional professional education at Institute of additional professional education of the Stavropol state agricultural university;
- Regulations on the organization of training of listeners of additional general education and additional professional programs for individual plans, including in an expedited manner, in the Stavropol state agricultural university;
- An approval procedure of requirements to an internal quality evaluation of additional educational programs in in the Stavropol state agricultural university;
- Regulations on types and forms of an internal quality evaluation of implementation of additional educational programs and their results in in the Stavropol state agricultural university;
- An order of the organization and implementation of educational activities for the main programs of professional training in in the Stavropol state agricultural university.

The mission of educational programs of a cluster 05.00.00 of "Science about the Earth" consists in satisfaction of educational needs of the

personality and requirements of society in the educated and professionally prepared graduates ecologists capable to adaptation and successful development of adjacent areas of professional activity and also advanced training, training in programs of additional education and continuation of education in a postgraduate study.

The purpose of the program of occupational retraining for the subject "Environmental protection and green production" is forming at listeners of professional competences on creation of a complex of the organizational and technical measures aimed at providing compliance of nature protection activities of the entity to standard requirements, minimization of negative impact of the industry on the environment.

Contents of educational programs of a cluster include the description of a mission, the program implementations expected results of training - knowledge, abilities, skills and the purchased competences, content, conditions and technologies of implementation of educational process, a quality evaluation of training of graduates are more whole.

The contents of educational programs are revised annually. For example, in 2016 to the curriculum of the direction of preparation 05.03.06 "Ecology and environmental management" changes based on requirements accepted 11.08.2016 are made. The federal state educational standard (the course unit of "A basis of melioration, recultivation and a protection of lands" is entered).

Working programs of course units are annually considered and approved at a meeting of departments. For example, to the working program of discipline "Environmental assessment of the enterprises" changes in connection with an output of a row of new normative documents in the field of environmental protection are made.

By development of educational programs of the cluster experience of implementation of programs by the leading domestic and foreign higher education institutions was considered and considered.

For example, by development of the main professional general education program for the master program "Innovative technologies in the sphere of energy saving and environmental control" (05.04.06 "Ecology and environmental management") in 2015 experience of implementation of the international grant of Tempus Green Ma executed in consortium with European was applied (University of Genoa, Italy; Alicante University, Spain; Silesian technical university, Poland) and Russian (Russian chemical and technological university of D. I. Mendeleyev, Ural federal university, Tambov state technical university, etc.) partner higher education institutions.

Educational programs and implementation of educational process provide a possibility of implementation of the international activities. On the cluster during 2010-2017 a row of projects of the European Union (Tempus Net Water, Tempus RUDECO, Tempus Green Ma, ERASMUS + SARUD) was realized therefore there was an upgrade of curricula on a bachelor degree profile "Environmental management", the master program "Agro ecological monitoring".

By development of educational programs of a bachelor degree, magistracy and postgraduate study the sequence and an eligibility of levels is provided.

All educational programs of a cluster are developed according to the requirements of Federal state educational standards of higher education providing implementation of competence-based approach and mandatory existence of requirements to results of training.

In the curriculum of educational programs of a cluster and in working programs of course units is specified the quantity of the classes given with use of interactive methods of training, among which lecture visualization, problem lecture, binary lecture, lecture press conference, business game, round desktop, brainstorming session and method of cases.

On work programs of course units and practices the volume of hours and subjects which are carried out on an independent study is specified. Independent operation of students is regulated by methodological recommendations.

The ratio of lectures, laboratory, practical hours and students' individual work is on work programs in strict accordance with curricula of the direction. Working programs are developed by the teachers carrying these course units, are considered at faculty meetings, the academic commission of faculty and are approved as the dean of faculty.

Lecture occupations in the directions of preparation "Ecology and environmental management" (05.03.06, 05.04.06) are carried out only by the teachers having an academic degree or a rank. The material explained at lectures corresponds to training programs and differs in rather high level which is supported with specific examples, and also scientific data obtained by the staff of profile departments.

Classes are given with use of demonstration materials, hardware and software, the high share of occupations is carried out in the interactive form (round desktops, business games, shave-rings, master classes, occupations in small groups, creative jobs, excursions, etc.). According to Federal state educational standards of higher education for the purpose of improvement of quality of the presented material holding open lectures with the invitation of representatives of professions, binary lectures, lectures with the programmed errors, etc. practices.

The scope of laboratory operations and practical works explicitly is reflected in working programs of disciplines and completely answers the purpose and tasks of course units.

All departments of faculty are provided with courseware, methodological and scientific literature which promotes a high level of orientation of students' individual work.

Courseware of a training package reflect the modern level of development of science, provide logically sequential presentation of material, use of the modern means of an intensification of educational process, different forms of its organization. A training package allows students to master deeply a training material and to receive skills of its use in practice, promote formation of competences of future expert in this field.

In all courseware provided on the local area network of university and on accounts of teachers on the website of university there are special sections containing recommendations for independent operation. For execution of students' individual work necessary conditions are created: scientific library with Internet connection, methodical offices, computer support for search of training and scientific matter.

The curriculum and work programs of course units is annually analyzed following the results of academic year as part of new requirements is the basis for allocation of an academic load on course units, departments and each teacher. Meetings of the Academic council of faculties with participation of main trainers of all departments on whom the most significant questions following the results of a year are considered and are taken out recommendations precede discussion and approval of the curriculum.

The multi-level education system is performed in system: bachelor study, postgraduate study, advanced occupational retraining (Institute of additional professional education). provided professional According to the programs to and public accreditation all elements of this system are implemented. Implementation of professional development course for practitioners and occupational retraining according to the "Environmental protection and green production" program also gives the chance to make changes to content of practical preparation on subject matters of a bachelor degree and master courses.

Based on curricula the academic load of departments is planned and affirms, individual plans of teachers are created. The academic load of teachers is determined by the standard rates accepted on the Academic council of the Stavropol state agricultural university and approved by the order of the rector. One rate of the scientific and pedagogical worker constitutes 900 classroom hours a year. Such level of loading is optimum, increase will lead to decrease in intensity of scientific work, reduction of number of publications.

Practical training of students of faculty in all directions is systematized. On younger courses educational practice, on seniors - production and pre-graduation practical training will be organized. For the students studying according to master programs research work is provided. The general duration of all types of practical preparation corresponds to duration specified in Federal state educational standards of the higher education.

Practical work of students is weekly controlled in the place of practical training by responsible executive of profile departments and employer's representative. Heads of practice from production draw the conclusion about results of practical training by students. By results of a work practice students arrange the report and the diary which is checked by heads of practice from the entity and from department. At the end the practice is conducted discussion, and amendments are introduced in training programs in profile objects taking into account wishes of the employer regarding skills, abilities of students and forming of

competences. Survey results of specialists about quality of training of graduates are considered (proofs on the place).

Professional and practical preparation is implemented according to the programs and the corresponding recommended practices published at faculty in 2013-2016.

The system of interaction with employers, representatives of labour market is based on contractual relations. Practice is held on the profiled organizations: Ministry of natural resources and environmental protection of the Stavropol region; Stavropol regional center for hydrometeorology and environmental monitoring; the branch "CLATI on the North Caucasus Federal District" - "CLATI for the Stavropol region"; "Directorate of specially protected natural territories of Stavropol region"; - LLC "Ecoproject", LLC CET "Ecolife", LLC "Center of ecological monitoring", JSC "Arnest", etc.

The University has developed and implemented a system of evaluation of students' knowledge at different levels of the educational process. Innovative form of monitoring is the use of score-rating assessment technology of students' knowledge, which is used to:

- encourage systematic work of students, disclosure of their creative abilities, differentiation of assessment of knowledge;
- improve the objectivity and reliability of assessment of the level of the students.

Distribution of scores on a studied discipline is a mandatory supplement to the working program of discipline. There is a documented procedure for quality system – the "Regulation on score-rating system of knowledge assessment".

For each study discipline of the curriculum the Fund of assessment tools for different forms of control (current, intermediate, final) was developed.

Implementation of educational programs provided each student with access to databases, e-library system (ABS), containing publications in the disciplines studied and formed on the basis of agreements with owners of electronic library resources posted on the University website at: (http://www.stgau.ru).

Research work is a compulsory element of preparation of bachelors, masters and PhD students and is aimed at comprehensive development of general cultural, general professional and professional competencies. Students are given the opportunity to study the special literature and other scientific and technical information on the achievements of domestic and foreign science; to participate in conducting scientific research on the basis of the specialized laboratories (environmental monitoring; monitoring of soil agrochemical analysis, landscape design, etc.); to carry out the collection, processing, analysis and systematization of scientific information; presentations at conferences (demonstration results), shows and exhibitions.

To monitor the effectiveness of educational programs is the collection and analysis of the following information:

- average exam of persons enrolled in 1 course;
- the results of current progress and attendance;

- current control results:
- the results of inter-term certification;
- results of final certification;
- surveying students on satisfaction with the quality of education, etc.

The analysis of changes in labour market needs and research of new professional opportunities for graduates is carried out by:

- analysis of periodicals, professional standards, etc.;
- participation of faculty members in conferences, meetings of the Board and the Public Council of the Ministry of natural resources and environmental protection of the Stavropol Region, seminars, conducted by the educational-methodical Association of universities, professional training courses, internships in enterprises, etc.

Verification of achievement of learning outcomes is carried out when assessing competencies of graduates with teachers, heads of practical training, members of the state examination Commission and employers. The adjustment mechanism of training results is based on the opinions of students, teachers, and employers by means of questionnaires, analysis of reports on production and predegree practice, characteristics of employers and the state final certification.

### Conclusions on Standard 2: Strengths:

- 1. Curricula in the direction "Ecology and nature" not only meet the FSES HE, but also take into account the wishes of employers, students and other interested parties.
- 2. Internationalization of teaching and research activities through participation in international projects and programs (Tempus, Net Water, Tempus Rudeco, Tempus GreenMa, Erasmas SARUD) and as a result developing in the world educational space the image of the educational programs of the cluster.

#### Areas for improvement:

- 1. Further integration of the representatives of the professional community and the faculty, aimed at updating the content of working programs of disciplines, practices and curricula, taking into account regional features and requirements of the modern market. The expansion of the influence of employers on the formation and content of educational Cluster programme 05.00.00 "Science about Earth".
- 2. The increase in the number of international internships and faculty training in the leading universities of the country, aimed at exchange of experience in the implementation of similar programs.

### 2.3. Standard 3. Student-centred learning and assessment procedure

Assessment of the level of students' knowledge and quality of preparation of future specialists is based on unified approaches and criteria, and is governed by a number of approved provisions published on the official website of the University (www.stgau.ru). In this case all the way from the applicant to the graduate is covered with the assessment and analysis of the results of the receiving company, the current and

intermediate certification of students in all subjects of the curriculum, the State Final Attestation of graduates.

Identifying the quality of training of students is carried out on the basis of analysis and evaluation entry requirements, results of control of knowledge in the disciplines of all blocks of the curriculum, intermediate and Final State Attestation of graduates.

The Commission for State Final Attestation in accordance with FSES HE representatives of the professional community are included. For example, in 2016 the Deputy Director on scientific work of Federal State Institution "Stavropol Scientific Research Agriculture", doctor of Agricultural Sciences, professor E. I. Godunova was approved as the Chairman of the SFA in areas of training 05.03.06 and 05.03.06, members of the SFA were director of the "CLATI on NCFD" -"CLATI for the Stavropol region" Babanskii, M. S., head of the Department of environmental design, regulation and environmental protection SUE SR "State center of environment monitoring and waste management" M.V. Bobryshev, head of Department of protection, control and supervision over the use of objects of flora and fauna of Ministry of nature Trautvain I.G.

Results of students' assesment are brought to their attention and discussed monthly at the meetings of the Educational Committee and on the Academic Council of the faculties. According to the results of meetings decisions are made that contribute to improvements in the situation.

Curricula include the study of subjects chosen by students with the distribution of the cycles. Discipline on the student's choice proposed by the departments, the results of the discussions and taking into account the production needs, competencies and interests of students. The Dean's office has the protocols of meetings of the elective courses of the disciplines. Students have the opportunity to attend programs of additional professional education.

Group and individual counseling are regularly held for students, which is provided for scheduled consultations. Schedule of consultation is posted on the Bulletin Board of the Department.

Independence, objectivity and professionalism of the assessment process is ensured by the competence of the teaching staff of the University.

An integral part of educational process is students' self-study work, which is regulated by methodical instructions.

Self-study work includes the following activities: elaboration of the lecture material; implementation of educational tasks of the disciplines, study on educational benefits of the program material; preparation for seminars, control points, laboratory works; preparation of reports, papers; completing coursework and course projects, final qualifying works. Accepted forms of control of knowledge of students in the self-study subjects are: the current survey, seminar, examination, colloquium, test, essay, homework, workbook, abstract report. All forms of self-study work are reflected in the working programs of disciplines and educational-methodical complexes.

Organization of scientific work at the Faculty of Ecology and Landscape Architecture focused on the strategic challenges facing the Stavropol State Agrarian University. It involves scientific research aimed at the development and improvement of educational process and improvement of quality of preparation of graduates of all educational levels; solving of applied research tasks with the subsequent implementation of research results; search work directed on creation of advanced science; applied research.

The scientific potential of the students at the faculty is realized through the students scientific society, in which there are 12 scientific groups and the Council of young scientists and specialists of the faculty.

Students take an active part in the implementation of Federal grant programs.

Undergraduate and graduate students conduct their research at the following venues: innovation of the laboratory of ecological monitoring, landscape design, agrochemical analysis of soil monitoring; training and experimental farm of the Stavropol State Agrarian University.

Young scientists of the faculty present their research results at conferences, contests, participate in competitions and conferences of different level. Thus, since 2012, students of the specialty 05.03.06 "Ecology and nature management" has traditionally become the winners of the regional competition of ecological projects "ECO-SOUTH" award in the nominations "The best project in the field of eco-innovation" (V. Khalikova, A. lyakina), "The best project in the field of the study of biodiversity and its conservation" (Zhuravleva A., Devyatkova D.), "Socially significant environmental project" (Yemtseva Yu.).

Organization of scientific work at the Faculty of ecology and landscape architecture focused on the strategic challenges facing the Stavropol State Agrarian University. It involves scientific research aimed at the development and improvement of educational process and improvement of quality of preparation of graduates of all educational levels; solving of applied research tasks with the subsequent implementation of research results; search work directed on creation of advanced science; applied research.

In 2016 students-ecologists presented their designs to the contest of student research works "Use and protection of water resources in the basin of the Kuban river" organized by the Kuban basin water management together with the all-Russian society of nature protection. By the results of the contest, three students became winners: Ruslan Tambiev (supervisor - Mandra Y. A.), Khalikova Valeria (supervisor - Stepanenko E. E.), Stanislav Shaposhnikov (supervisor - Kapaeva V. Yu.).

Every year young scientists of the faculty present results of their research at the all-Russian competition for the best scientific work among students and post-graduates and young scientists of higher educational institutions of the Ministry of Agriculture on the direction "Environmental engineering and water management" (Perzhinskaya A., Zhebrikov M., Grigorieva A., Ivannikova E., Borzova Y., Lukyanov A., Tsoy T.). In 2013 Serbin Maxim became the winner of this competition on the National stage.

During the reporting period students and postgraduates of the faculty was awarded the prize of the Rector of the Stavropol State Agrarian University in the field of science and innovations for young scientists (Bobrysheva M., Bilko M.), have received 3 grants of the Stavropol GAU (Nebogina Yu. Yu., 2012; Bilko M. V., 2014; Koblov, Yu. A., Chuksyn I.S., 2015). The total amount of attracted funds is 220 thousand rubles.

Annually students of the faculty participate in the contest "BaiStadi". In October 2016, the 3rd year student of the direction 05.03.06 "Ecology and nature" Penkina E. was the winner of the contest and awarded the nominal scholarship of the company "Bayer CropScience".

Students of the faculty participated actively and successfully in international, national and regional conferences, round tables (annual University conference "Young farmers of Stavropol region"; international scientific-practical conference "Agrarian science, creativity, growth," III international scientific-practical conference "Topical issues of ecology and environmental management"; international scientific-practical conference "Ecology and sustainable rural development"; All-Russian scientific-practical conference "Sustainable development of specially protected natural territories and preservation of biological diversity", etc.).

The obtained results of the research the students use the rating for participation in the open competition for receiving higher state academic scholarship for achievements in research activities. During 2012-2016 according to the results of scientific research students received more than 45 diplomas and 62 certificates and 38 certificates of different levels, nominal scholars became 12 people.

In addition, senior students, who distinguished themselves during the internship and received job offers, may get individual training plan. The University website has a section on employment, presented the list of vacancies. Employment data are presented in table 8.

The faculty organized system of assistance in employment of graduates, which begins with senior courses is carried out until clearance of the graduate for a particular job. With this purpose, meetings of graduates with the heads of agricultural holdings, industries and enterprises of the North Caucasian region of the Russian Federation. For example, in the framework of cooperation between the Stavropol State Agrarian University with the Ministry of natural resources and environmental protection of the Stavropol Region on 15-25 November 2016 at the faculty of ecology and landscape architecture was held a series of public lectures by leading representatives of the professions for the future specialists-ecologists.

### Conclusions on standard 3: Strengths:

- 1. High status of education obtained at the faculty, including core subjects in regional communities and a significant number of loyal potential consumers.
- 2. The intensity of the educational environment of the faculty, due to the degree of its saturation conditions, influences and possibilities, as well as concentration of their manifestation.

#### **Areas for improvement:**

- 1. Improving of international mobility of students, undergraduates, graduate students: increase number of students participating in international conferences, competitions and projects.
- 2. Improvement of career guidance work at the faculty with the aim of attracting applicants with a higher level of initial training, an increase in the number of Olympiads for schoolchildren.
- 3. The preservation and expansion of diverse forms of further education students.

### 2.4. Standard 4. Enrollment, support academic achievement and graduation of students

To attract to the University the different types of potential applicants there is an active study of the Russian experience on organization and improvement of a career guidance work.

To ensure a competitive level of all categories of students at the University and the faculty conducts the following vocational activities: meetings with students, presentations at meetings with parents, meetings with teachers, round tables, performances of propaganda teams, lectures, presentations, questioning, guided tours to the University and enterprises, organization of games and competitions.

Career guidance work covers schools and colleges in the city of Stavropol, Blagodarnensky, Kirovsky, Novoaleksandrovsky, Sovietsky, Novoselytsky Districts.

Special attention was paid to the geographic expansion of career guidance events: all the districts of the Stavropol region, the individual districts of the Krasnodar and Rostov region, cities of Stavropol region.

Before the career guidance work of the current year were compared with data from the survey of applicants with the number received by the faculty and their comparison with the results of the survey of first-year students. The results of the survey of freshmen this year showed that 62 % visited the University Open Days. A great influence on the choice of the faculty and areas of training provided parents information on the University website and social networks, participation in the meeting or the Olympiad for student production brigades.

The traditional form of attracting students is a gathering of student production brigades (SPB) (the contests "Ecology", "Landscape designer", "Forester"), which are actively attended by the faculty members.

For the improvement of information and career guidance work for the formation of a contingent of students in areas of training in the sociological study.

To popularize the scientific and technical creativity of youth and vocational guidance, and in cooperation with the Junior Academy of Sciences of the Stavropol region, which holds on the faculty the finals of the district competition "Step into the future" in section "Environmentalist" conduct classes on the basis of laboratories of the faculty.

The most effective is targeting work with graduates. This means organization practices, master classes for students. For example, in 2016, the Department of ecology and landscape construction in cooperation with

the Regional centre of ecology, lore study and tourism held a miniconference and master class, which involve students of 7-11 grades from districts of the Stavropol territory.

Information about ongoing areas of training posted on the University website (<a href="http://www.stgau.ru">http://www.stgau.ru</a>).

The rules and procedure of admission (transfer) students from other educational institutions is carried out on the basis of the Regulations on transfer, deductions and recovery of students of the Stavropol State Agrarian University, as well as on the basis of the Rules of admission of applicants of the Stavropol GAU for the 2016/2017 academic year and admission to the Master's Degree program of the Stavropol State Agricultural University for the 2016/2017 academic year posted on the University website (http://www.stgau.ru).

In accordance with the Charter of the University monthly all the faculties hold an interim certification of students of all specialties on a three-point scale (2, 1, 0). In the evaluation sheet also reflects the number of scores accumulated in the discipline for the appraisal period. Certification is carried out by all subjects of the curriculum, the results are recorded in current tests and examinations. Students failing 3 or more subjects, missed classes for valid reason have to attend the Educational Committee and the Dean accepts administrative measures (reprimand, severe reprimand by the faculty and University, letter and invitation to parents, recommendations for expulsion).

Monitoring the quality of education at the level of Dean of faculty is carried out in the following areas:

- Systematic analysis of information about the attendance and progress of students is carried out through the Educational Commission, group, course, faculty. Monthly assessment of students and the work of the Educational Commission shall be retained in the Dean's office. Information about the attendance and progress of students is communicated to parents, students, tutors and faculty.
- Analysis of academic sessions, taking into account students' performance. The results of the sessions are analyzed at the meetings of the Educational Committee of the group, course, faculty and stored in the Dean's office.
- Analysis of the work of a department on organization of self-study work of students. In work programs, educational-methodical complexes of disciplines of the obligatory questions for self-study. Control of self-study work is carried out at control points, in accordance with performance of laboratory and practical lessons.
- Organization of work of the heads of the groups to monitor attendance of lectures and practical classes. Heads of groups have journals in which daily make a mark on the number of missing hours. Weekly data on gaps noted in the journal for "Students' attendance", which is located in the Dean's office.
- Analysis of students' attendance of classes by the Dean's office staff. The methodist of Dean's office selectively monitors students' attendance.

Department of the faculty monitor the quality of student learning and determine ways of its further improvement by working in the following areas:

- Current test control of knowledge. Control of knowledge is carried out on practical and laboratory classes in the form of oral questioning, colloquium, seminar. Based on the current control of knowledge, each teacher monthly certificate students. In accordance with the criteria of the score-rating assessment of students on the FSES HE the final grade for the discipline can be given by the amount of points accrued.
- Self-study work of students is regulated by methodical instructions. Control of self-study work of students is conducted by teachers according to the working program of disciplines.
- Monitoring the development of practical skills is carried out in practical classes, educational and industrial practice.

One of the areas of practical training of students is the participation in international programs. For example, over the past 3 years, the four students-ecologists (Tovkan A., Zgirko A., Soloviev R., Kim Y.) had professional training in Germany under the program APOLLO.

For support of talented youth at the University are awarded a University Grant and Award Academic Council of the University for young scientists in the field of science and innovation, starting in 2010. The funds can be used for the purchase of laboratory equipment, software, or publications of results of intellectual activity.

For successes in educational, scientific, sports and public life of the University students of the faculty are marked with nominal scholarships.

Final qualifying works of students are practice-oriented in nature. The results of scientific-research work of students are used to perform final qualification works (bachelor's works, master's theses).

State Final Attestation is carried out at the faculty in two stages. In the first phase students take final comprehensive qualifying examination in the specialty. The second stage is in the form of the protection of final qualifying work. The composition of the state examination Commission includes 50% of the production of the profile directions of preparation with work experience not less than 3-5 years.

### Conclusions on Standard 4: Strengths:

- 1. The University has the system of supporting of academic achievement of students.
- 2. Through the participation of University employees in the systematic career guidance work targeted selection of applicants is conducted.
- 3. Promotion of educational programs on the Internet, through the media.

#### **Areas for improvement:**

- 1. To increase the number of graduate qualification works, made at the request of enterprises
- 2. The involvement of students and graduates of technical schools in student events and conferences

3. Maintaining and developing of partnership, providing an international perspective.

#### 2.5. Standard 5. The teaching staff

The implementation of educational programs in areas of training 05.03.06 Ecology and ecosystem exploitation (profile - "ecosystem exploitation"); 05.04.06 Ecology and ecosystem exploitation (Master's programs "Agroecological monitoring", "Innovative technologies in the field of energy conservation and environmental control"); 05.06.01 Earth Sciences (profile "Ecology (by industries)); and retraining programs "Environmental protection and ecological safety of production" are provided with scientific and pedagogical staff, having basic education, corresponding to the profile of discipline and a degree or experience in relevant professional field and systematically engaged in scientific and methodical activities.

University Personnel policy is entirely consistent with the strategy and objectives in the field of quality of graduates training. This is evidents as the qualified approach in the recruitment and progression of teachers in career. The procedure for admission faculty employees for work is regulated by the Order of the Ministry of Education of the Russian Federation on November 26, 2002 Nº 4114 and the Regulations on the procedure for the replacement of posts of scientific and teaching staff in higher education of the Russian Federation.

Graduate Departments on educational programs of the Cluster are:

- Department of Ecology and landscape construction;
- Department of Agricultural Chemistry and Plant Physiology;
- Department of Soil Science named after V. I. Tyulpanov.

The following indices are allocated by the graduating Department of Ecology and landscape construction:

- staffing level 100%;
- qualitative composition of the teaching staff: the proportion of Doctors 23.1%, Candidates of sciences 61,5%; Associate professors (in rank) 46.1%; associate professors (ex officio) 53.8%; Professors (in rank) 7.7%; Professors (ex officio) 23.1%.
- age structure of teaching staff: the average age of staff of the department 44 years, teaching staff of retirement age 1 person;
- the number of full-time teaching staff 10 people; number of external part 3 persons.
- the number of full-time teaching staff of faculty with science degrees and / or rank in the age of 35: 1 person;
- The number of full-time teaching staff of faculty with a degree of Doctor of Science and / or the rank of Professor in the age of 50 1 pers.
- Number of teachers enrolled in postgraduate or doctoral studies: 7.7%.
- Basic education of teachers is fully consistent with the profile of the teaching subjects.

In the Graduating Department of Agricultural Chemistry and Plant Physiology are identified the following indicators:

- Staffing level - 100%;

- Qualitative composition of the teaching staff: the proportion of Doctors 23.5%, Candidates of sciences 64,7%; Associate professors (in rank) 35.3%; Associate professors (ex officio) 11.8%; Professors (in rank) 23.5%; Professors (ex officio) 23.5%.
- Age structure of teaching staff: the average age of teaching staff of the Department is 43, teaching staff of retirement age - 5 people;
- The number of full-time teaching staff 14 people; number of external part 3 persons.
- The number of full-time teaching staff of faculty with Science degrees and / or rank at the age of 35 years: 6 people;
- The number of full-time teaching staff of faculty with a degree of Doctor of Science and / or the rank of professor in the age of 50 no.
- Proportion of teachers who have defended in the past 5 years doctoral and candidate dissertations: 23.5%.
- Number of teachers enrolled in postgraduate or doctoral studies: 5.9%.
- Basic education of teachers is fully consistent with the profile of the teaching subjects.

In the Department of Soil Science named after V. I. Tyulpanov are identified the following indicators:

- Staffing level 100%:
- Qualitative composition of the teaching staff: the proportion of Doctors 12.5%, Candidates of sciences 87,5%; Associate professors (in rank) 50%; Associate professors (ex officio) 75%; Professors (in rank) 12.5%; Professors (ex officio) 0%.
- Age structure of teaching staff: the average age of staff of the department is 47 years, teaching staff of retirement age 1 person;
- The number of full-time teaching staff of faculty 8 people; number of external teaching staff -0 people.
- The number of full-time teaching staff of faculty with Science degrees and / or rank at the age of 35 years: 2;
- The number of full-time teaching staff of faculty with a degree of Doctor of Science and / or the rank of Professor in the age of 50 0.
- Proportion of teachers who have defended in the past 5 years doctoral or candidate dissertations: 12.5%.
- Number of teachers enrolled in postgraduate or doctoral studies: 0%.
- Basic education of teachers is fully consistent with the profile of the teaching subjects.

Teaching staff of graduating departments held regular training at intervals not less than 1 time in 3 years, but this periodicity is conditional option and in fact teaching staff of departments involved in these programs more often. Retraining geography includes major Russian and international educational centers. The data are given in the Annex.

In all departments of the faculty there is active work on the preparation and publication of educational literature, which reflects the results of scientific research.

The quality of graduates is directly depending on the application in the educational process knowledge, acquired by teachers in the process of scientific activity.

On graduate departments there are 4 academic school (direction), the representatives of which carry out scientific research in the field of environmental protection and rational land-use management:

- Environmental monitoring of natural and anthropogenically transformed ecosystems (head PhD, assoc. prof. Mandra Yu.A.);
- The study of composition and chemical and physical properties of natural mineral and fresh drinking water and their effects on biological organisms (head - Prof. Kornilov N. I., Doctor of Agriculture);
- Theoretical and technological bases of biogeochemical fluxes of substances in agricultural landscapes (heads - Professor, Ageev V.V. Doctor of Agriculture, Professor, Esaulkov A.N. Doctor of Agriculture);
- Soil formation and evolution of soils (head Professor, Tskhovrebov V.S. Doctor of Agriculture).

Scientific research is conducted on the basis of innovation units of the university:

- Environmental monitoring laboratory;
- Agrochemical analysis laboratory;
- Soils monitoring laboratory.

These laboratories are equipped with modern technologies, instrument base allows you to perform research at a high level.

Subjects of state budgetary and contractual R & D over the past 5 years in the direction of "Ecology and ecosystem exploitation" is presented in the Appendix. Basic research conducted at the Faculty not only in the framework of dissertation research, but also through the involvement of the budget in the framework of public contracts with the Ministry of Agriculture of Stavropol Territory, the Ministry of Natural Resources and Environmental Protection of the Stavropol Territory, which contributes significantly to the development of the region.

To enhance the activity of raising funds for R & D staff of the faculty participate in various competitions and grants.

During the reporting period, employees of graduating departments have received 6 grants of Stavropol State Agrarian University (Sigida M.S., Salenko E.A., Aysanov T.S., Gurueva A.Yu., Mandra Yu.A., Nebogina Yu.Yu.). Funding from the Foundation for Assistance to Small Innovative Enterprises in Science and Technology have received the 5 employees of specialized departments for UMNIK program (Kalugin D.V., Mandra Yu.A., Sedykh E.A., Salenko E.A., Ozheredova A.Yu.), and 2 team - for the program START (head Kornilov N.I., Department of ecology and landscape construction, 2011; head Esaulkov A.N., Department of Agricultural Chemistry and plant physiology). In 2015, an assistant professor of Ecology and landscape construction Department Mandra Yu.A. received a grant of Potanin Foundation in the amount of 500 thous. rub.

An important area is international cooperation. Employees of faculty participate in the implementation of international grant programs as Tempus Net Water «Network of university programs for training of masters in the field of water management technology" (Italy); Tempus

Rudeco «Supplementary vocational education in the field of rural development and ecology" (Germany); Tempus Greenma «Network of university programs for training of masters in the field of energy conservation and environmental control" (Italy); Erasmas + SARUD «Sustainable development of agriculture and rural areas" (Germany). This approach allows us to learn from the advanced experience of foreign countries in the organization of educational, scientific and production activities.

Among the practical results of the use of innovative equipment of Faculty laboratories include the development and reception of security documents. So for 5 years on the faculty there were received 32 certificates of authorship and 9 patents for inventions and utility models. The programs designed for computers have been tested in the educational process at the international exhibitions and innovative interiors. Department for five years actively participated in the following exhibitions: Biotechnological Exhibition-Fair "RosBioTech"; St. Petersburg Technical Fair, "Best innovative project and the best scientific and technical development of the year» «High Tech»; The exhibition "Innovation of the Year" and other.

Research work carried out by scientists of the faculty, allows to participate in publishing, teaching, study guides, monographs, research papers are developed. Faculty maintains a high level of scientific and methodological developments: in the period from 2012 to 2016 there were published 12 monographs, 94 articles in journals from the list of SCADT, about 800 articles in various publications, including the central and foreign press, 25 articles Scopus, 2 article - Web of Science.

In order to improve the educational process in areas of training Cluster "Earth Science" to give lectures and conduct master classes are regularly invited representatives of the production: Korovin A.A. - Ph.D., head of environmental department of the analysis of the medium and long-term programs and plans of the Ministry of Natural Resources and Environmental Protection of the Stavropol Territory (external); Lysenko I.O. - Ph.D., chief specialist of the Department of Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing in the North Caucasus Federal District (external), Podkolzin A.I. - Ph.D., Director of FSI SCAS "Stavropol" (external); Kravchenko N.A. - Head of the State Organization "AHM North Caucasus" and others.

In 2015, as part of the Tempus GreenMa international program for undergraduates of direction "Ecology and Ecosystem Exploitation" the cycle of lectures was organized by foreign partners: Grzegorz Kubica (Silesian University of Technology, Poland); Manuel Gasco and Ohana Driha (University of Alicante, Spain); Pietro Zunino and Vincenzo Bianco (University of Genoa, Italy).

The University adopted by an effective procedure of employment of employees. The applicant, before signing the employment contract, meets with the University Charter, collective agreements, internal regulations, the Regulation on the processing and protection of personal data of workers and students, the Regulations on wages, policies and objectives in the field of quality, job descriptions and other local acts directly work-

related. After that the applicant for the post undergo the election process, based on which he can be recommended to conclude an employment contract for a definite period.

The University has a system of score-rating assessment of teaching staff activity that creates a competitive environment and activates the channels of vertical mobility of personnel. Position of the teacher is the result of the sum of the individual scores. Payment of incentive bonuses (premiums) depends on the position in the rankings: the higher the position, the greater the share of allowances in the allocation of the bonus pool.

Rating takes into account during making personnel decisions and moral encouragement of employees. Rating allows each employee to determine the balance between the needs of personal and professional growth and strategic priorities of the University. This balance is reflected in the future plans of the teachers (examples of creative ideas will be shown on the site), and the achievement of targets for specific dates. Rating of teacher is the basis for determining the duration of the employment contract is entered into the competitive selection procedure.

The following forms and methods of support of scientific achievements of the faculty are implemented at the University:

- The establishment of an individual salary increments for teachers based on the results of scientific work;
  - Entry on the Board of the University Honor;
- The allocation of additional funds for the purchase of office equipment, scientific equipment, travel expenses, the payment of participation in congresses and conferences, publications and dissertations abstracts payment,
- Awarding of certificate of honour, submission to the government awards, and honorary title of Honored worker.

The University activity for the improvement of personnel policy is also based on the results of the feedback from the employees - through a system of public opinion polls. Annually, there are questionnaires on a wide range of issues related to employee job satisfaction at the University. Survey results are communicated to the administration of the University and faculties and distributed to employees.

According to surveys of teachers, it is put into regular practice the peer review procedure of Attestation Commission, self-education, the choice of the individual incentives of professional or personal growth, establishing the terms of the employment contract between the University and the employee. The survey results are the basis for various kinds of decisions - for example, for the appointment of employees to the new position, for the modernization of material and technical base, to create an internal network, renovation fund of scientific library and others.

### Conclusions to the standard 5: Strengths:

- 1. Increase in diplomaed teachers as a result of the functioning of the system of employment and career growth.
  - 2. High activity and scientific potential of the teaching staff.

3. Involvement to the educational process the representatives of production and foreign partners.

#### **Areas for improvement:**

- 1. Revitalization to increase the number of publications and citations of teaching staff both in Russian and foreign scientific journals indexed in the database Web of Science, Scopus.
- 2. Increase the language training of teaching staff to use foreign experience in training of new technologies.

### 2.6. Standard 6. Educational resources and student support system

For the organization of the educational process, bachelors, masters, graduate students are adequately provided with material and technical base. Classrooms located on the territory of the main building of the University at the following addresses: Zootechnichesky court, 12; Mira Str., 304; Pushkina Str. 15.

The University has sufficient material and technical base, providing the performance of all kinds of disciplinary and interdisciplinary training, laboratory, practical and research work of students, provided by the educational plan of the university, and corresponds to sanitary and fire regulations and norms.

Special rooms are classrooms for training lecture-type classes, seminar-type classes, course design (implementation of term papers), group and individual counseling, monitoring and interim assessment, as well as space for independent work and storage rooms and preventive maintenance training equipment. Special rooms are equipped with specialized furniture and technical equipment of training, employees for presentation of educational information to a large audience.

To carry out activities such as lecture, there are offered a demonstration of equipment sets and training aids that provide themed illustration, exemplary programs relevant disciplines (modules), a working curricula of disciplines (modules).

List of logistics required to implement the master's program includes specialized laboratories. Specific requirements for logistical and educational provision are defined in the basic educational programs.

Rooms for independent work of students equipped with computers, with the access to the "Internet" network and electronic information and educational environment of the organization.

The organization is provided with the necessary set of licensed software (composition is defined in the work programs of disciplines (modules) and subject to annual renewal).

The faculty has profile innovative laboratory:

1. Environmental monitoring (equipped with laboratory equipment: laboratory conductivity meter FE30-Kit, pH meter "Ecotest-2000I", precision scales RV 512, Adventurer Pro EN series, 510 gr., RV 214 scales, an oven / sterilizer E28, redistiller BS, Spectrophotometer Unicom 1200/1201, Fourier spectrometer infrared FSM 1202, titration installation, voltammetric analyzer ABC-1.1, conductometric Multitest analyzer KSL-

111, analyzer Multitest IPL-513, COD electrochemical analyzer "Expert-001-COD", the spectra library for infrared Fourier spectrophotometer, light meter "TKA-PKM" muffle furnace EKPS-V-10 M (1100 ° C), ASpecquantitative analyzer IR spectra, a multivariate analysis method of least squares).

- 2. Agrochemical analysis (equipped with equipment such as a polarimeter, atomic absorption spectrometer with flame atomization novAA 300, polarimeter POLAX-2L, meter SevenEasy pH, flame photometer PFA-378, a mill for grinding soil samples "Pulverisette 2", a mill for grinding vegetable samples A 11 basic, muffle furnace SNOL 6/11, distiller GFL 2008, laboratory drying cabinet Binder, photoelectrocolorimeter Unico 1200, ionomer I-160 M, precision scales RV 313, technical scales RV 512, water baths GFL with "ring" covers );
- 3. Soil monitoring (equipped with equipment such as a spectrophotometer "Specola-11", flame photometer PFM, laboratory ionomer I-160MI, distiller, liquid Analyzer Expert-001, moisture analyzer, technical scales RV 512, atomic absorption spectrometer ZEEnit-700).

Laboratory allows to train ecologists. On the basis of laboratory, the students successfully complete the training and pre-diploma practice, undergraduates and graduate students carry out research work.

Laboratory base allows to organize research work of teachers and students. The result of the research work is the publication of monographs, participation in conferences, competitions, exhibitions. For modernization and laboratory equipment there were spent more than 6 mill. rubles.

Practical training is one of the important moments in the preparation of the expert. The basis of educational and industrial practice is educational and experimental farm of the University, which now has more than 9,000 hectares of land, including 3,000 hectares of arable land.

In the conditions of teaching and experimental farm on the basis of eight stationars carried out research within the framework of the six schools. Long stationary experience (37 years) of the Department of Agricultural Chemistry and agriculture included in the register of geographical network of experiments with fertilizers and is the property of the Russian agricultural science (certificate of RAAS №069 from 02.01.2006).

In 2009 there was built a high-tech greenhouse complex, which uses Dutch technology of growing vegetables. Unique greenhouse area of 650 m2 equipped with an automated control system, including microclimate and plant nutrition systems, drip irrigation, fertilizing plants with carbon dioxide, supplementary lighting.

On the basis of educational and experimental farm and a greenhouse complex, students do practical work and are engaged in research work.

To implement the program, if necessary, we can also involve the laboratory of other SSAU departments.

The graduating departments are working closely with NPE "Management of protected areas of the Stavropol Territory", SE "Stavropol Regional Center for Hydrometeorology and Environmental Monitoring ",

using their material basis for training in the disciplines of "Nature conservation and preservation work ", "Environmental Monitoring ".

Software and information support of the educational process is organized in view of the fact that during training the student must master the skills of using information technologies, which carry out the development of course projects, settlement and graphic works, preparation of final qualifying work at a high level, learn to program, manipulate the results of experiments, to carry out the collection of information for independent research.

At the University a great attention is paid to the licensing of software used in the learning process, and in other areas of the university.

Scientific Library of Stavropol State Agrarian University is equipped with the necessary telecommunications equipment, communications equipment, electronic equipment, has free access to the Internet, using Wi-Fi technology. For self-study of students there are 7 reading halls, 750 seats (including dormitories library), there are 93 workstations with access to the "Internet" network and e-learning environment of the University, 62 units of copying, duplicating equipment.

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The library fund is (on 01/01/2017) 2,337,664 copies of print and electronic publications, including 815,305 copies of educational and methodical literature on the basic educational programs.

Each student is provided with individual unlimited access from anywhere in the network "Internet" to the resources of electronic library systems: EBS "Lan"; EBS Znanium.com; EBS "Stavropol State Agrarian University."

Electronic Library System of Stavropol State Agrarian University has an extensive collection of Russian and foreign publications, developed reference aids, provides users access to the Russian and international databases of scientific and educational resources. The research library formed the databases of own generation: electronic catalog, database "Works of scientists of Stavropol State Agrarian University," database "Publications about Stavropol State Agrarian University," database

"Dissertations and abstracts," database "Scientific articles," database "Rare book" and others. The database "Works of scientists of Stavropol State Agrarian University" is formed from the educational and scientific publications of the University staff on the basis of a licensing agreement and contains more than 21.5 thousand bibliographic records and more than 6.5 thousand full-text electronic resources. The electronic catalog contains more than 440 thousand records. The whole complex of services and resources of the Electronic library system of Stavropol State Agrarian located the portal in of the scientific http://bibl.stgau.ru/. The system of a single search window was designed that integrates a search through internal and external electronic resources. Access to e-library system of the University users can get from anywhere in the world where there is Internet. Links to EBS of SSAU are posted on the University website, personal webpages of teachers and students.

The fund of additional literature includes official, reference and bibliographic and periodicals. The fund of periodicals contains more than 760 titles of printed periodicals and more than 1.5 thousand names of Russian and international electronic periodicals.

The fund of periodicals contains, inter alia, the following editions on the profile of the main educational program: Ecology, Ecology of production, Use and protection of natural resources, Geo-ecology, Engineering geology, Hydrogeology; Problems of agricultural chemistry and ecology.

Electronic and printed publications of the Scientific library provide educational literature on all the disciplines taught at the university in accordance with the requirements of the Federal State Educational Standard.

The users have access to modern professional databases: resources of the Digital Dissertation Library of the Russian State Library, the Scientific Electronic Library eLibrary, international databases Scopus and Web of Science.

The system of links to educational and scientific electronic resources has been designed, the access to the electronic catalogs of leading libraries and universities in the world, links to international collection of open access journals (Open access): Science Direct, Springer, Taylor & Francis, Oxford University Press, Thomson Reuters, EBSCO, JSTOR, ProQuest, DOAJ (Directory of Open Access Journals), and others.

Automation of library processes from the order of a book to its giving out to the reader is carried out using an automated library information system (ABIS) MARK - SQL (version 1.14). Card Index of book providing of the educational process is formed in the ABIS Mega-Pro. Students with disabilities are provided with work places with installed software «Jaws for Windows 15.0 Pro» which allows to convert electronic and print publications into a voice file. An agreement on cooperation and joint activities (from 25.06.2012) was signed with Stavropol Regional Library for the Blind and Visually Impaired named after Mayakovsky GBUK.

If necessary, Stavropol SAU creates special conditions for higher education on educational programs to teach students with disabilities.

Special conditions for higher education on educational programs to teach students with disabilities refer to the learning environment including the use of special education programs and methods of training and education, special textbooks, manuals and teaching materials, special technical training means of the collective and individual use, the provision of tutor services who provides students with the necessary technical assistance, conducting group and individual rehabilitative training, access to the buildings of organizations, and other conditions, without which it is impossible or difficult to master educational programs for students with disabilities.

Education of students with disabilities and disabled can be arranged both together with other students and in separate groups.

Getting affordable and quality higher education for persons with disabilities can be achieved through the establishment in the university a complex of necessary learning conditions for this category of students.

Creating the conditions for visiting classes:

- 1. Availability of 1-2 special places in the classrooms for persons with disabilities. In general, in a standard audience the first tables in the row by the window and in the middle row must be foreseen for learners with impaired vision and hearing, and 1-2 first tables in the row by the doorway for learners traveling in a wheelchair.
- 2. Availability of equipped sanitary facilities. In particular, on the second floor there is a toilet cubicle, available for students with limited mobility.
- 3. Availability of information about the schedule in places accessible to blind or visually impaired students and in an adapted form (taking into account their special needs).
- 4. The presence of tutors (among student volunteers), providing the necessary assistance to the learner.

Material and technical support of the educational process

- 1. For disabled and people with hearing impairments:
- The presence of sound-amplifying equipment, multi-media and other technical means of reception and transmission of information in accessible formats;
- A classroom, in which students with hearing impairment are trained, will be equipped with computers, audio equipment (acoustic amplifier and speakers), video equipment (LCD projector, TV), electronic board, multimedia system; videos also play a special role in teaching the hearing impaired.
  - 2. For students with visual impairments:
- The availability of Braille computer equipment, electronic magnifiers, video magnifiers, programs for non-visual access to the information, software-speech synthesizers and other technical means of reception and transmission of educational information in forms accessible to this category of students;
- In a classroom it should be possible to view distant objects (text on the blackboard, slide on the screen) using video magnifiers for remote viewing.
  - 3. For students with disorders of the musculoskeletal system:

- The availability of computer equipment with special software, adapted for disabled, alternative data input devices and other technical means of reception and transmission of educational information in the forms available to students;
- Use of special features of the Windows operating system, such as the on-screen keyboard, with which you can enter text, Windows Setup actions when typing with the keyboard or mouse.

In addition, there will be provided the release of printed materials in alternate formats (large font or audio files), as well as the possibility of free provision of special textbooks, manuals and other training materials.

Educational and methodological support of the educational process

- 1. Inclusion in the variable part of the curriculum (block "Elective subjects") of specialized adaptation disciplines for the purpose of further individualized correction of educational and communicative skills, professional and social adaptation. A set of these specific disciplines is determined based on the specific situation and individual needs of students with disabilities.
- 2. The educational process should widely use socially active and reflective learning techniques, socio-cultural rehabilitation technology to assist in the establishment of full-fledged interpersonal relationships with other students, creating a comfortable psychological climate in the student group.
- 3. Provision of students with disabilities with print and electronic educational resources in the forms adapted to the problems of their health.

Selection and development of training materials should take into account provision of this material in various forms so that hearing impaired people receive information visually, visually impaired - auditory (e.g., using a speech synthesizer program).

- 4. For completing practices by disabled persons, if necessary, there should be created special work places according to the nature of health problems and taking into account the professional activity.
- 5. For the ongoing monitoring of progress and intermediate attestation there were established funds of evaluation means adapted for disabled persons and allowing to assess the level of formation of competences stated in the educational program.

The form of the current and final attestation for students with disabilities is set by the teacher to suit the individual psychophysical characteristics (orally, written on paper, written on the computer, in the form of testing, etc.). If necessary, a student with a disability is provided additional time to get ready to answer during a test or exam.

6. Students with disabilities can be taught on an individual curriculum in a timely manner, taking into account the characteristics and educational needs of the individual learner. Individual training schedule provides different options for training: in the university (in an academic group or individually), at home using distance learning technologies.

The use of e-learning and distance learning technologies in the educational process

- 1. Adaptation of the official websites of the organizations in the "Internet" network, taking into account the special needs of disabled persons with impaired vision with bringing them to the international standard of accessibility of Web content and Web services.
- 2. The use of distance learning which provides the possibility of communication not only with the teacher but also with other students, and cooperation in the process of cognitive activity.
- 3. Systematic organization of online webinars that can be used to conduct virtual lectures to engage all participants in distance learning, seminars, speeches, presentations of students, protection of work performed, training and others.

Social and upbringing work

- 1. Teachers and supervisors of groups: control over class attendance by students with disabilities, assistance in the organization of independent work in case of illness, the organization of individual consultations for students missing classes for a long time, control of attestations, taking tests, examinations, the elimination of academic debts. Conducting training activities contributing to the unity of the group, aimed at collaboration, discussion, group decision.
- 2. Creation at the faculty and profiling department of a tolerant sociocultural environment necessary for the formation of the civil, legal and professional position of complicity, the willingness of all team members to communicate and cooperate, to the ability to tolerantly perceive social, personal and cultural differences.
- 3. The development of the volunteer movement, which not only promotes the socialization of people with disabilities, but also promotes the rest of the students towards them developing the integration processes in the youth environment.

Features of the organization of the educational process for persons with disabilities at the University are regulated and governed by the Regulations on the organization of the educational process for persons with disabilities in Stavropol State Agrarian University.

Upbringing work at the Faculty is conducted in accordance with the concept adopted by the University, which defines: the goals, objectives and principles; the structure of the educational process; the expected results of the implementation of the concept; regulation and assessment of educational activity.

The faculty makes an annual plan of educational and career guidance work, the implementation of which is discussed at the meeting of the Academic Council of the Faculty.

Curators are in direct contact with student groups. They are appointed by the Dean of the Faculty on the proposal of the graduating department from among the most experienced and qualified teachers. Their work is determined by the plan considered at a meeting of the graduating department and approved by its head. Information on the activities is recorded in diaries of curators. At the end of each study year, the curators report on the meeting of the department. The upbringing activity of the department is conducted in the following areas.

- 1. Preventive work. Students who have a large number of nonattendance and unsatisfactory current attestation are invited to the meeting of the department where they are explained what consequences such attitude to the educational process can have. Meetings with problem academic groups are practiced. In exceptional cases, personal meetings of the Head of the graduating department and teachers with parents of underachieving students are organized.
- 2. Upbringing work. It is carried out in the course of personal meetings of teachers of the department and head of the department with groups or individually with the students in the form of conversations, suggestions for the formation of behavior, and so on. An effective method of influence is to bring elements of civil, legal, patriotic, moral education in the disciplines of teaching process.
- 3. Formation of traditions. The University annually holds events such as "Dedication to freshmen", "Student Day", "Day of the specialty", Month of Delinquency Prevention, Health Week, a competition of wall newspapers and so forth.
- 4. Participation in cultural and sporting events. Each year, the university holds a review competition "Young talents", "Student Spring," theme nights "Christmas party", Valentine's Day, Shrovetide festivities.
- 5. Participation in social events. Students actively participate in charity events and concerts organized by the city administration and other activities.

Social support for students is carried out in the following directions:

- Health care (systemic medical-health work for the prevention of diseases and medical examination of students and staff);
- Organization of housing and living conditions (University has 5 dormitories. Each dormitory is equipped with sleeping quarters, bathroom and washroom, bathroom consumer services, leisure facilities. All rooms are electrified, equipped with central water supply, sewerage and heating. Security works in the hostel round the clock, fire alarm is installed in all rooms. All dormitories are equipped with video surveillance systems);
- Catering (Canteens and snack bars are equipped with modern technology and refrigeration equipment. The menu includes a variety of hot first and second courses, set meals.);
- Sports work (The University has a sports complex which includes sports grounds for playing football, volleyball, basketball, a fitness hall, a gym, sections in various fields of sport.)

The university regularly monitors students' opinion:

- Surveying students on the conditions and the organization of educational process (once per year);
- Meeting of the students with the rector and the university administration (once per semester);
  - Business hours of the Faculty Dean, Vice-Rectors for directions.

Based on the survey of students, adjustments are made in the educational process.

## Conclusions on standard 6: Strengths:

- 1. The educational process is conducted in modern laboratories, classrooms equipped in compliance with all the requirements.
- 2. There is an efficient system of work with electronic library resources.

#### **Areas for improvement:**

- 1. Further improvements and updating of the material and technical base, software for educational and research processes in line with global trends in education.
- 2. To ensure the further development and updating of the information system, including the publication of more detailed information about ongoing educational programs in the English version.

## 2.7. Standard 7. Collection, analysis and use of information for management of education

To improve and update the educational programs the university is constantly conducting sociological research among students, teachers and representatives of production. The monitoring results are reported to the personnel at the weekly University administration meetings, meetings of dean's offices and departments, meetings of the Academic Council of the University and those of faculties, at the meetings of educational committees, meetings of students with the administration of the University and faculties, at the meetings of the educational committees, parent-teacher conferences.

Information about the educational programs of the Faculty is published on the official website of the University as well as in specialized publications of the University for school leavers. This information is constantly updated. Large amount of information about the university and the faculty is spread by the department of information technology and the press center of SSAU. The main mission of this control is to form a common information space around the university, a positive image of the university, its positioning as a competitive educational institution in the world system of education with advanced scientific and innovative technologies, which is able to train highly qualified specialists for work both in the Southern and North Caucasian Federal Districts and for the global economy.

Achievements of the University students and teachers in general are widely reported in the news of the University and faculties on the university site (http://stgau.ru), videos about various events in the life of the University and its students, which are then posted on the university website and on YouTube, on the information plasma panels. During 2015 the total number of views of the University materials amounted to more than 30,000.

The University established its own system of students and alumni database, called AIS contingent. It tracks a student on more than 120 parameters: name, photo, address, information about the parents, studied languages, etc. It implements features such as history of movements, attestation and score-rating assessment, mark sheets and references, the Report Wizard. In addition, there has been developed the AIS "The

calculation of training hours and staff" that allows calculation on the curriculum, taking into account the features of the educational process for the various forms of training, consideration of classroom and extracurricular load, control of compliance of educational groups with working curriculum, the ability to forecast staff and load for 3-5 years, as well as reports on loads of departments, faculty and the university as a whole.

The university established a center to promote employment of graduates which aims to promote the employment of students and graduates. Areas of it work:

- Providing jobs for both temporary and constant employment of graduates;
  - Assistance in writing resumes, advice on job search;
  - Training workshops «Technology of effective job search", etc.;
- Organization and carrying out of presentations of enterprises, companies and organizations;
- Analysis of the effectiveness of employment and demand for university graduates.

Many graduates are successful in their careers, occupy high positions in the government and commercial structures.

## Conclusions on the standard 7: Strengths:

- 1. Information on employment and demand for graduates at the University of internal resources
  - 2. A clear and systematic work on the assessment of public opinion.

#### **Areas for improvement:**

- 1. Continue the work of structural units (departments, laboratories, etc.) To fill their pages on the Internet to carry out their constant renewal and updating in order to attract all interested parties.
- 2. Attract manufacturers to participate in joint seminars, conferences, round tables, workshops and so on.

#### 2.8. Standard 8. Information to the public

One of the key factors in the successful functioning of the quality management system of Stavropol State Agrarian University is the organization of a system of feedback from internal and external customers, partners and other stakeholders. Systematically organized feedback gives identification of key areas for improvement and support processes and points of growth in the activities of the University.

Informing the public about educational programs of the Cluster 05.00.00 "Earth Sciences" takes place through various communication channels. A significant role is played by the official website of the University, located at the address: www.stgau.ru in accordance with the rules of placing on the Internet and update the information on the educational institution (approved by the RF Government Decree of April 18, 2012 Nº343.). The site contains information on the activities of the University and its structural divisions. Information resource of the University official site is formed from the public important information for

all participants in the educational process, business partners and all other interested parties in accordance with the authorized activities of the University. Horizontal navigation menus for groups of target audience is static and consists of the items: "General Information", "Structure of the University", "Science", "Student", "School leaver", "Development of agriculture", "MBA" Agribusiness "," "Professional standards "(the first line of the menu). Horizontal menu is the second line of the paragraphs: «Web-mail», «Contact», "Search", "Map of the portal." The core modules of the main page: "Official information", "Anti-corruption", "Gallery", "Hostel SSAU", "Human resources – the formula for success", "Events", "Links", "Faculty news", "News" and "Virtual tour of the University."

Each department involved in the implementation of the EP on 05.00.00 "Earth Sciences", has its page on the site. Each teacher has a personal account, which places the material on the subjects and the learning process. Actively working group of officials of Stavropol State Agrarian University in social networks where registered students, faculty, university graduates who guickly involved in the discussion of high school life. Achievements of students, university teachers in general are widely reported in the news on the website of the University and the faculties of the transmission "SU Student", videos about different events in the life of the university and the students, who then posted on the University website and on YouTube, on the information plasma screens. The life and activities of the University, the Faculty of coverage in the media newspapers "Stavropol Pravda", "Komsomolskaya Pravda", "Agrarian Stavropol Krai," "AGROSTART" magazines, "Agricultural Stavropol Krai," "Daily Agricultural Review", etc. A lot of interesting information can be found in the university newspaper, as well as booklets, brochures, leaflets.

Informing the public is held at the traditional annual Open Days of faculties and universities, meetings with alumni. Effective communication channels is a vocational guidance work being done by staff and students of faculty to students and schools in the city of Stavropol Territory area (in place of the proof). For graduates of the University we created the conditions for job search - familiarity with large organizations-employers, existing vacancies for employment, places for practical training, placement may resume on the page "Center of promoting the employment of graduates," hosted on the University website. We conducted monitoring studies on graduate employment and demand for jobs in the labor market. The results of the analysis of the employment of graduates are considered at meetings of the Academic Councils of faculties, chairs meetings. In collaboration with employers, each faculty is practicing its own specific forms of cooperation. Traditionally, the organization carried out outreach workshops on the basis of employers organizations. These classes allow every student not to get lost in a large number of graduates, and to find his employer, who will appreciate all that a student knows and can do. The employer, in turn, is able to see his potential employee among many students.

Informing the professional community is also carried out through the activities of the Stavropol branch of inter-regional resource center (SBIRRC) among the educational institutions of primary and secondary

agrarian education, operating in the North Caucasus and Southern federal districts. SBIRRC operates on the basis of the structure of the University Institute of additional professional education (IAPE). SBIRRC organizes training courses, provides consulting and methodological support institutions, which is part of an industry resource center

## Conclusions on the standard 8: Strengths:

- 1. Functions of the public information system on the results of activities of the University through online channels and media.
- 2. Placing information about employment and the demand for graduates in the University website

#### **Areas for improvement:**

- 1. Expansion of the audience of visitors to the pages of the Faculty of the University website by creating and placing them on new entries to attract students, representatives of scientific and professional communities, the local population.
- 2. Strengthening cooperation with the various professional associations and organizations on the issues of employment of graduates.

## 2.9. Standard 9. Monitoring and periodic evaluation of educational programs

Introduction updating procedure is one of the results of the Faculty of Ecology and Landscape Architecture at the practical application of the quality management system of preparation of students. This procedure is based on the results of the monitoring of the educational process (conducted by the experts of University), data actualization of training and methodological support disciplines, the results of research infrastructure and labor market analysis and review, the needs of employers.

University specialists each year are working to improve the content management system of educational programs.

Actualization of curricula is carried out in several directions.

The first of them is the actualization of the content and the distribution of types of works on the subject. The need to adjust the volume of work in the discipline is usually associated with significant changes in the content of the course, which can be caused by external (changes in the legislative framework, the active development of the subject area) or internal causes. For example, the need to reflect in educational process the results of scientific research, the accumulation of sufficient capacity for special innovative training courses. With the introduction in the educational process in the discipline of professional applications or complex software required to change the ratio of types of work. Also, a change in the distribution of types of works on the subject can influence the quality of monitoring learning outcomes and student performance.

The second direction of actualization - the analysis of the content of the educational standard for the possibility of unification of the disciplines cycles close areas of the Faculty for the purpose of inter-group lecture classes. This situation allows graduates to create interdisciplinary vision of the research problem.

EPEP for the enlarged group 05.00.00 "Earth Sciences" regulates the objectives, expected results, content, conditions and technologies of the educational field of study. EPEP includes: curriculum, working programs of academic disciplines and other materials to ensure the quality of training of students, as well as the practices of the program, training calendar schedule and training materials that accompany the implementation of programs (http://www.stgau.ru/obschinf/information/oop/).

The curriculum is reviewed annually by the new requirements in the context of the end of the academic year; it is the basis for the allocation of teaching load for the disciplines, departments, specific teachers. Workload and staff departments is reviewed and approved annually at the last meeting of the Academic Council of the University. Discussion and approval of the curriculum is preceded by meetings of educational committees with the participation of faculty responsible for the educational work of teachers of all chairs, which are considered the most important issues for the year and makes recommendations.

Each training cycle is the basic (mandatory) part and a variable (profile). Students can form individual educational path by choosing subjects variable part of the curriculum. The university component in the form of a variable component and a choice of disciplines formed from a regional perspective, the realities of the Stavropol Territory and the Northern Caucasus.

Testing is carried out to achieve the learning outcomes in the assessment of competencies of graduates of teachers, heads of production practice, the members of the state certification committee and the employer. Adjustment mechanism of learning outcomes based on the account the opinions of students, teachers and employers through questionnaires, analysis of comments on the production practice, DPA reports.

Interested parties can get acquainted with the learning outcomes set out in the operating educational programs on disciplines on the faculties of the pages on IDPO page on the University website and in the private offices of teachers

## Conclusions on the standard 9: Strengths:

1. The procedure for updating the curriculum covers all the elements of professional educational programs, and is a "starting point" for the formation of the preparation of plans of educational and methodical, personnel and logistics faculty training process for the next academic year.

#### Areas for improvement:

- 1. Strengthening the work on the actualization of educational programs with the participation of students, for example via student Quality Committee.
- 2. International accreditation program for the enlarged group 05.00.00 "Earth Sciences" (05.03.06 "Ecology and Nature Management" profile "Nature", 05.04.06 "Ecology and Nature Management" master program "Agro-ecological monitoring", "Innovative technologies in the

field of energy saving and environmental control") in the European accreditation organizations (agencies).

## 2.10. Standard 10. Periodic procedures of external quality assurance of educational programs

From time to time, in accordance with the plan they carry out an external evaluation of EPEP implemented at the University. Certificates of passing external quality evaluation of EPEP SSAU procedures, provided by national law, are: certificate of state accreditation  $N^\circ$  1754 from 17.04.2016 (http://www.stgau.ru/abiturient/general/svidetelstvo/), recognition of SSAU as effective institution in terms of monitoring the effectiveness of the educational institutions, the results of the planned site inspection management oversight and control of organizations engaged in educational activities of the Ministry of education of Russia (2016), diplomas and letters of appreciation on the part of employers and civil society organizations. Some of the quality awards, the most significant for the University since 2011:

2016, 2013, 2010 – Prize Winner of the European Quality Competition "Award in the field of excellence (EFQM «Excellence Award»);

2013 – Grand Prix of the All-Russian contest "Russian organization of high social efficiency";

2011, 2005 – Winner of the RF Government Prize in the field of quality;

2011, 2007 – International tournament winner on the quality of Central and Eastern Europe;

2010, 2005 – Winner of the Prize of the Ministry of Education and Science of the Russian Federation "Systems to ensure the quality of training";

2008 - Winner of the priority national project "Education";

2008 – Finalist of European Quality Competition "Award in the field of excellence" (EFQM «Excellence Award»);

2007 - Winner of the contest of Independent States in the field of quality.

By all accounts independent ranking Russian demand for higher education institutions, conducted by RIA "News" in 2016, we went into the lead among agricultural universities in the country. And according to the results of the annual ranking of universities, which is the Russian and international rating agency RAEX ("Expert RA") Stavropol State Agrarian University - the only agricultural university in Russia and only one of the North Caucasus Federal District high schools came in the top 100 in this prestigious national ranking.

All these and additional awards are published on the University website: http://www.stgau.ru/cuko/un-awards/

In addition, the external evaluation of the educational program is conducted by the stakeholders and employers when visiting training sessions, evaluation of the results of scientific research of students and teachers.

The University corrective activities are based on the results of external examination procedures carried out in accordance with the model

of evaluation of customer satisfaction (http://www.stgau.ru/cuko/quality-system/).

## Conclusions on the standard 10: Strengths:

- 1. Activity of the university in the organization of external independent evaluation of the quality of educational programs, procedures.
- 2. Engaging employers and stakeholders in the external evaluation of educational programs.
- 3. Develop a corrective activities based on the results of external examination procedures carried out in accordance with the model of evaluation of customer satisfaction.

#### **Areas for improvement:**

1. It is necessary to pay attention to the quality of the preparation of accounting materials (on self-report) in order to conduct an external evaluation of the quality implementation of educational programs.

#### **III CONCLUSIONS**

Cluster Development of accredited educational programs carried out in accordance with the Program of development of the University for the period 2014-2018.

Aims and objectives of the educational programs are defined, evaluated and adjusted to reflect the views of teachers, students, supervisors of enterprises and institutions and employers about the quality of training of graduates, graduates reviews. Education activities take into account the staffing requirements of the region.

The University developed, implemented, and certified quality management system (QMS). Quality Policy is discussed with the heads of various levels with the involvement of stakeholders.

Revision of the working curriculum and academic disciplines and practices programs conducted annually in accordance with the objectives and results of educational programs: updated maintenance workers training courses, teaching materials, fund evaluation tools to ensure the implementation of appropriate educational technology with the development of science, technology, information technology, economy, culture and social policy.

When forming the curriculum we take into account the consistency of the content of the disciplines, build a logical sequence of their study

Procedure for assessment of knowledge/competence of students and graduate students at the intermediate and final state certification of regulated developed and approved documents.

Control of the quality of training of students and post-graduate students is carried out during the training period. Conclusions on the quality of education are made on the results in the educational and scientific activities.

At the departments we organized the research work of students.

A rating assessment of knowledge/competence formation of students is introduced, and it operates. This system is used to encourage the

systematic work of students, evaluation of differentiation of knowledge as well as improve the objectivity and reliability of students' level of training evaluation.

The implementation of educational programs in areas of training cluster 5.3.03 "Ecology and nature"; 05.04.06 "Ecology and nature"; 05.06.01 "Earth sciences" provides a competent faculty of performing, in addition to educational, innovative research and practice. The University operates a system of rating estimation of activity of teachers, departments and faculties. Strengths of human resource potential are the availability of scientific and pedagogical schools and higher qualification training system.

The teaching staff takes part in the work of various international, national and intra conferences, seminars and exhibitions.

Educational programs in areas of training are provided by the relevant Cluster Foundation classroom, laboratories, equipment, and training and scientific innovation laboratory. All laboratories are equipped with modern equipment and instruments necessary to carry out laboratory and practical classes. Equipment and instruments are used not only in the educational process, but also in the performance of R & D, WRC bachelors, masters and PhD students of all areas of training. Also for practical training of students we used the territory of teaching and experimental farm and greenhouse-hothouse complex of SSAU. Innovative laboratory and other structural units of the University are also bases for practice, research.

In order to optimize the learning process we use multimedia classes, Internet resources, with tasks for students. Study subjects are provided with necessary electronic educational resources. For independent work of students in the disciplines of scientific and research works, performance of course and graduation papers they have the work-hours in computer rooms, laboratories, in the reading room of scientific library.

Administration of the University and faculties regularly collects information on the participation of students and teachers in conferences, contests, competitions and testing. Information on these achievements is posted on the University website and the pages of the faculties. Students and teachers have access to electronic resources.

Teachers conduct career guidance meetings with pupils and students of specialized colleges. Informing the public is held at the traditional Open Days, competitions, contests, etc..

We conduct monitoring studies on graduate employment and demand for jobs in the labor market. Information on employment and the demand for graduates can be found on the page of the Center of assistance to employment of graduates posted on the University website and in the media publications. The results of the analysis of the employment of graduates are considered at meetings of the Academic Councils of faculties, chairs meetings.

#### **ACHIEVEMENTS OF THE CLUSTER OF EDUCATIONAL PROGRAMMES**

On the directions "Ecology and Natural Resource Management (05.03.06, 05.04.06)," Earth Sciences "(05.06.01), professional retraining program "Environmental protection and ecological safety of production".

#### 1. The quality of the educational program implementation

Identification of the quality of training of students is carried out based on the evaluation of admission requirements and further analysis, the results of knowledge control in the disciplines of all the blocks of the curriculum, intermediate and final state attestation.

Analysis of the academic achievement of students of the Faculty for 5 years showed that the absolute performance on average ranged from 87.5 to 100%, the quality of knowledge - from 83 to 100%.

#### 2. Ensuring the up-to-date content of education

Providing the up-to-date content is in accordance with the requirements of educational standards and the needs of stakeholders. Therefore, the University continuously conducts various questionnaires and surveys of employers, students, parents and graduates of schools and technical colleges. Survey results are translated into concrete solutions to improve the conditions of students living in dormitories, training and implementation of the educational process.

During the last 2 years there were qualitative changes in the site of the University, webpages of faculties, divisions. This provides easy access to useful information about foreign training, scholarship programs, research projects, achievements of students and staff. Anyone can read the news about the lives of students and staff of the faculties and the University.

#### 3. Staff (Professor-teaching staff competence)

Professor-teaching staff (PTS) on the direction 05.03.06 "Ecology and Natural Resource Management" consists of highly qualified teachers with academic degrees and titles. PTS comprises 54 persons, including 7 doctors and professors (12.9%) and 42 candidates of sciences (77.8%), 30 associate professors (55.6%), 8 senior lecturers (14.8%), 3 teachers (5.6%), 6 assistants (11.1%). The proportion of people with scientific degrees is 90.7%, with scientific titles - 51.9%.

PTS on the master's program "Agroecological monitoring" consists of 23 persons, including 6 doctors and professors (26.1%) and 17 candidates of sciences (73.9%), 14 associate professors (60.9%), 3 senior lecturers (13.0%). The proportion of people with scientific degrees is 100%, with scientific titles - 69.6%.

PTS on the master's program "Innovative technologies in the field of energy conservation and environmental control" consists of 15 persons, including 4 doctors and professors (26.7%) and 11 candidates of sciences and associate professors (73.3%). The proportion of people with scientific degrees is 100%, with scientific titles - 73.3%.

PTS on the graduate program 05.06.01 "Earth Sciences" (Profile - Ecology (on branches)) comprises 18 persons, including 7 doctors and professors (38.9%) and 9 candidates of sciences and associate professors (50.0%). The proportion of people with scientific degrees is 88.9%, with scientific titles - 77.8%.

PTS on the program of professional retraining "Environmental protection and ecological safety of production" is represented by two candidates of scientists, associate professors.

PTS of graduating departments takes regular training courses at intervals not less than once in 3 years, but this periodicity is a conditional option and in fact PTS of the departments takes part in these programs more often.

## 4. Independent assessment of the level of students' knowledge (participation in projects FEPO, FIEB et al.)

The University participates in the program of the Federal online exam of professional education. Analysis of test results in 2014 in the disciplines of general humanitarian and socio-economic cycle, as well as natural-science cycle showed that the percentage of students who have mastered all didactic units of disciplines ranges from 75% (Biology) to 100% (Jurisprudence).

#### 5. Demand for graduates (employment)

Since 2012, The University trains Masters and since 2013 - bachelors in "Ecology and natural resource management."

Graduate employment is not less than 83.3%.

#### 6. Learning Resources

The University has sufficient material and technical base, providing the conduct of all kinds of disciplinary and interdisciplinary training, laboratory, practical and research work of students, specified in the educational plan of the university, and corresponding to sanitary and fire regulations and norms.

#### 7. Scientific activities

In graduating departments there are 4 scientific schools (directions), the representatives of which carry out scientific research in the field of environmental protection and rational nature management.

Basic research at the Faculty is conducted not only in the framework of dissertation research, but also through the involvement of the budget resources in the framework of public contracts with the Ministry of Agriculture of Stavropol Territory, the Ministry of Natural Resources and Environmental Protection of Stavropol Territory, which contributes significantly to the development of the region.

#### 8. Academic mobility of students

Each year, students participate in international programs of LOGO, APOLLO, which allows them to pass practical training at leading enterprises in Europe.

To assist students wishing to do an internship abroad, there are training courses at the language center allowing to get more in-depth knowledge of a foreign language. In cooperation, possibilities for academic mobility of graduate students at the University and partner universities are studied.

#### 9. International projects

Over the past 5 years, faculty members participated in the implementation of the following international grant programs: Tempus NetWater «Network of university programs for training of masters in the field of water management technology" (Italy); Tempus Rudeco «Additional professional education in the field of rural development and ecology" (Germany); Tempus Greenma «Network of university programs for training of masters in the field of energy conservation and environmental control" (Italy); Erasmus + SARUD «Sustainable development of agriculture and rural areas" (Germany).

This approach allows to learn from the advanced experience of foreign countries in the organization of educational, scientific and production activities.

#### **ACHIEVEMENTS OF THE CLUSTER OF EDUCATIONAL PROGRAMMES**

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This approach allows to learn from the advanced experience of foreign countries in the organization of educational, scientific and production activities.

#### SSAU quality mission and policy



Миссия университета – расширить границы знания и обучения, обеспечить подготовку выпускников-профессионалов, улучшить качество жизни населения Юга РФ и способствовать сохранению и приумножению нравственных, культурных и научных ценностей общества.

Видение СтГАУ: обучение, развитие и воспитание личности, способной успешно работать в любой стране мира и проявлять свои творческие возможности в условиях многообразия современного общества.

**Ценности Университета:** Качество, Этика, Профессионализм, Креатив.

Качество для нас обозначает предоставление нашим потребителям услуг, которые отвечают или превышают их ожидания. Работа над совершенствованием качества услуг – это основная задача каждого из наших сотрудников.

В нашей работе мы придерживаемся высоких этических стандартов. Мы уважаем наших потребителей, партнеров и сотрудников как уникальных личностей с индивидуальными потребностями и стремлениями.

Мы стремимся к использованию лучших мировых технологий и новых разработок в области образования и управления персоналом. Мы приветствуем высокую персональную ответственность каждого сотрудника. Мы приветствуем открытость и стремимся к повышению уровня коммуникаций и обмена информацией.

Мы – креативны, постоянно генерируем новые идеи. Это наш постоянный источник энергии, благодаря которому мы достигаем успеха.



#### ПОЛИТИКА В ОБЛАСТИ КАЧЕСТВА Ставропольского государственного аграрного университета

Ключевая цель Политики в области качества – развитие СтГАУ как универсального образовательного, научно-исследовательского, аналитического, консалтингового и проектного центра, способствующего устойчивому экономическому, социальному и экологическому развитию Ставропольского края и юга России.

Стратегия СтГАУ в реализации Ключевой цели:
• концентрация таланта – привлечение в СтГАУ талантливых студентов, аспирантов, преподавателей, ученых через интернационализацию образования, разработку собственных программ, содействие в участии в региональных и федеральных программах поддержки креативных сотрудников и студентов.

• разнообразие ресурсов – диверсификация источников бюджетного и внебюджетного финансирования через коммерциализацию результатов исследований научных школ, трансфер технологий, расширение ассортимента дополнительных услуг, расширение сферы

экспертно-консалтинговой деятельности сотрудников.

• оптимальное управление – непрерывное совершенствование системы управления через поддержку лидерства, делегирование полномочий на основе вдохновляющей мотивации, расширение коммуникационного потока и наделение ресурсами.

#### Политика СтГАУ в области качества базируется на следующих принципах:

• совершенствование ключевых процессов для постоянного улучшения качества услуг СтГАУ в соответствии с установленными ожиданиями потребителей, с государственными образовательными стандартами и достижениями науки, с законом «Об образовании в Российской Федерации»;

• вовлеченность сотрудников и обучающихся в деятельность по улучшению качества ключевых процессов через непрерывное повышение компетентности и мотивации, под-

держку различных творческих инициатив;

- поддержание и развитие корпоративной среды, способствующей формированию социально ответственной личности сотрудников и обучающихся, обладающих профессионализмом, инициативностью и ответственностью, гражданским самосознанием, высокими нравственными ценностями;
- вовлеченность партнеров и всех сторон, заинтересованных в успешной работе СтГАУ, в реализацию Политики в области Качества и установление с ними долгосрочного сотрудничества;

• открытость и доступность информации о ключевых результатах деятельности СтГАУ и его структурных подразделений, сотрудничество со СМИ в освещении лучшей практики в образовании, науке, воспитании, управлении, развитии партнерских отношений.

Руководство университета берет на себя ответственность за реализацию Политики в области качества, гарантирует обеспечение условий для ее реализации и призывает всех сотрудников и обучающихся СтГАУ объединить усилия для достижения ключевой цели.

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Ректор

В.И. Трухачев

#### **INFORMATION ON CONTINGENT**

## Indicators of admission to educational programs that are included in the cluster 05.00.00 "Earth Sciences" in 2016-2017 academic year

		Nun	iber of fre	shmen	
Name of educational program	Full- stu	time	Correspo	Total	
		C	B	uy	IOLAI
05.03.06 Ecology and Natural Resource	<b>B</b> 25	2	- -	4	31
Management (profile «Natural Resource Management»)					
05.04.06 – Ecology and Natural Resource Management (program «Agroecological monitoring»)	10	-	5	-	15
05.04.06 – Ecology and Natural Resource Management (program «Innovative technologies in the field of energy conservation and environmental control»)	5	1	-	-	5

Note: B – budgetary form of study; C – commercial form of study

## Contingent of students and graduate students enrolled in educational programs within the Cluster 05.00.00 "Earth Sciences"

Name of educational program	Year	Contingent of students							
	of	Total		including	]				
	study		full- time study B/C	corresp ondence study B/C	full-time- correspon dence study B/C				
05.03.06 Ecology and Natural Re Management	source	108/34	94/16	14/18	1				
Profile «Natural Resource	1	25/6	25/2	0/4	-				
Management»	2	24/7	24/5	0/2	-				
_	3	21/12	21/5	0/7	-				
	4	24/4	24/4	-	-				
	5	14/5	-	14/5	-				
05.04.06 Ecology and Natural Re Management	source	30/3	25/0	5/0	0/3				
Program «Agroecological	1	15/0	10/0	5/0	-				
monitoring»	2	7/3	7/0	-	0/3				
Program «Innovative technologies	1	5/0	5/0	-	ı				
in the field of energy conservation and environmental control»	2	3/0	3/0	-	-				
05.06.01 Earth Sciences		2/0	2/0	-	-				
Profile «Ecology (on branches)»	1	-	-	-	ı				
	2	1/0	1/0	_	-				
	3	-	-	-	-				
	4	1/0	1/0	-	-				
	5	-	-	0/1					
TOTAL ON THE CLUSTER		140/38	121/16	19/19	0/3				

Note: B – budgetary form of study; C – commercial form of study

#### **DATA ON STUDENTS' PROGRESS**

Average point of the Unified State Examination as a result of the admission of students to the undergraduate educational program 05.03.06 "Ecology and Natural resource management"

Form of study	2012	2013	2014	2015	2016
Full-time, budgetary	60.9	61.5	56.44	58.75	59.47
Full-time, commercial	48.43	51.2	44.62	45.28	47.67
Total on the full-time study	57.88	60.4	53.7	56.05	58.59
Correspondence, budgetary	45.7	-	46.9	40.3	49.8
Correspondence, commercial	0	-	1	1	-
Total on the correspondence study	45.7	-	46.9	40.3	49.8

## Absolute progress and quality of students' knowledge studying courses of the Cluster 05.00.00 "Earth Sciences"

Time period	Absolute progress, %	Knowledge quality, %								
05.03.06 - Ecology and Natural Resource Ma										
Resource Management)										
2012/2013 academic year (summer session)	100.0	90								
2012/2013 academic year (winter session)	98.0	80								
2013/2014 academic year (summer session)	100.0	83								
2013/2014 academic year (winter session)	99.1	87								
2014/2015 academic year (summer session)	100.0	88								
2014/2015 academic year (winter session)	98.4	90								
2015/2016 academic year (summer session)	95.7	87								
2015/2016 academic year (winter session)	100.0	88								
05.04.06 - Ecology and Natural Resource N	lanagement (pro	gram –								
Agroecological monitor	ing)									
2012/2013 academic year (summer session)	100.0	100								
2012/2013 academic year (winter session)	100.0	100								
2013/2014 academic year (summer session)	87.5	88								
2013/2014 academic year (winter session)	100.0	100								
2014/2015 academic year (summer session)	100.0	100								
2014/2015 academic year (winter session)	91.7	92								
2015/2016 academic year (summer session)	100.0	100								
2015/2016 academic year (winter session)	100.0	100								
05.04.06 - Ecology and Natural Resource Manag	ement (program	– Innovative								
technologies in the field of energy conservation	and environmer	ital control)								
2015/2016 academic year (summer session)	100.0	100								
2015/2016 academic year (winter session)	100.0	100								

#### Results of State Final Attestation (direction 05.03.06 - Ecology and Natural Resource Management)

Full-time study						ľ	lumber of	students	(share, º	<b>6</b> )					
	2012				2013			2014			2015			2016	
	full- tim e	corres ponde nce	full- time- corres ponde nce	full- time	corres ponde nce	full- time- corre spon denc									
			1100			1100			1100						e
Admitted to the state exam	-	-	-	19 (100)	-	-	11 (100)	18 (100)		36 (100)			29 (100)	17 (100)	
Results of the state exam:		ı	I		I	I			I						
excellent	-	-	-	9 (47.3)	-	-	3 (27.4)	3 (16.6)		18 (50)			16 (55.2)	4 (23.6)	
good	-	-	-	9 (47.3)	-	-	4 (36.3)	8 (44.6)		9 (25)			10 (34.5)	10 (58.8)	
satisfactory	1	-	-	1 (5.4)	-	-	4 (36.3)	7 (38.8)		9 (25)			3 (10.3)	3 (17.6)	
unsatisfactory	-	-	-	-	-	-	-			-			-	-	
average point of the state	-	-	-	4.4	-	-	3.9	3.8		4.25			4.4	4.0	
exam															
Admitted to the defense of	-	-	-	19	-	-	11	18		36			29	17	
the final qualification paper				(100)			(100)	(100)		(100)			(100)	(100)	
Results of the final qualification	tion pa	aper defe	nse		1	1			1					_	
excellent	1	-	-	10 (52.6)	-	-	2 (18.2)	3 (16.6)		19 (52.8)			18 (62)	4 (23.6)	
good	-	-	-	8(42.1 )	-	-	6 (54.5)	12 (66.8)		15 (41.7)			8 (27.5)	12 (70.6)	
satisfactory	-	-	-	1 (5.3)	-	-	3 (27.3)	3 (16.6)		2 (5.5)			3 (10.5)	1 (5.8)	
unsatisfactory	-	-	-	-	-	-	-			-			-	-	
average point of the final qualification paper defense	-	-	-	4.4	-	-	3.9	4		4			4.5	4.2	
final qualification papers recommended for introduction	-	-	-	1 (5.3)	-	-	3 (27.4)	-		5 (13.8)			4 (13.7)	1(5.9)	
Number of honours degrees	-	-	-	5 (26.3)	-	-	2 (18.2)	2 (11.2)		13 (36.1)			10 (34.5)	1 (5.9)	

Results of State Final Attestation (direction 05.04.06 - Ecology and Natural Resource Management, program «Agroecological monitoring»)

Indicator				p. 0 g. u	ım «Ag		umber of			<b>6</b> )					
	2012			2013			2014	-		2015			2016		
	full- time	corres ponde nce	full- time- corres ponde nce												
Admitted to the state exam	3 (100)	-	-	4 (100)	-	-	3 (100)	-	-	6 (100)	-	-	5 (100)	-	-
Results of the state exam:	, ,	1	ı	, ,	1	I				, ,		ı		ı	,
excellent	2 (66.7)	-	-	3 (75)	-	-	2 (66.7)	-	-	4 (66.6)	-	-	3 (60)	-	-
good	1 (33.3)	-	-	1 (25)	-	-	1(33.3	-	-	2 (33.4)	1	-	2 (40)	-	-
satisfactory	-	-	-		-	-		-	-		-	-	-	-	-
unsatisfactory	-	-	-		-	-		-	-		-	-	-	-	-
average point of the state exam	4.6	-	-	4.75	-	-	4.6	-	-	4.6	-	-	4.6	-	-
Admitted to the defense of the final qualification paper	3 (100)	-	-	4 (100)	-	-	3 (100)	-	-	6 (100)	-	-	5 (100)	-	-
Results of the final qualification	on paper	defense	I			I		I	I			l		I	
excellent	2(66.7 )	_	-	3 (75)	-	-	2(66.7 )	-	-	5 (83.3)	-	-	4 (100)	-	-
good	1 (33.3)	-	-	1 (25)	-	-	1 (33.3)	-	-	1 (16.7)	-	-		-	-
satisfactory	-	-	-		-	-		-	-		-	-		-	-
unsatisfactory	-	-	-		-	-		-	-		-	-		-	-
average point of the final qualification paper defense	4.6	-	-	4.75	-	-	4.6	-	-	4.8	-	-	5	-	-
final qualification papers recommended for introduction	1 (33.3)	-	-	1(25)	-	-	1(33.3	-	-	1 (16.7)	-	-	-	-	-
Number of honours degrees	-	-	-	3 (75)	-	-	2(66.7)	-	-	2(33.4)	-	-	3 (75)	-	-
Recommended for post graduate studies	1(33.3	-	-	1(25)	-	-	1(33.3	-	-	1 (16.7)	-	-	3 (75)	-	-

Job placement indicators of graduates of the educational program

## cluster 05.00.00 «Earth sciences»

n	ts	ved	}	ling m a	Ge Continued education 4 duty				Continued education				np				0
Year of graduation	Number of students	paxolama Jo JaqunN	i p	Employed according specialization from a	total number o employed	empioyed		Postgraduate	training program	Ordered to active		) acquire [c+c]					
		чел.	%	чел	%	чел	%	чел	%	чел	%	чел	%				
		05.0	3.06 -	- Ecol	ogy an	d nat	<u>ural re</u>	sourc	e m	anage	ement	<u> </u>					
2012	-	-	-	-	-	-	-	-	-	-	-	-	1				
2013	19	11	84,2	8	42,1	5	26,3	-	-	1	5,3	2	10,5				
2014	11	2	18,2	2	18,2	3	27,2	-	-	6	54,5	-	-				
2015	36	7	19,4	2	5,6	16	44,4	-	-	9	25,0	4	11,1				
2016	29	2	6,9	2	6,9	18	62,1	-	-	6	20,7	3	10,4				
		05.0	4.06 -	- Ecol	ogy an	d nate	ural re	sourc	e m	anag	ement	t					
2012	3	3	100	3	100	-	-	-	-	-	-	-	-				
2013	4	4	100	3	100	-	-	-	-	-	-	-	-				
2014	3	3	100		100	-	1	-	-	-	-	-	-				
2015	6	5	83,3	5	83,3	ı	-	-	-	-	-	1	16,7				
2016	4	4	100	4	100	-	-	-	-	-	-	-	-				

**APPENDIX 4** 

#### **APPENDIX 5**

#### **STUDENTS' ACHIEVEMENTS**

## Named fellows enrolled in educational programs, within the Cluster 05.00.00 "Earth Science"

Year	Students name	Name of the scholarship	Category of the scolarship				
2012	Serbin Maksim Anatolievich	Governor of Stavropol Krai	Success in scientific and study activity				
2012	Serbin Maksim Anatolievich	Potanin V.O. Fund	Victory in scholarship program				
2012	Koblov Jury Anatolievich	Academic Council of the University	Success in scientific and study activity				
2012	Lakina Anna Igorevna	Named after A.D. Argunov	Success in scientific and study activity				
2013	Serbin Maksim Anatolievich	Government of the RF	Success in scientific and study activity				
2013	Novik Ksenia Pavlovna	Governor of Stavropol Krai	Success in scientific and study activity				
2013	Ozeranskaya Svetlana Olegovna	Prize of the federation of trade unions of SK	Success in professional an public activity				
2014	Novik Ksenia Pavlovna	Government of the RF	Success in scientific and study activity				
2014	Gebrikov Maksim Andreevich	Named after A.D. Argunov	Success in scientific and study activity				
2015	Gebrikov Maksim Andreevich	Government of the RF	Success in scientific and study activity				
2015	Tumaeva Oksana Sergeevna	Governor of Stavropol Krai	Success in scientific and study activity				
2016	Penkina Ekaterina Sergeevna	JSC «Bayer»	Victory in scholarship program				







# ДИПЛОМ

НАГРАЖДАЕТСЯ КОМАНДА

PaulA

занявшая 1МЕСТО

В ИНТЕЛЛЕКТУАЛЬНО -РАЗВЛЕКАТЕЛЬНОЙ ИГРЕ "РАСШИРЯЙ ГОРИЗОНТЫ"

ПРЕДСЕДАТЕЛЬ ПЕРВИЧНОЙ ПРОФСОЮЗНОЙ ОРГАНИЗАЦИИ СТУДЕНТОВ СТГАУ



н.п.головин

СТАВРОПОЛЬ,2016















#### **PTS ACHIEVEMENTS**

## 9-й Международный биотехнологический Форум-выставка «РосБиоТех -2015»

28-30 октября 2015









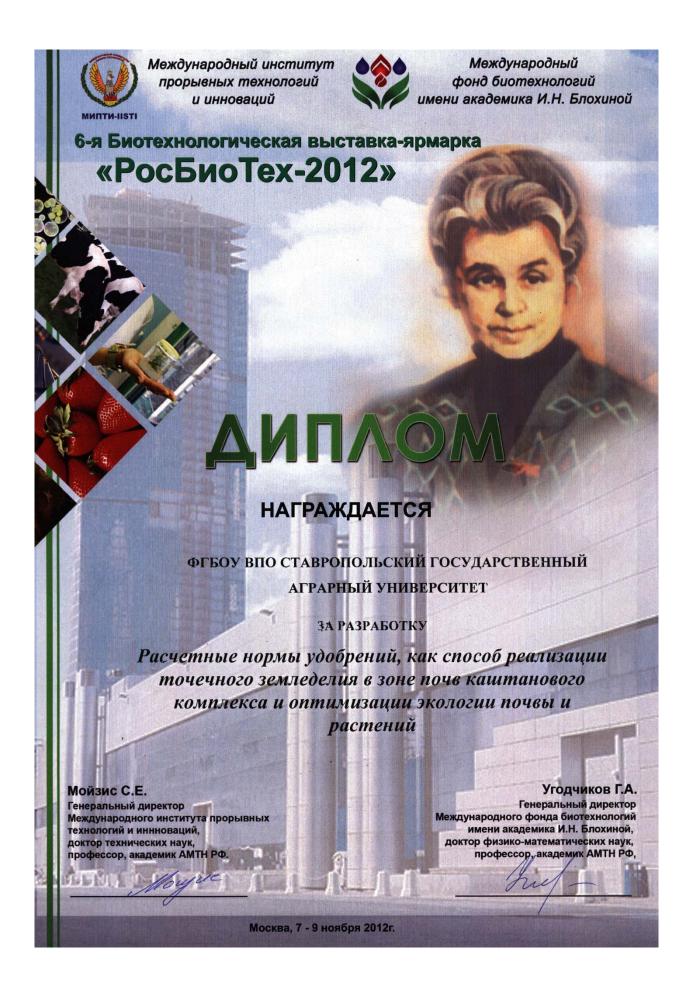
### награждается золотой медалью

## ФГБОУ ВПО «Ставропольский государственный аграрный университет»

Ресурсосберегающие технологии применения минеральных удобрений на основе мониторинга почвенного плодородия и программирования продуктивности сельскохозяйственных культур в условиях Центрального Предкавказья

Председатель Организационного комитета, академик РАН Рогов И.А.

Mounty Ecapeus











### КОНКУРС



ЛУЧШИЙ ИННОВАЦИОННЫЙ ПРОЕКТ И ЛУЧШАЯ НАУЧНО-ТЕХНИЧЕСКАЯ РАЗРАБОТКА ГОДА

# MOUNTAIN

#### II СТЕПЕНИ

(с вручением серебряной медали)

#### награждается

ФГБОУ ВПО «Ставропольский государственный аграрный университет» Россия, Ставрополь

#### за разработку

Система мониторинга и сохранения плодородия почв в различных климатических зонах Ставропольского края

#### в номинации

Лучший инновационный проект в области экологии, рационального природопользования, переработки отходов

Сопредседатель

Научно-технического совета при Правительстве Санкт-Петербурга

В.А. Глухих

2014 Санкт-петербург Министерство образования и молодежной политики Ставропольского края



# AMILAOM

НАГРАЖДАЕТСЯ

Casenco Esena Aseccangpobna

федеральное государственное бюджетное образовательное учреждение высшего профессионального образования «Ставропольский государственный аграрный университет»

### **ЛАУРЕАТ**

краевой молодежной премии в области науки, инноваций и инициатив

Номинация: «Научная деятельность»

Министр

В.В. Аямин

г. Ставрополь, 2014 г.

## X Международный биотехнологический Форум-выставка «РосБиоТех -2016»

1-3 ноября 2016









# MONDINA

### награждается золотой медалью

Технология биологически значимой оценки состояния окружающей среды в зоне влияния строительства нефтеперегонной станции

Мандра Юлия Александровна, канд. биол. наук, доц., Степаненко Елена Евгеньевна, канд. биол. наук, доц., Поспелова Оксана Анатольевна, канд. с.-х. наук, доц., Окрут Светлана Васильевна, канд. биол. наук, доц., Зеленская Тамара Георгиевна, канд. с.-х. наук, доц., Гудиев Олег Юрьевич, канд. с.-х. наук, доц., Васильева Наталия Николаевна, канд. с.-х. наук, ст. преп. , Капаева Виктория Юрьевна, ассистент кафедры, Касаткина Александра Олеговна, ассистент кафедры

ФГБОУ ВО Ставропольский государственный аграрный университет

Председатель Оргкомитета Академик РАН, член Президиума РАН

At the

Лисицын А.Б.

# 8-й Международный биотехнологический Форум-выставка «РосБиоТех -2014»

27-29 октября 2014







# AMINOM

### награждается золотой медалью

ФГБОУ ВПО «Ставропольский государственный аграрный университет»

Технология применения пермакультуры в обустройстве приусадебных участков в различных климатических условиях.

Председатель Организационного комитета, академик РАН Рогов И.А.

Mounty

БЛАГОТВОРИТЕЛЬНЫЙ ФОНД В. ПОТАНИНА

## Диплом

Победителя Грантового конкурса для преподавателей магистратуры 2014–2015 учебного года

Мандра

ЭОлия Александровна

Ставропольский государственный аграрный университет

Генеральный директор Благотворительного фонда В. Потанина О. И. Орачева Off



### **Professional qualification of PTS at graduate chairs** Information on refresher training and re-education of the ecology and landscape architecture chair stuff, educational cluster 05.00.00 «Earth sciences» period 2012 – 2016

	05.00.00 «Earth sciences» period 2012 - 2016					
Nº	Name	Position	science degree, rank	Place of refresher training	Program of refresher training	
			201	2 год		
1	Stepanenko E.E.	Assistant- professor	Ph.D, Biology, Assistant-	Stavropol SAU	Master's Program «Ecology and nature resource management»	
			professor	Stavropol SAU	«Natural regulation and Legislation of agrarian territories»	
2	Mandra J.A.	Assistant- professor	Ph.D, Biology, Assistant- professor	FSBEI HPE Orel SAU IPPPK	«Ecological marking and marketing of ecological and regional production of agrarian territories»	
				Stavropol SAU	«Nature protection regulating and legislation of agrarian territories»	
3	Kornilov N.I.	Professor	Ph.D, Chemistr y, Professor	Stavropol SAU	«Nature protection regulating and legislation of agrarian territories»	
4	Lisenko I.O.	Assistant- professor	Ph.D, Biology, Assistant- professor	Stavropol SAU	«Nature protection regulating and legislation of agrarian territories»	
5	Pospelova O.A.	Assistant- professor	Ph.D, Agricultur e,	Stavropol SAU	«Nature protection regulating and legislation of agrarian territories»	
			Assistant- professor	RGAU – MAA named after K.A. Timirazev»	«Sustainable development of agrarian territories: approaches for regional and municipal programs»	
6	Okrut S.V.	Assistant- professor	Ph.D, Biology, Assistant-	Stavropol SAU	«Nature protection regulating and legislation of agrarian territories»	
			professor	Buryat State Agriculture Academy by V.R.Philippov	«Development of agrarian ecological tourism»	
7	Zelenskaya T.G.	Assistant- professor	Ph.D, Agricultur e,	Stavropol SAU	«Nature protection regulating and legislation of agrarian territories»	
			Assistant- professor	Samara State Agriculture Academy	«Professional education in development of agrarian territories and ecology. Sustainable use of water resources of agrarian territories and methods of ecological management»	
8	Gudiev O.J.	Assistant- professor	Ph.D, Agricultur e	Stavropol SAU	«Nature protection regulating and legislation of agrarian territories»	
			20	13		
1	Zelenskaya T.G.	Assistant- professor	Ph.D, Agricultur e	FSBEI HPE «Pyatigorsk state linguistic university»	«Modern requirements to international scientific publications»	

2	Mandra J.A.	Assistant- professor	Ph.D, Biology, Assistant- professor	Stavropol SAU	«Development of youth innovations: tendencies and practices»
3	Gudiev O.J.	Assistant- professor	Ph.D, Agricultur e	Stavropol SAU	Master's program on «Ecology and ecological management»
			20	14	
1	Mandra J.A.	Assistant- professor	Ph.D, Biology, Assistant- professor	Genoa University (Italy) Stavropol SAU	Intensive course on «Energy saving and ecological control» «Implementation of informational and communicative technologies in education»
				Novocherkassk engineering and melioration institute named after A.K.	«Environmental engineering and water use»
				Stavropol SAU Silesia technical	<pre>«Development of innovative sphere of SK»  «Energy saving and</pre>
				university (Poland)	ecological control»
2	Stepanenko E.E.	Assistant- professor	Ph.D, Biology, Assistant- professor	Stavropol SAU	«Implementation of informational and communicative technologies in education»
				Stavropol SAU	«Development of innovative sphere of SK»
				Novocherkassk engineering and melioration institute named after A.K. Kortunov	«Environmental engineering and water use»
3.	Lisenko I.O.	Assistant- professor	Ph.D, Biology, Assistant- professor	Stavropol SAU	«Implementation of informational and communicative technologies in education»
				Novocherkassk engineering and melioration institute named after A.K.	«Environmental engineering and water use»
4.	Gudiev O.J.	Assistant- professor	Ph.D, Agricultur e	Stavropol SAU	«Implementation of informational and communicative technologies in education»
5.	Okrut S.V.	Assistant- professor	Ph.D, Biology, Assistant- professor	Stavropol SAU	«Implementation of informational and communicative technologies in education»
				Novocherkassk engineering and melioration institute named after A.K. Kortunov. A.K. Кортунова	«Environmental engineering and water use»
6.	Pospelova O.A.	Assistant- professor	Ph.D, Agricultur	Novocherkassk engineering and	«Environmental engineering and water use»

	T		1	1	T
			e, Assistant- professor	melioration institute named after A.K. Kortunov. A.K.	
7.	Zelenskaya T.G.	Assistant- professor	Ph.D, Agricultur e, Assistant- professor	Кортунова  Novocherkassk engineering and melioration institute named after A.K. Kortunov. A.K. Кортунова	«Environmental engineering and water use»
8.	Kornilov N.I.	Professor	Ph.D, Chemistr y, Professor	FSBEI HPE The Russian Presidential Academy of National Economy and Public Administration (RANEPA)	«Forensic examination»
	1		20	15	
1.	Mandra J.A.	Assistant- professor	Ph.D, Biology, Assistant- professor	IRT «Integral» Sent-Petersburg	«Development of section «List of activities on environmental protection» in project documents»
2.	Gudiev O.J.	Assistant- professor	Ph.D, Agricultur e	Astrakhan state university	«Landscape design and basics of landscape planning»
		1		16	
1.	Vasileva N.N.	Senior lecturer	Ph.D, Agricultur e	Kuban state agrarian university named after I.T. Trubilin	«Innovative technologies in melioration complex of agro- landscape sustainable development»
2.	Kalaeva V.J.	lecturer	-	Kuban state agrarian university named after I.T. Trubilin	«Innovative technologies in melioration complex of agro- landscape sustainable development»

Professional qualification of PTS at graduate chairs
Information on refresher training and re-education of the agrochemistry and plant physiology chair stuff, educational cluster
05.00.00 «Earth sciences» period 2012 – 2016.

Nō	Name	Position	science degree, rank	Place of refresher training	Program of refresher training
			20	012	
1.	Esaulko A.N.	Professor	Ph.D, Agriculture, Professor	Kuban state agrarian university	Scientific basis of soil fertility measurement and productivity of agrocoenosis in accordance with agromethod and technologies of cultivating field crops in different agro-landscape
2.	Lobankova O.J.	Assistant- professor	Ph.D, Biology, Assistant- professor	Stavropol SAU	Modernization of the system of professional education for training of agrarian specialists in inter-regional resource center
3.	Sigida M.S.	Assistant- professor	Ph.D, Agriculture, Assistant-	Saratov SAU named after N.I. Vavilov	«Agro-chemistry»

			professor		
4.	Korostilev S.A.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Saratov SAU named after N.I. Vavilov Kuban state agrarian university	«Agro-chemistry»  Integrated implementation of fertilizers and plant protection means
5.	Salenko E.A.	Senior lecturer	Ph.D, Agriculture	Saratov SAU named after N.I. Vavilov	«Agro-chemistry»
				Kuban state agrarian university	Integrated implementation of fertilizers and plant protection means
			2	013	
1.	Esaulko A.N.	Professor	Ph.D, Agriculture, Professor	Saratov SAU named after N.I. Vavilov	«Agro-chemistry»
				IAPE «HSI AIC» RGAU – MAA named after K.A. Timirazev	Modern approaches to organization and legislation support of educational process in accordance with FO-273 «Education in RF»
				Smolny institute of Russian academy of education	Organization of effective system of scientific and research work at the company
				Smolny institute of Russian academy of education	Methods of working with innovative projects
				Stavropol SAU	Extracurricular financing of innovative projects
2.	Podkolzin A.I.	Professor	Ph.D, Biology, Professor	Saratov SAU named after N.I. Vavilov	«Agro-chemistry»
3.	Gorbatko L.S.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Kuban state agrarian university	Scientific basis of soil fertility measurement and productivity of agrocoenosis in accordance with agromethod and technologies of cultivating field crops in different agro-landscape
4.	Belovolova A.A.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Kuban state agrarian university	Scientific basis of soil fertility measurement and productivity of agrocoenosis in accordance with agromethod and technologies of cultivating field crops in different agro-landscape
5.	Lobankova O.J.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Kuban state agrarian university	Scientific basis of soil fertility measurement and productivity of agrocoenosis in accordance with agromethod and technologies of cultivating field crops in different agro-landscape
6.	Sigida M.S.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Stavropol SAU	Development of youth innovations: tendencies and practices
7.	Korostilev S.A.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Stavropol SAU	Development of youth innovations: tendencies and practices
8.	Salenko E.A.	Senior	Ph.D,	Saint-Petersburg of	Start of innovative project in

		lecturer	Agriculture	economics, culture and business	the sphere of innovative technologies
				management	
				IAPE Stavropol SAU	Development of youth innovations: tendencies and practices
9.	Fursova A.J.	Senior lecturer	Ph.D, Agriculture	Saint-Petersburg of economics, culture and business management	Start of innovative project in the sphere of innovative technologies
				IAPE Stavropol SAU	Scientific basis of soil fertility measurement and productivity of agrocoenosis in accordance with agromethod and technologies of cultivating field crops in different agro-landscape
10.	Voskoboinik A.V.	Senior lecturer	Ph.D, Agriculture	Saratov SAU named after N.I. Vavilov	«Agro-chemistry»
		1	20	014	
1.	Esaulko A.N.	Professor	Ph.D, Agriculture, Professor	Ryazan SAU named after P.A. Kostichev	Actual tasks in preparing and implementation of educational programs in accordance with FSES HE 3+
2.	Grechishkina J.I.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Saratov SAU named after N.I. Vavilov	«Agro-chemistry»
				015	
1.	Esaulko A.N.	Professor	Ph.D, Agriculture, Professor	MSAA named after K.A. Timirazev	Tasks of Universities on actualization of educational programs in accordance with PS
2.	Belovolova A.A.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Saratov SAU named after N.I. Vavilov	Ways of improvement physiology and plant biochemistry training in polylevel educational system
3.	Sigida M.S.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Saratov SAU named after N.I. Vavilov	«Agro-chemistry»
4.	Korostilev S.A.	Assistant- professor	Ph.D, Agriculture, Assistant- professor	Saratov SAU named after N.I. Vavilov	«Agro-chemistry»
5.	Salenko E.A.	Senior	Ph.D,	Saratov SAU	«Agro-chemistry»
		lecturer	Agriculture	named after N.I. Vavilov	
		lecturer		named after N.I.   Vavilov   <b>016</b>	
1.	Esaulko A.N.	Professor		Vavilov	Integrated implementation of fertilizers and plant protection means
1.			Ph.D, Agriculture,	Vavilov  016  Kuban SAU  Kuban SAU	of fertilizers and plant
	A.N. Podkolzin	Professor	Ph.D, Agriculture, Professor Ph.D, Agriculture,	Vavilov 016 Kuban SAU	of fertilizers and plant protection means Integrated implementation of fertilizers and plant

	O.J.	professor	Agriculture, Assistant- professor		of fertilizers and plant protection means
5.	Voskoboynik ov A.V.	Senior lecturer	Ph.D, Agriculture	Kuban SAU	Integrated implementation of fertilizers and plant protection means
6.	Salenko E.A,	Senior lecturer	Ph.D, Agriculture	FSBEI APE State institute of new educational forms	Psychological and pedagogical training of teacher in professional education: new technologies and forms of teaching
7.	Fursova A.J.	Senior lecturer	Ph.D, Agriculture	Kuban SAU	Integrated implementation of fertilizers and plant protection means
				FSBEI APE State institute of new educational forms	Psychological and pedagogical training of teacher in professional education: new technologies and forms of teaching

Data on advanced training and retraining of employees of the Department of Soil Science named after V. I. Tyulpanov, providing the educational process on educational programs of the cluster 05.00.00 "Soil Science" for the period 2012 – 2016

Nº п/ п	Name	position	Scientific degree	Place of advanced professional training	Name of programm					
	2012									
1	Nikiforova A.M.	docent	Candidate of Agricultural Sciences	Kuban SAU	Integrated application of fertilizers and plant protection means					
2	Tskchovreb ov V.S.	professor	Doctor of Agricultural Sciences, professor	Kuban SAU	Integrated application of fertilizers and plant protection means					
3	Faizova V.I.	docent	Candidate of Agricultural Sciences, docent	Kuban SAU	Integrated application of fertilizers and plant protection means					
			20	013						
1	Nikiforova A.M.	docent	Candidate of Agricultural Sciences	Stavropol SAU	The development of youth innovations: tendencies and practice					
			20	014						
1	Faizova V.I.	docent	Candidate of Agricultural Sciences, docent	Kuban SAU	Integrated application of fertilizers and plant protection means					
2	Tskchovreb ov V.S.	professor	Doctor of Agricultural Sciences, professor	Educational consulting center «Standards and metrology»	Requirements for accredited testing laboratories in the framework of new and existing laws, standards, regulations					
3	Lysenko V.Ya.	docent	Candidate of Agricultural Sciences	Kuban SAU	Integrated application of fertilizers and plant protection means					
4	Novikov A.A.	docent	Candidate of Agricultural Sciences	Kuban SAU	Integrated application of fertilizers and plant protection means					
			20	015						
5	Tskchovreb	professor	Doctor of	Kuban SAU	Modern methods of soil					

	ov V.S.		Agricultural		research
			Sciences, professor	Kuban SAU	History and philosophy of science
6	Nikiforova A.M.	docent	Candidate of Agricultural Sciences	Kuban SAU	Modern methods of soil research
7	Kalugin D.V.	docent	Candidate of Agricultural Sciences	Educational center in the field of fire safety	Radiation safety in the operation of radiation sources, radioactive substances, storage facilities and radioactive waste management

#### **APPENDIX 8**

### The theme of the state budget and contractual research works

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
1	2	3	4	5 CTDUCTION	6
1	2012	Creation of electronic maps of the city of Stavropol, reflecting the impact of external environment on living organisms	applied	The Ministry of natural resources and environmental protection of the Stavropol region	395
2	2012	Development of an evidence-based package of the project of the ecological path on the protected area reserve "Irgalinsky" Stavropol region	applied	The municipal administration of Stepnovsky district, SK	20
3	2013	Scientific substantiation of managerial decisions in the field of protection and sustainable use of resources targeted specially protected natural territories of the Stavropol region on the basis of assessment of natural ecosystems, their dynamics and development forecast	applied	State institution "Directorate of specially protected natural territories of Stavropol region"	97
4	2013	Scientific substantiation of managerial decisions in the field of protection and sustainable targeted use of the natural resources of the sanctuaries, "Novotroitskoe", "Solonoe", "Novoselytskoe", "Chograysky" Stavropol region"	applied	State institution "Directorate of specially protected natural territories of Stavropol region"	230
5	2013	Scientific substantiation of managerial decisions in the field of protection and sustainable use of natural trust resources of the refuge "Krasnogvardeyskoe" Krasnogvardeisky district, Stavropol region	applied	State institution "Directorate of specially protected natural territories of Stavropol region"	58
6	2013	Development of science-based technologies of utilization and neutralization of waste electronic technician	applied	JSC «CKУ»	75
7	2013	Development of scientific project of improvement and landscaping	applied	JSC «VITANA»	28
8	2014	The scientific rationale for the measures required for sustainable existence of natural complexes in the reserves of the Stavropol region (part 1)	applied	State institution "Directorate of specially protected natural territories"	79
9	2014	The scientific rationale for the measures required for sustainable existence of natural complexes in the reserves of the Stavropol region (part 2)	applied	State institution "Directorate of specially protected natural territories"	
10	2014	The scientific rationale for the measures required for sustainable existence of natural complexes in the reserves of the Stavropol region (part 3)	applied	State institution "Directorate of specially protected natural territories"	79, 1
11	2014	The development of the project of an accomplishment and gardening of school territory of secondary school №9, village	applied	SPK kolkhoz Rodina	20

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
		Rasshevatskaya Novoaleksandrovsky district with a scientifically sound selection of the range of plantings			
12	2014	The scientific basis for regulation of environmental parameters in industrial premises	applied	IE Golubchikov V.V.	125
13	2014	The development of the project of improvement and landscaping at the town of Mikhailovsk, Akademicheskaya St., 12 with a scientifically sound selection of the range of plantings	applied	NPO "EVA-S"	16
14	2015	Scientific substantiation of environmental effectiveness of the storage, use and disposal of hazardous waste in farm of Kolesnikov N. V. Stavropol territory Krasnogvardeisky district village Pregradnaya	applied	Farm household Kolesnikov N. V.	60
15	2015	Science-based development of the project of landscaping the territory of secondary school Nº 26 of the city of Stavropol with the selection of the range of plantings	applied	Secondary school №26 Stavropol	3
16	2015	The development of the project of an accomplishment and gardening of territory of a private household with a scientifically sound selection of the range of plantings	applied	Konovalov Anatoly Iosifovich	61,5
17	2015	Scientific substantiation of methods and technologies of recycling waste of electronic equipment	applied	JSC «CKУ»	123
18	2015	The scientific rationale for the range of ornamental plants used in landscaping of territory of a private household	applied	Kopylenko Julia Vladimirovna	40
19	2015	Development of methods selection of variety of trees and shrubs for landscaping, taking into account soil and climatic conditions	applied	JSC «Poly- Service»	60
20	2015	The scientific rationale for the use of fertilizers based on soil-agrochemical inspection of soils on the area of 1536 ha	applied	IE Alexeenko I.A.	61,4
21	2016	Development of science-based recommendations for improving the sustainability of the resource potential and human transformation of agricultural landscapes in the zone of unstable moistening of Stavropol region.	applied	The Ministry of agriculture of the Stavropol region	400
22	2016	Scientific substantiation and development of recommendations for standards for emissions of pollutants from sources ГБПОУ НИК	applied	ГБПОУ НИК	25
23	2016	Scientific substantiation and development of recommendations for standards for emissions of pollutants from sources ГБПОУ НИК	applied й	ГБПОУ НИК	25
24	2016	The scientific study of the impact of waste ГБПОУ НИК on the environmental components.	applied	ГБПОУ НИК	25
25	2016	Scientific research impact, LLC "Poly-Service" components of the natural environment.	applied	JSC «Poly- Service»	195

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
26	2016	Scientifically grounded selection of trees and shrubs for the needs of the landscaping of a private household, taking into account soil and climatic conditions of the zone of unstable humidification	applied	JSC «Poly- Service»	130
		DEPARTMENT OF SOIL SCIENCE NAMED A	FTER V. I	. TYULPANOV	
1	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	Agrofirm "Kits" Neftekumsky district	107,8
2	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE Semenenko T.I. Krasnogvardeysky district	1,4
3	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE Sboretz V.A. Krasnogvardeysky district	4,3
4	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE Kazakov A.A. Krasnogvardeysky district	14
5	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Opytny» Neftekumsky district	13,6
6	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-houshold Sayfetdinova R.K. Turkmensky district	1,1
7	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK kolkhoz Rodina Krasnogvardeysky district	325
8	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Vostok» Neftekumsky district	46,8
9	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Opytny» Neftekumsky district	34
10	2012	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	Agrofirm "Kits" Neftekumsky district	93,5
11	2012		applied	JSC «Agro» Ipatovsky district	2,8
12	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Trunovskoe» Trunovsky district	84,6
13	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Novokugultinsko e» Trunovsky district	53,8
14	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC Agrocomplex «Uspensky» Krasnodar region	65,7
15	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of	applied	JSC «Dobrovolnoe»	17

Nō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
		application of fertilizers		Ipatovsky district	
16	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Gelios» Ipatovsky district	117,4
17	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Staromaryevka» Grachevsky district	0,8
18	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC Agrocompany «Runo» Kochubeevsky district	277
19	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Novy Oktybr» Mineral waters district	87
20	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK kolkhoz Rodina Krasnogvardeysky district	129,9
21	2013	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Gelios» Ipatovsky district	28,6
22	2013	Studies on the microbiological parameters of the black earth when implementing no-till technology in the area of sustainable moistening of the Stavropol region	applied	The Ministry of agriculture of the Stavropol region	100
23	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK kolkhoz Rodina Krasnogvardeysky district	129,9
24	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Kudrya V.A. Krasnogvardeysky district	8,6
25	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Demyanenko V.V. Krasnogvardeysky district	1,9
26	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Andrushenko N.A. Krasnogvardeysky district	3,1
27		Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Kudrya V.A. Krasnogvardeysky district	3,3
28	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Kudrya V.A. Krasnogvardeysky district	2,6
29	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Luchkin A.S. Krasnogvardeysky district	1,2

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
30	2014	the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Kudrya V.A. Krasnogvardeysky district	4,8
31		Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK kolkhoz- Plemzavod named after Lenin, Arzgirsky district	283,3
32	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Lunev A.N. Krasnogvardeysky district	5,4
33	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC AIC "Rassvet"	118,5
34	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC «Kevsala» Ipatovsky district	42,4
35	2014	the purposes of scientific substantiation of application of fertilizers	applied	JSC «Gelios» Ipatovsky district	38
36	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK kolkhoz Rodina	4,5
37	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC Agrofirm «Agrosakhar»	24
38	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK kolkhoz Rodina Krasnogvardeysky district	250,4
39	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK "Rossia" Arzgir district	193,6
40	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC AIC "Rassvet"	164,5
41	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE Kazakov A.A. Krasnogvardeysky district	44,3
42	2014	the purposes of scientific substantiation of application of fertilizers	applied	JSC Essentuki- Khleb	38
43		Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK kolkhoz Zarya Krasnogvardeysky district	89,4
44	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	SPK kolkhoz Ruslan Krasnogvardeysky district	2,5
45	2014	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Slysenko S.N. Krasnogvardeysky district	4,8

Nō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
46	2014	Development of agricultural practices in the cultivation of crops with the aim of providing the erosion resistance of the soil cover, preservation and accumulation of organic matter in the soil, growth and yield and reduce the cost of crop production in the arid zone of the Stavropol region (stage III)	applied	The Ministry of agriculture of the Stavropol region	29,9
47	2014	Development of agricultural practices in the cultivation of crops with the aim of providing the erosion resistance of the soil cover, preservation and accumulation of organic matter in the soil, growth and yield and reduce the cost of crop production in the sustainable moistening zone of the Stavropol region (stage III)	applied	The Ministry of agriculture of the Stavropol region	29,9
48	2014	Development of agricultural practices in the cultivation of crops with the aim of providing the erosion resistance of the soil cover, preservation and accumulation of organic matter in the soil, growth and yield and reduce the cost of crop production in the unstable humidification zone of the Stavropol region (stage III)	applied	The Ministry of agriculture of the Stavropol region	29,9
49	2014	Studies on the changes of microbiological indicators of ordinary Chernozem in the implementation of the "zero" technologies in the area of sustainable moistening of the Stavropol region (stage II)	applied	The Ministry of agriculture of the Stavropol region	200
50	2015	Studies on the changes of microbiological indicators of ordinary Chernozem in the implementation of the "zero" technologies in the area of sustainable moistening of the Stavropol region (stage II)	applied	The Ministry of agriculture of the Stavropol region	200
51	2015		applied	SPK kolkhoz Druzhba	294,3
52	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	JSC "Belokopanskoe"	133
54	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of application of fertilizers	applied	IE farm-house Petrovtsi A.M.	3,1
55	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of increase of soil fertility and application of fertilizers	applied	IE farm-house Apolochov M.F.	2,5
56	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of increase of soil fertility and application of fertilizers	applied	IE farm-house Fisenko I.I.	10,8
57	2015		applied й	Farm "Novoaalexandrov sky"	57,3

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
58	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of increase of soil fertility and application of fertilizers	applied	JSC "Gelios"	64,1
59	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of increase of soil fertility and application of fertilizers	applied	JSC AIC "Rassvet"	83,9
60	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of increase of soil fertility and application of fertilizers	applied	SPK "Rossia"	191,8
61	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of increase of soil fertility and application of fertilizers	applied	Farm household Zolotareva E.Yu.	1,5
62	2015	Conducting soil and agrochemical survey for the purposes of scientific substantiation of increase of soil fertility and application of fertilizers	applied	JSC "Luch"	47,4
63	2015	Conducting scientific soil and agrochemical research in LLC AE "Opytnyi" in order to improve the scientific basis of soil fertility and fertilizer application	applied	LLC AE "Opytnyi"	43,2
64	2015	Conducting scientific soil and agrochemical studies in LLC Agricultural Company "Kitz" in order to improve the scientific basis of soil fertility and fertilizer application	applied	LLC Agricultural Company "Kitz"	243
65	2015	Conducting research soil-agrochemical research in APC stud farm named after "Lenin" in order to improve the scientific basis of soil fertility and fertilizer application	applied	APC stud farm named after "Lenin"	228,5
66	2015	Conducting research soil-agrochemical research in IE head Kostenko Roman Gennadievich in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head Kostenko Roman Gennadievich	5,3
67	2015	Conducting scientific soil and agrochemical research in stud farm named after Lenin in order to improve the scientific basis of soil fertility and fertilizer application	applied	stud farm named after Lenin Apanasenkovsky district	315
68	2015	Conducting scientific soil and agrochemical research in LLC AFC "Podgornoe" in order to improve the scientific basis of soil fertility and fertilizer application	applied	LLC AFC "Podgornoe"	221,2
69	2015		applied	LLC AFC "Alexandria"	246,7
70	2015	Conducting scientific soil and agrochemical research in AFC stud farm "Rossiya" in order to improve the scientific basis of soil fertility and fertilizer application	applied	AFC stud farm "Rossiya"	560
71	2015	Conducting scientific soil and agrochemical research in PFE Kitz Ivan Ivanovich for scientific	applied	PFE Kitz Ivan Ivanovich	70

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
		study of soil fertility improvement			
72	2015	Determination of the number of basic physiological groups of microorganisms and the presence of pathogens in the soil at 20 reference sites	applied	LCC "Donskaya Niva" Oktyabrsky district of Rostov region	80
73	2015	Conducting scientific soil and agrochemical research in LLC AI "Yug-Agroprogress" for the purposes of scientific justification of fertilizer applying	applied	YugAgro	139,4
74	2015	Conducting scientific soil and agrochemical research in JSC "Piatigorsky Khlebokombinat" in order to improve the scientific basis of soil fertility and fertilizer application	applied	JSC "Piatigorsky Khlebokombinat"	76,7
75	2015	research in the APC "Kirovsky" in order to improve the scientific basis of soil fertility and fertilizer application	applied	APC "Kirovsky"	126,9
76	2015	Conducting scientific soil and agrochemical research in APC collective farm "Rodina" in order to improve the scientific basis of soil fertility and fertilizer application	applied	APC collective farm "Rodina" of Krasnogverdeisky district	180,1
77	2015	Conducting scientific soil and agrochemical research in PFE IE Sborets V.A. in order to improve the scientific basis of soil fertility and fertilizer application	applied	PFE IE Sborets V.A.	12,6
78	2015	Conducting soil and agrochemical survey of the APC collective farm "Rodina" for the purposes of scientific justification of fertilizer applying	applied	APC collective farm "Rodina"	158,7
79	2016	The study of changes in the microbiological indicators of blackearth in the implementation of "zero" in the area of sustainable technology moistening of Stavropol Territory (final stage) "	applied	The Ministry of Agriculture of The Stavropol Territory	400
80	2016			The Ministry of Agriculture of The Stavropol Territory	500
81	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application (Stage 2)		APC collective farm "Rodina" of Krasnogverdeisky district	180,1
82	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application		IP head of PFE Merzlikin E.S. of Novoalexandrovsk y district	15,5
83		Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IP head of PFE Merzlikin E.S. of Novoalexandrovsk y district	5,7
84	2016	research in order to improve the scientific basis of soil fertility and fertilizer application		PFE Temirbulatov A., Kochubeyevsky District	13,5
85	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application		PFE "Durnevyh" Trunovsky district	4,4

Nō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
86	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	LLC Agrofirma "Kitz", Neftekumsky district	145,7
87	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	PFE "Vyrodovyh", Trunovsky district	3
88	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	PFE "Itominyh", Trunovsky district	13,2
89	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head of PFE "Krasnikovyh", Trunovsky district	12,8
90	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head of PFE Tatarincev E.V. Trunovsky disrrict	12,8
91	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head of PFE Lyakhov Yu. A, Trunovsky district	16,6
92	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head of PFE Kuchkin V.M., Trunovsky district	2,4
93	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE PFE Voronkov A.E., Trunovsky district	6,3
94	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE PFE Polshin A.V., Trunovsky district	16,1
95	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	PFE "Pedashenko", Trunovsky district	32
96	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE "Zarubinykh", Trunovsky district	7,1
97	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head of PFE Novikov S.P., Trunovsky district	20,4
98		Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	КХ «Подпальный», Труновского района	19
99	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head of PFE Kozlov Yu.V., Trunovsky district	4,6
100	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head of PFE Grannikov E.P., Trunovsky district	13,2
101	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head Gubanov G.A., Trunovsky district	22,9
102	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	PFE «Nezabudka», Trunovsky district	11,3
103	2016		applied	PFE «Ryabovykh»,	3,3

Nō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
		research in order to improve the scientific basis of soil fertility and fertilizer application		Trunovsky district	
104	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE head of PFE «Chaschma», Trunovsky district	5,5
105	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	PFE «Anuta», Trunovsky district	6,4
106	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	PFE «Aist», Trunovsky district	6,4
107	2016	research in order to improve the scientific basis of soil fertility and fertilizer application	applied	IE PFE Nikitina L.I., Stepnovsky district	3,5
108	2016	research in order to improve the scientific basis of soil fertility and fertilizer application	applied	LLC AE "Opytny" Neftekumsky district	51,2
109	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application (3 stage)		JSC "Piatigorsky Khlebokombinat"	65,7
110	2016	Conducting scientific soil and agrochemical research of area to determine the power of topsoil removal and decision-making on land reclamation		"Federal state budgetary educational institution of children's "Kindergarten of General developing type "Krasnye kamni" Office of the President of the Russian Federation"	10
111	2016	Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application		LLC "Maryinskiy istochnik"	75
112	2016	research in order to improve the scientific basis of soil fertility and fertilizer application	applied	LLC "Gelios", Ipatovsky district	123,5
113		Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	JSC "Piatigorsky Khlebokombinat"	104,2
114		Conducting scientific soil and agrochemical research in order to improve the scientific basis of soil fertility and fertilizer application	applied	APC collective farm "Rodina" of Krasnogverdeisky district	321,8
115		Conducting scientific laboratory research of industry waste samples in order to evaluate their use in the agricultural practice of		LLC "Phoenix-C"	11,6
116		Conducting scientific laboratory studies of soil samples of the company "Geotechnics"		LLC "Geotechnics"	13,5
	1	AGROCHEMISTRY AND PLANT PHYSIOL			
1		The scientific rationale for the use of fertilizers based on soil agrochemical survey APC named after Voroshilov		APC named after Voroshilov	145
2		The scientific rationale for the use of fertilizers based on soil agrochemical soil survey on the		LLC "Kirova" Petrovsky district	177, 7

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
3	2012	area 11987ga. LLC "Kirova" Petrovsky district Scientific justification of use of fertilizers on a	applied	Limited liability	89
		basis is soil agrochemical inspection of soils on the area of 6000 hectares" Limited liability company of Nikolino of the Petrovsky area		company of Nikolino of the Petrovsky area	
4	2012	Scientific justification of use of fertilizers on a basis is soil agrochemical inspection of soils" Belomechetskoye" Limited liability company of Kochubeevsky district	applied	Limited liability company of Kochubeevsky district	143,5
5	2012	Scientific justification of use of fertilizers on a basis is soil agrochemical inspection of soils" Limited liability company «Dzhengur» the Karachay-Cherkess Republic	applied	Limited liability company «Dzhengur» the Karachay- Cherkess Republic	18
6	2012	Scientific justification of use of fertilizers on the basis of early-spring soil diagnostics Limited liability company «Beam» of the Novoselitsky area	applied	Limited liability company «Beam»	64,4
7	2012	Volski-Biokhim Limited liability company studying of effect of the fertilizers «Mikromak» and «Mikroel»	applied	Volski-Biokhim Limited liability company	129,5
8	2012	Scientific justification of use of fertilizers on a basis is soil agrochemical inspection of soils" Country farm "Vasilyev" of Novoaleksandrovsky area	applied	Country farm "Vasilyev" of Novoaleksandrovs ky area	5,5
9	2012	Development of agrotechnical acceptances in case of cultivation of crops for the purpose of ensuring erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a droughty zone of Stavropol region (1 stage)	applied	Ministry of Agriculture of Stavropol region	90
10	2012	Development of scientifically based recommendations about enhancement of elements of the minimum technologies of cultivation of page - x. the cultures providing erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, to growth of productivity and decrease in cost value of crop products in a zone of steady moistening of Stavropol region	applied	Ministry of Agriculture of Stavropol region	45
11	2012	Development of agrotechnical acceptances in case of cultivation of page - x. cultures for the purpose of ensuring erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a zone of unstable moistening of Stavropol region (1 stage)	applied	Ministry of Agriculture of Stavropol region	90
12	2012	Development of evidence-based recommendations about conducting agriculture for various soil and climatic zones of Stavropol region for the purpose of increase in production volume of agricultural products	applied	Ministry of Agriculture of Stavropol region	250

Иō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
13	2012	Development of resource-saving technologies of cultivation of winter wheat in soil and climatic zones of Stavropol region	applied	Ministry of Agriculture of Stavropol region	200
14	2013	Development of agrotechnical acceptances and technical requirements in case of adaptive engineering procedures for creation of technical means and the equipment in system of innovative technologies of exact agriculture for the purpose of improvement of agrochemical and physical indicators of soil fertility and increase in productivity of crops in the territory of Stavropol region (1 stage)	applied	Ministry of Agriculture of Stavropol region	200
15	2013	Development of economically reasonable acceptances of early-spring nitric top dressing of winter wheat in various soil climatic conditions of Stavropol region	applied	Ministry of Agriculture of Stavropol region	200
16	2013	Development of agrotechnical acceptances and in case of cultivation of crops for the purpose of ensuring erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a droughty zone of Stavropol region (2 stage)	applied	Ministry of Agriculture of Stavropol region	170
17	2013	Development of scientifically based recommendations about enhancement of elements of the minimum technologies of cultivation of the crops providing erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a zone of steady moistening of Stavropol region (2 stage)	applied	Ministry of Agriculture of Stavropol region	190
18	2013	Development of agrotechnical acceptances and in case of cultivation of crops for the purpose of ensuring erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a zone of unstable moistening of Stavropol region (2 stage)	applied	Ministry of Agriculture of Stavropol region	170
19	2013	Development of resource-saving technologies of cultivation of winter wheat in soil and climatic zones of of Stavropol region (3 stage)	applied	Ministry of Agriculture of Stavropol region	150
20	2013	Studying of effect of the Mikromak and Mikroel fertilizers	applied	Volski-Biokhim Nizhny Novgorod	89,5
21	2013	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils	applied	Limited liability company «Dzhengur» the Karachay- Cherkess Republic	18
22	2013	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 4100 hectares	applied	Limited liability company "Belomechetskoye " Kochubeevsky	143

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
23	2013	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils of Voroshilov	applied	"Collective farm of Voroshilov" Trunovsky area	18
24	2013	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 2115 hectares	applied	Private company Joint business «Oktyabrskoye» Ipatovsky area	95,2
25	2013	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 700 hectares	applied	Agricultural production cooperative kolkhoz of Chapayev Kochubeevsky area	28
26	2013	Services in testing of crops in soil climatic conditions of the place of cultivation	applied	LLC Evralis	158,4
27	2013	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 15067 hectares	applied	Open joint stock company Joint business Aygursky Apanasenkovsky area	100
28	2013	Services in testing of crops in soil climatic conditions of the place of cultivation	applied	LLC Evralis	15,2
29	2013	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 6000 hectares in borders of municipalities of the village Of St. George and the farm of Ust-Nevinsky	applied	Village of St. George and farm of Ust-Nevinsky of LLC Management assets Nevinsky	240
30	2013	On a subject: "Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 1183 hectares" Expanse of Shpakovsky area	applied	LLC Razdolye of Shpakovsky area	53,2
31	2013	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 13262 hectares the Homeland of Sovetsky area of 2013-2014.	applied	"Homeland" of Sovetsky area	43,7
32	2013	Scientific justification of use of quality indicators for the analysis of grain of winter wheat	applied	LLC Agrokhimik Stavropol - Sigida M. S.	25
33	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 13262 hectares	applied	Agricultural production cooperative Homeland	407,2
34	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 21201 hectares	applied	Agricultural production cooperative of Lenin	722,2
35	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 4955 hectares	applied	Agricultural production cooperative of Kumskoy	173,4
36	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils	applied	Agricultural production	428,1

Nº	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
		on the area of 12700 hectares		cooperative of Kirov	
37	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 4000 hectares	applied	LLC Nina	115,6
38	2014	Scientific justification of use of fertilizers on the basis of early-spring soil diagnostics of crops of winter wheat on the area of 2000 hectares	applied	Agricultural production cooperative of collective farm of Lenin	50
39	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 9494 hectares	applied	Agricultural production cooperative of Pravokumskoye	311,7
40	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 11800 hectares	applied	Agricultural production cooperative of Pobeda	413
41	2014	Scientific justification of use of fertilizers at test of crops in soil climatic conditions of cultivation of experimental station of the Stavropol state agricultural university	applied	LLC Youzhny Dom	125
42	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 14000 hectares	applied	Agricultural production cooperative of Rodina of Novoaleksandrovs ky area	490
42	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 488 hectares	applied	Country economy Spring	17
44	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 277 hectares	applied	Country farm of Ponedelnikov	9,7
45	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 900 hectares	applied	Country farm of Tripolskaya	31,5
46	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 900 hectares	applied	Country farm of Tripolsky	30,7
47	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 400 hectares	applied	Country farm of Shebalkov	20
48	2014	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 50 hectares	applied	Country farm of Shebalkov	2,5
49	2014	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 410 hectares	applied	Country farm of Pruglov	20,5
50	2014	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 493 hectares	applied	Country farm of Pruglov	24,6
51	2014	Liabilities in provision of services on testing of crops in soil climatic conditions of the place of	applied	Evralis	133,5

Nō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
		cultivation			
52	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 3250 hectares	applied	Private company Red Dawn	128,7
53	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 3023,8 hectares	applied	Country economy of Molchanov	105,8
54	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 789 hectares	applied	Country economy Participation	31,5
55	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 2500 hectares	applied	Joint business Joint-stock company Oktyabr'skoye	135,7
56	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 5200 hectares	applied	Experienced and production economy Beam	159,8
57	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 200 hectares	applied	Country farm of Lopatin	7
58	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 550 hectares	applied	Country farm of Lopatin	19,3
59	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 2500 hectares	applied	LLC Management assets	93
60	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 1460 hectares	applied	Country economy of Molchanov	51,1
61	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 2000 hectares	applied	LLC Kubanyagroservic e	19,3
62	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 1404 hectares	applied	LLC "VIR-AGRO"	61,2
63	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 1733,22 hectares	applied	Country farm of Zhdanov	39
64	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 2499,9 hectares	applied	LLC Bitl	56,2
65	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 1700 hectares	applied	LLC Novy Put	76,5
66	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils	applied	Sole proprietor company of Yevtushenko N.N.	2
67	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 70 hectares	applied	Sole proprietor company of Kayshev S.S.	3,1
68	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 70 hectares	applied	Agricultural production cooperative Homeland	407,3

Nō	year			Finance source	Finance volume (thousa nd rubles)	
69	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 21201 hectares	applied	Agricultural production cooperative of Lenin	722,2	
70	2014	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 4955 hectares	applied	Agricultural production cooperative of Kumskoy	173,4	
71	2014	Development of agrotechnical acceptances in case of cultivation of crops for the purpose of ensuring erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of rastenivodchesky products in a droughty zone of Stavropol region (2 stage)	applied	Ministry of Agriculture of Stavropol region	20	
72	2014	Development of scientifically based recommendations about enhancement of elements of the minimum technologies of cultivation of the crops providing erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a zone of steady moistening of Stavropol region (2 stage)	applied	Ministry of Agriculture of Stavropol region	20	
73	2014	Development of agrotechnical acceptances in case of cultivation of crops for the purpose of ensuring erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a zone of unstable moistening of Stavropol region (2 stage)	applied	Ministry of Agriculture of Stavropol region	20	
74	2014	Development of resource-saving technologies of cultivation of winter wheat in soil and climatic zones of Stavropol region (4 stage)"	applied	Ministry of Agriculture of Stavropol region	50	
75	2014	Determination of storage conditions of inventories of intervention fund of agricultural products, raw materials and food, harvest of 2013, and also determination of quality of grain products	applied	LLC SOYUZ- FINANCE	100	
76	2015	Development of agrotechnical acceptances and technical requirements in case of adaptive engineering procedures for creation of technical means and the equipment in system of innovative technologies of exact agriculture for the purpose of improvement of agrochemical and physical indicators of soil fertility and increase in productivity of crops in the territory of Stavropol region (3 stage)	applied	Ministry of Agriculture of Stavropol region	300	
77	2015	Development of resource-saving technologies of cultivation of winter wheat in soil and climatic zones of Stavropol region (final stage)	applied	Ministry of Agriculture of Stavropol region	150	

Nō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
78	2015	Development of agrotechnical acceptances in case of cultivation of crops for the purpose of ensuring erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a zone of unstable moistening of Stavropol region (final stage)	applied	Ministry of Agriculture of Stavropol region	170
79	2015	Development of scientifically based recommendations about enhancement of elements of the minimum technologies of cultivation of the crops providing erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a zone of steady moistening of Stavropol region (final stage)	applied	Ministry of Agriculture of Stavropol region	170
80	2015	Development of agrotechnical acceptances in case of cultivation of crops for the purpose of ensuring erosive stability of a soil cover, preserving and accumulating of organic substance in the soil, growth of productivity and decrease in cost value of crop products in a droughty zone of Stavropol region (final stage)	applied	Ministry of Agriculture of Stavropol region	175
81	2015	Development of resource-saving technologies of use of fertilizers on the basis of optimization of diagnostics of food of plants for increase in productivity of crops in the territory of Stavropol region	applied	Ministry of Agriculture of Stavropol region	250
82	2015	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 664 hectares	applied	Sole proprietor company Bolurov Rasoul Bilyalovich	29,8
83	2015	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 4952 hectares	applied	LLC Plodorodiye	163,4
84		Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 1251,8 hectares	applied	LLC Agro Rus	50
85	2015	Scientific reasons for use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 454,3 hectares	applied	Sole proprietor company Savelyev Gennady Ivanovich	18
86	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 6473 hectares	applied	LLC Izobiliye	226,5
87	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the square	applied	Sole proprietor company Pavlov Valery Nikolaevich	157,5
88	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 6473 hectares	applied	LLC AGRICULTURAL FIRM	108,2
89	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 349 hectares	applied	LLC INTERINVEST	15,7

Nō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
90		Scientific justification of use of fertilizers on the basis of early-spring soil diagnostics of crops of winter wheat on the area of 3500 hectares	applied	LLC Novostarodubskoy e	87,5
91	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 6340 hectares	applied	LLC Shaumyanovskoye	221,9
92	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 6708 hectares		JSC Kayasulinskoe	181,1
93	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 5484 hectares		SPKK "Stepnye Zori"	148,1
94	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 9083 hectares		IP Head of K(F)X Sherpeev Zaurbek Shatuevich	227,1
95	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils on the area of 1350 hectares		FSUE HAG "SKZOSP"	47,2
96	2015	Scientific justification of use of fertilizers on the basis of soil diagnosis of early spring winter wheat crops on an area of 3500 hectares		LLC "Novostarodubsko e"	47
97	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical soil survey on the area of 32 hectares		IP Head of KFX Kostoev Jabrail Tuganovich	1
98	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical soil survey on the area of 300 hectares	applied	IP Head of KFX Sheldesheva Antonina Nikolaevna	10,5
99	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical soil survey on the area of 140 hectares		IP Head of KFX Belmus Yuri Vasilyevich	7
100	2015	Test of crops in soil and climatic conditions of the place of cultivation	applied	LLC "Euralis Semans RUS"	165,2
101	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils	applied	"Business Service International"	20
102	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical inspection of soils	applied	IP Head Kolesnikov Gennadiy Alexandrovich	1,8
103	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical soil survey on the area of 978 hectares		SEC farm "Rodina"	39,
104	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical soil survey on the area of 1862.71 hectares		IP Head of KFX Samarin Grigory Mikhailovich	74,5
105	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical soil survey on the area of 740.15 hectares		IP Head of KFX Samarin Mikhail Grigorievich	29,6
106		Scientific justification of use of fertilizers on the basis of soil and agrochemical soil survey on the area of 62 hectares	applied	IP Head of KFX Samarin Isay Grigorievich	2,5
107	2015	Scientific justification of use of fertilizers on the basis of soil and agrochemical soil survey on the area of 5966 hectares		SHP CJSC "Rus"	239

Νō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
108		The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 3500 hectares	applied	ST head KFH X Alekseenko I.A.	140
109	2015	The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 1524 hectares		llc «Razdole»	30,5
110	2015	The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 300 hectares		ST head KFH Sheldesheva Antonina Nikolaevna	9,6
111	2015	application on the base of soil and agrochemical research on the area of 1733,22 hectares	applied	ST KFH Zhdanova Anna Petrovna	38,9
112	2015	The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 15067 hectares	applied	CP "Airorskiy"	442,4
113		The scientific substantiation for fertilizer application on the base of soil and agrochemical research		ST head KFH Maximov Sergiy Ilich	0,7
114	2016	Development of agricultural practices and technical requirements under adaptive processes for the development of instruments and equipment in the system of innovative farming technologies to improve the agro-chemical and physical characteristics of soil fertility and productivity of agricultural crops in the Stavropol Territory (the final stage)	applied	Ministry of Agriculture of the Stavropol Territory	450
115	2016	Development of resource-saving technologies of fertilizer application by optimizing the diagnosis of plant nutrition to increase productivity of crops in the Stavropol Territory (II stage)		Ministry of Agriculture of the Stavropol Territory	550
116	2016	The development of scientific substantiation study of recommendations for the rational use of mineral fertilizers in different soil and climatic conditions of the Stavropol Territory		Ministry of Agriculture of the Stavropol Territory	500
117	2016	The development of scientific substantiation study of recommendations on the impact of modern micro fertilizers on crop yields		Ministry of Agriculture of the Stavropol Territory	700
118	2016	The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 15067 hectares		CP "Airorskiy"	442,4
119	2016	The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 2499,9hectares		Llc Bilt	56, 2
120		The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 1733,22hectares		KFH Zhdanova	38,9
121	2016	The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 300 hectares		ИП КФХ Максимов С.С	0,7
122	2016			Llc «Agroholding Krasnogvardeiskiy »	603,6
123	2016	The scientific substantiation for fertilizer	applied	AO	210,4

Νō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
		application on the base of soil and agrochemical research		«Kayasulinskoe	
124	2016	The scientific substantiation for fertilizer application on the base of soil and agrochemical research		CPKK «Ctepnye Zori»	99,9
125	2016	The scientific substantiation for fertilizer application on the base of soil and agrochemical research		Llc «Ayamal»	44,0
126	2016	The scientific substantiation for fertilizer application on the base of soil and agrochemical research (pasture)		Llc CP «Opytnyi»	68,7
127	2016	The scientific substantiation for fertilizer application on the base of soil and agrochemical research on the area of 800 hectares		Llc«Agrotransit»	48,0
128		The scientific substantiation for fertilizer application on the base of soil and agrochemical research on 3394.0 hectares of land within the boundaries of the municipality of the village Vorovskoleskoy "		Llc «Active management»	38,5
129	2016	The scientific rationale for the use of fertilizers based on soil and agrochemical soil survey on the area of 3394.0 hectares within the boundaries of the municipality of the village Vorovskoleskoy		Llc «Active management»	67,8
130	2016	The scientific substantiation for fertilizer application on the base of soil and agrochemical research		Llc Agrofirm «KITS»	155,5
131	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application		ST Kryshayhalov Ykyn Cultanovich	22,9
132	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application	applied	Llc «AGROCOIUZ»	54,1
133	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application		SPK collective farm «Rodina»	20,2
134	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application		SPK collective farm «Rodina»	1,5
135	2016	Crops testing in soil and climatic conditions of the place of cultivation	Scientific research		209
136	2016	Crop testing in soil and climatic conditions of the place of cultivation		IIc CAATBAU RUS	70
137	2016	Crop testing in soil and climatic conditions of the place of cultivation	applied	AO MXK EVROHIM	47,9
138	2016	Crop testing in soil and climatic conditions of the place of cultivation	applied	CPK pedigree collective farm «Kuban»	309,9
139	2016	Crop testing in soil and climatic conditions of the place of cultivation	applied	AO «SPK collective farm «Rodina	227,5
140	2016	Crop testing in soil and climatic conditions of the place of cultivation	applied	Lic«AGRO-SOFT»	466
141	2016	Carrying out agrochemical and eco-toxicological soil investigation with the aim of scientific		Llc «Carmat-Agro Plus»	335.8

Nō	year	theme	Way of researc h	Finance source	Finance volume (thousa nd rubles)
		substantiation of the fertilizer application in the conditions of the Black Sea region of the Crimea on an area of 9 000 (nine thousand) hectares			
142	2016	The study of the effect of $\beta$ -glucan barley malt on beer wort indicators	applied	Llc «Dunaiskoe»	30
143	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application		Llc KH «Alex»	63
144	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application on an area of 1200 hectares		Llc «CHP Agroinitsiativa»	54
145	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application on an area of 3500 hectares		Collective farm Orlovskiy	157,6
146	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application on an area of 3500 hectares		KFH «Dina	56,3
147	2016	Carrying out agrochemical analyses of soil and plants to determine biological activity of soil with the aim of scientific substantiation of agrochemicals application		KFH «Dina	77,4
148	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application on an area of 1070 ra		ST head KFH Strygin Maxim Valerevich	24,2
149	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application on an area of 740 hectares		Fertility	29,6
150	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application on an area of 265,3 hectares		Gannorv D.B.	25.3
151	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application on an area of 265,3 hectares		Gannorv D.B.	0,8
152		Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application		Llc «Livestock breeder »	31,4
153	2016	Carrying out agrochemical investigation of soil with the aim of scientific substantiation of fertilizer application			8
154	2016	Carrying out agrochemical investigation with the aim of scientific substantiation of fertilizer application on an area of 492 hectares		LIc CHP Adonev	36,9

INFORMATION ON THE ELECTRONIC FULL TEXT RESOURCES, ACCESS TO WHICH IS PROVIDED ON THE BASE OF DIRECT CONTRACTS WITH THE POSSESSORS OF THE RIGHTS

Νō	Resource name	Information	Information about a contract	Duration of contract	The Internet	Sum contract	Number
п/п		about possessors	conclusion		Website		of users
•		of the rights					
			Contract 12/030/16 of 19.12.2016	21.12.2016 - 21.12. 2017	http://e.lanbook.	920 000,00	
			Contract 12/075/15 of 21.12.2015	21.12.2015 - 21.12. 2016	com/	912 000,00	
	OFC Dublishing	Lla «Dubliahina	Contract 12/199 of 24.12.2014	27.01.2015 - 27.01.2016		235 910,00	
1.	ЭБС Publishing house «Lan»	Llc «Publishing house «Lan»	Contract 12/158 of 22.12.2014	27.01.2015 - 27.01.2016		363 000,00	Unlimited
	ilouse «Laii»	House «Lan»	Contract 01/052 of 27.01.2014	27.01.2014 - 27.01.2015		190 000,00	
			Contract 01/017/13 29.01.2013	29.01.2013 - 29.01.2014		145 000,00	
			Contract01/054 of 2301.2012	25.01.2012 - 25.01.2013		70 000,00	
2.	ЭБС	Llc «Scientific-	Contract 1981 96c 12/029/16 of	22.12.2016 - 22.12.2017	http://znanium.c	280 000,00	Unlimited
	ZNANIUM.COM	publishing center	19.12.2016		om/		
		INFRA-M»	Contract 12/076/15 of 22.12.2015	22.12.2015 - 22.12.2016		260 000,00	
			Contract 1047 96C/12/156 of	23.12.2014 - 23.12.2015		260 000,00	
			17.12.2014				
3.	ЭБС «The	Llc «NexMedia»	Contract 214-12/14/12/157 of	23.12.2014 - 23.12.2015	http://www.biblio	64 000	Unlimited
	University library		22.12.2014	01.10.001001.10.0011	club.ru	669 500 00	
	online»		Contract 272-11/13/11/113 of	01.12.2013 - 01.12.2014		663 500,00	
			26.11.2013	01 12 2012 01 12 2012	-	200 000 00	-
			Contract 121-11/12 11/062 of 01.12.2012	01.12.2012 - 01.12.2013		380 000,00	
			Contract 169-11/11 of	01.12.2011 - 01.12.2012		70 000,00	]
			29.11.2011				
			Contract 53-12/10 Д-12/106/10 of	01.12.2010 - 01.12.2011		70 000,00	
			01.12.2010				
4.	ЭБД РГБ	FGU «The	Contract Nº095/04/0351 of 31.10.2016	08.11.2016 - 08.05.2017	http://diss.rsl.ru/	199420,00	10
		Russian	Contract Nº 095/04/0215/04/039/15 of	15.05.2015 - 15.05.2016		398840,00	accesses
		government state	29.04.2015				
		<b>»</b>	Contract 095/04/0146/04/014/14 of	15.05.2014 - 15.05.2015		199420,00	
			17.04.2014				
			Contract 095/04/0426/10/094 of 07.10.13	30.10.2013 - 30.04.2014		199420,00	
			Contract 095/04/0148 03/054 of	04.04.2013 - 05.10.2013	1	99710,00	1
			18.03.2013	0		33, 10,00	
			Contract 095/04/0964 09/045	10.09.2012 - 09.03.2013			1
			10.09.2012				

**APPENDIX 9** 

5.	Abstract electronic base Scopus	FGBU «The Government public scientific- technical library of Russia»	SUBLICENCE CONTRACT № SCOPUS / 029 от 20/ 07/2016 г.				
6.	Abstract electronic base Scopus	NP «The National  -Electronic- Informational Consortium»	Contract 11/013/14 of 06.11.2014 Contract 11/011/13 of 22.11.2013 Contract 11/013/11 of 23.11.2012	01.12.2014 - 01.12.2015 01.12.2013 - 01.12.2014 01.11.2012 - 01.12.2013	http://www.scop us.com/	898261,00 715162,00 624739,00	Unlimited
7.	Web of Science	FGBU «The Government public scientific- technical library of Russia»	Sublicense contract Nº WoS/ 224				
8.	Web of Science	NP «The National  -Electronic- Informational Consortium»	Договор 10/044/14 от 24.10.2014 Договор 11/012/13 от 25.11.2013 Contract 11/012/11 of 23.11 2012	01.11.2014 - 31.10.2015 01.11.2013 - 31.10.2014 23.11.2012 - 31.10.2013	http://apps.webo fknowledge.com	1 076 000,00 770 000,00 680 000,00	Unlimited
9.	Journal Citation Reports	NP «The National  -Electronic- Informational Consortium»	Contract 04/029 of 05.04.2013	05.04.2013 - 31.10.2013	apps.webofknowl edge.com/JCR	96 000,00	Unlimited
10.	Electronic library Grebennikon	Llc «Publishing house «Grebennikov»	Contract №31/ДП/2015/09/168 of 28.09.2015	26.10.2015 - 31.12.2016	http://grebenniko n.ru/	81 600,00	
11.	Terminal of the remote access ΦΓБΗУ ЦНСХБ	ФГБНУ ЦНСХБ	Contract № 11/025 of 09.11.2015r.	09.11.2015 - 09.11.2016	http://www.cnsh b.ru	35000,00	
12.	Llc «The scientific electronic library»	Llc «Scientific electronic	Contract №SIO-863/2015/09/042/15 of 09.09.2015 r.	09.09.2015-09.09.2016	http://elibrary.ru	250000.00	Unlimited
	SCIENCEINDEX	library»	Contract № 863/2014/08/063/14 of 04.09.2014 г.	04.09.2014-04.09.2015		130000,00	
			Contract № 863/2013 of 26.08.2013 г.	26.08.2013-26.08.2014		120000,00	
			Contract № SI 863/2012 of 04.07.2012 г.	04.07.2012-04.07.2013		100000,00	
11.	PO «Antiplagiat	Llc «Anti-Plagiat»	Contract № 452/09/004/16 of 05.09.2016r.	05.09.2016 - 05.09.2017	http://stgau.anti plagiat.ru/index.a spx	330750,00	Unlimited