

## ARMENIAN NATIONAL AGRARIAN UNIVERSITY

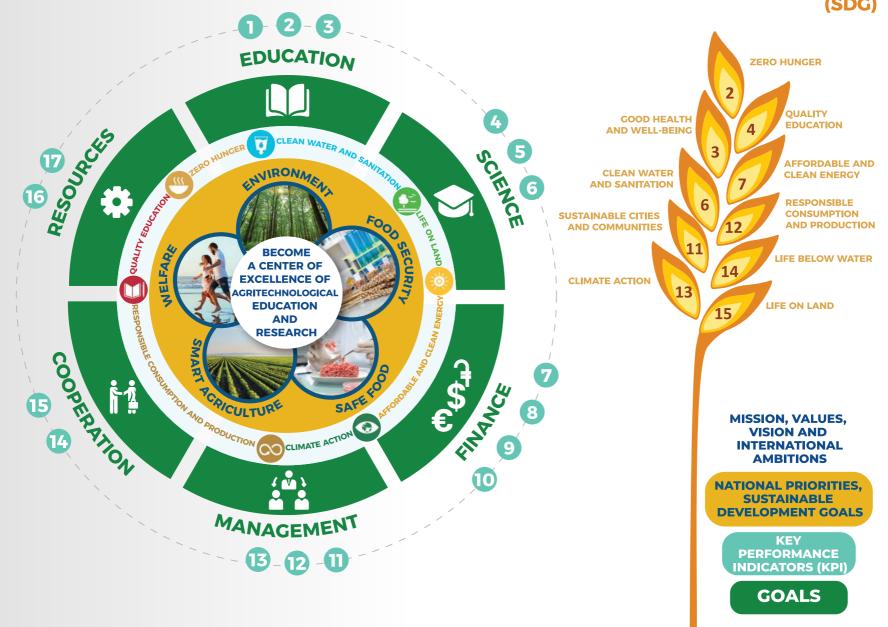




#### **STRATEGIC PLAN 2020-2024**



## UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDG)



## MISSION, VALUES, VISION, AND INTERNATIONAL AMBITIONS

Our mission is to prepare agritechnology specialists capable to develop the food and agriculture system in the country with the help of their profesioal skills and through cooperation with the sector's stakeholders.

The University will promote its research potential, offering best solutions for progress and will introduce up-to-date technologies, using and demonstrating the results of a knowledge-based economy.

#### **VISION**

The vision of the University is to become an agritech academic and research excellence center guided by creativity and innovations, promoting the harmonious collaboration between the agricultural education, research, extension and industry.

# INTERNATIONAL AMBITIONS

- Implementation of new joint educational programs with renowned international universities, providing double or joint degree diplomas and/or certificates;
- Coordination of international grant projects;
- International accreditation of educational programs;
- Promoting a growth of the number of foreign students:
- Export of innovative solutions in the field of science;
- Participation in international research projects.

#### Excellence

Strive and achieve a high standard of quality and professionalism, ensure continuous improvement, encourage and promote individual and collective inputs and achievements in all fields of the University's activity.

## Accountability and transparency

Work transparently and be accountable, always considering the participation of internal and external stakeholders important.

#### Social responsibility

Serve the public, enrich it with innovative knowledge and prepare specialists capable of taking personal responsibility towards the nation and the state.

#### Being student-centered

Form equally accessible and cooperative academic environment necessary for creativity and development of learners, ensuring their active involvement.

#### Dignified environment for everybody

Observe the norms of ethics, be honest and fair, guarantee academic freedom and honesty.

# Description Leadership qualities, encourage students to be self-confident and solve problems independently, arming them with the best practices and inspiring to change the world to the better.

# **KEY**VALUES

## NATIONAL PRIORITIES



#### **FOOD SECURITY**

Some of the main objectives of the food security are physical and economic accessibility of food and assurance of safety of food supplied to the population.

#### WELFARE AND HUMAN RESOURCE DEVELOPMENT

The education system in Armenia has diverse problems, with the quality of education being the most worrying one. Wellbeing of the society is determined by the improvement of the quality of education in the long run.

#### **ENVIRONMENT**

The Armenian government, guided by the principle of sustainable development, during the upcoming 5 years will implement actions that will exclude overuse of natural resources, minimize the adverse impacts on the environment, including on human life and health, and assure the prevention or reduction of environmental pollution, complex management of natural resources and control thereof.

#### **SAFE FOOD**

Providing qualitative changes in the development of the food safety system requires consistently promoting the enhancement of the efficiency of the food safety system in the country through modernization of the food safety capacities and quality infrastructures.

#### **SMART AGRICULTURE**

In the context of the modern global challenges, smart and innovative economy does not have any alternative for Armenia. Application of the principle of achieving maximum results with the existing resources is in the heart of the smart management. Human capital development is a priority in safeguarding our vision of development of smart agriculture.



#### **ZERO HUNGER**

## **GOAL 2:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture

ANAU seeks to promote enhancement of productivity and increase of incomes in food production, family agricultural holdings, in particular those of female and young farmers, including secure and equal access to production resources and investments, knowledge, financial services, creation of added value and market opportunities and non-agricultural employment. Cooperating with all possible stakeholders, the University will attempt to promote the maintenance and development of the sustainable food safety mechanisms in Armenia.



## GOOD HEALTH AND WELL-BEING

#### **GOAL 3:** Ensure healthy lives and promote well-being for all at all ages

The activities of the University are aimed at contributing to reduction of the number of deaths and diseases due to dangerous chemical substances, pollution and poisoning of air, water and soil, by providing quality agricultural education, high-quality professional consultancy and research, as well as at promoting multi-profile research and education projects for healthy agriculture and food safety systems, ensuring the professional potential needed for production of safe food.



## **QUALITY EDUCATION**

## **GOAL 4:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Quality education is the basis for improvement of human lives and sustainable development. Ensure that the learners acquire knowledge and skills necessary for sustainable development, including those of livelihood, human rights and gender equality, promotion of peace, global citizenship and evaluation of cultural diversity.

## **GOAL 6:** Ensure availability and sustainable management of water and sanitation for all

The largest share of water consumption is ascribed to agriculture. Eighty six percent of water resources in Armenia is used for agricultural purposes. ANAU seeks to develop and teach new methods of designing, construction and operation of water-improvement systems, irrigation of farmland and land improvement, as well as contribute to the efficient use of water resources in Armenia and solution of scientific and practical problems.

**CLEAN WATER AND SANITATION** 



## GOAL 7: Ensure access to affordable, reliable, sustainable and modern energy

During its activity, ANAU has been adhered to the energy-saving approach, promoting the use of alternative energy sources, thus contributing to solution of problems of climate change, agricultural industry, and access to energy, seeking to disseminate the energy-saving culture in all levels, including as an approach in educational programs and research activities.

AFFORDABLE AND CLEAN ENERGY





SUSTAINABLE CITIES AND COMMUNITIES

#### **GOAL 11:** Make cities inclusive, safe, resilient and sustainable

There exist economic, social and environmental ties between urban, suburban and rural agriculture that strengthen national and regional opportunities in food regulations. In case of right planning, urban agricultural holdings can contribute to the reduction of the human impact on climate and building food systems. In this regard, ANAU considers the sustainable city concept important and seeks to provide the needed professional potential to support the establishment, management and development of vertical agriculture in urban, suburban and rural environments



RESPONSIBLE CONSUMPTION AND PRODUCTION

#### **GOAL 12:** Ensure sustainable consumption and production patterns

ANAU disseminates the culture of optimal planning of agricultural operations, efficiency enhancement, prudent operation of resources and waste processing among its learners and employees. ANAU has adopted the approach of responsible use of resources through improvement of infrastructures.



CLIMATE ACTION

**GOAL 13:** Take urgent action to combat climate change and its impacts

ANAU researchers have dedicated their scientific research to the study and evaluation of ecological situation in the country, development of technologies for receiving ecologically safe food products from anthropogenically polluted land areas, implementation of necessary testings in organic farming and enhancement of adaptability of natural and agricultural systems, mitigation of desertification phenomena attributed to global climate change and putting the agricultural activity on more sustainable track.

### **GOAL 14:** Conserve and sustainably use the oceans, seas and marine resources

The country currently faces such problems as, for example, water pollution, bogging and availability of floating plastic debris, efficient and responsible operation of coastal ecosystems, and rehabilitation of fish resources. Solution of these and related problems will enable to provide the country with the necessary water resources and develop the blue economy. A Water and Land Resource Management Research Center was opened in 2019 at ANAU, with the mission of developing and implementing modern technologies in the field of management of water and land resources. There is also a Food Safety and Biotechnology division in the University's Research Institute of Food Science and Biotechnologies, with a Bio-tech Incubator to come soon.

## **GOAL 15:** Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

ANAU hosts the National Plant Genetic Resource Bank. Genetic research of the conserved plant genetic resources (CWRs (Crop Wild Relatives), aboriginal varieties and species) are ongoing: to select varieties resistant to the global changes in the environment, the aeroponic growing system has been set up. Particular ANAU subdivisions are implementing thematic research on conservation and rehabilitation of the country's degraded forests and bioecological aspects of improvement of species composition and dendroflora of the green plantations in Yerevan. At the same time, the University is actively involved in measures taken in the field of the country's environment, and delivers consultancy in the field of landscaping and specialized services in forestry. ANAU actively participates in the reforestation process. Nurseries have been created.



**LIFE ON LAND** 



#### **EDUCATION**

## Academic excellence, quality and competitive educational programs



#### **OBJECTIVES**



Continuous improvement of educational programs, internationalization and quality enhancement;

Preparing socially responsible, competitive and qualified specialists demanded in the local and international job markets and mastering the up-to-date technologies;

Increase in the number of local and foreign applicants through implementation of specialties demanded in the local and international job markets and educational programs in foreign languages;

Improvement of the non-formal and continuous education system;

Introduction and further deepening of student-centered approaches in the organization of the education process.

- Structural and content transformation of educational programs; compliance of the learning outcomes with the requirements of the job market and the NQF (National Quality Framework);
- Encouraging the scientific activity of the faculty to create theoretical prerequisites for ensuring education-research link in the teaching process;
- Professional, teaching and research capacity building for the faculty, aimed at implementation of high quality and competitive educational programs;
- Application of the approach of one-semester long paid internships, introduction of dual education;
- Ensuring the flexibility of core courses in line with scientific and technological innovations;
- Expansion of the cooperation format in the University's educational services, introducing, in particular, joint/double degree programs;
- Accreditation of educational programs, including that of by recognized international accreditation agencies;
- Development and implementation of educational programs for non-formal and continuous education in line with the requirements of food and agriculture sector;
- Ensuring a trustworthy, outcome-based and student-centered evaluation system;
- Active use of student-centered, inclusive and smart education approaches in the teaching and learning process, in particular in STEM educational programs.

#### **EDUCATION KPIs**



## Accredited educational programs demanded in the local and international job markets

- Number of graduates working in their related profession, size of the average salary:
- Number of agreements signed on organizing paid internships;
- Increase in the number of applicants;
- Number of accredited educational programs.



## Foreign language educational programs

- Increase in the internal and external mobility among students, faculty and employees;
- Increase in the number of students and faculty fluent in foreign languages;
- Increase in the number of foreign language educational programs and foreign applicants.



Number of short-term and mid-term courses, number of summer schools

#### **SCIENCE**

Obtaining scientific and research results in the food and agriculture sector and their implementation in the research excellence and innovative system development



#### **OBJECTIVES**

building:

Optimization of the research units of the Foundation and promoting scientific research and cooperation between them, cardinal revision of the activity of the base farms, human and institutional capacity

Strengthening the education-scienceindustry linkage, implementation and commercialization of the results;

Review of the directions of the scientificresearch activity in line with the challenges and trends of the sector, defining the research priorities in the University, implementing research projects having applied and investment significance;

Enhancing the visibility of scientificresearch activity, internationalization.

- Revision of the documents regulating the structures and the activities of the scientific-research units and base farms;
- Developing and implementing joint projects by the scientific-research units;
- Developing and application of mechanisms that will ensure involvement of the students in the scientific-research units and their participation in scientific projects;
- Human capital development in scientific centers, involvement of young personnel;
- Reequipment and modernization of the technological infrastructure;
- Operation of institutionalized mechanisms of implementation of the scientific results within the University, from the concept of a scientific result to its implementation;
- Define the priorities of the scientific-research activity of the University in line with the sustainable development goals, the country's priorities and the needs of farmers and investors;
- Recording the scientific results, publication of articles in journals with high citation index;
- Revealing the trends of international research projects, submitting grant proposals in areas that have strategic significance for the University;
- Improvement of the "Agriscience and Technology" periodical of ANAU and its positioning in the lists of recognized international research publications.

#### **SCIENCE KPIs**



#### Scientific activity aimed at implementation of the Sustainable Development Goals and solution of the national priorities; internationalization

- Efficient cooperation with international research and educational agencies: number of joint projects implemented, number of joint articles published, number of trainings;
- Number of international conferences participated;
- Increase in the number of articles published in journals with high citation index;
- Growth in the number of research grants (international and local);
- Volume of financial flows aimed at implementation of research works.



## Sustainable succession, rejuvenation of the science;

- Increase in the number of students involved in research processes;
- Increase in the number of young researchers;
- Average age of the researchers in the centers.



Amount of the implemented, commercialized, exported scientific results applicable in the learning process.

#### **FINANCE**

# **Efficient management of the University's financial resources**



#### **OBJECTIVES**



Introduction of effective mechanisms ensuring financial stability and autonomy;

Introduction of resource-efficient technologies, ensuring cost saving;

Ensuring financial flows through efficient management of the University's assets;

Increase in the volume of alternative funding.

- Analysis and planning of financial resources;
- Ensuring self-financing and additional incomes by enhancing the attractiveness and competitiveness of the dormitory and the rest house;
- Ensuring self-financing of research projects through commercialization of the scientific results;
- In the course of the infrastructure improvement, apply technical solutions that will further ensure saving of financial resources;
- Ensuring financial flows by delivering advisory, information, teaching and laboratory services and paid training courses;
- Recovery of teaching-experimental and production farms and their transformation into profitable entities;
- Establishing endowment funds;
- Participation in local and international projects, involvement of grants and donations;
- Use of investment practices;
- Capacity building for the Marketing and Development Division.

#### **FINANCE KPIs**



#### **Alternative financial flows**

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Volume of financial flows for advisory, information, training and laboratory services

- Endowment funds, financial inflow;
- Number of local and international grants;
- Volume of financial flow;
- Volume of donations.



Volume of the incomes of the teachingexperimental and production farms



Volume of financial flows received from implemented, commercialized, and exported scientific results

#### **MANAGEMENT**

Ensuring vertical and horizontal cooperation, participation, accountability and transparency in the governance system of the University.



#### **OBJECTIVES**



Formation of an in-house and academic culture;

Reform in the University's governance system and enhancement of its efficiency;

Introduction of a new human resource management (HRM) system, recruitment, maintenance and development of the best human resources;

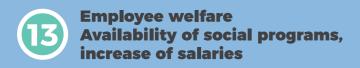
Revision of the quality assurance system, application of the Plan-Do-Check-Act (PDCA) cycle and introduction of an impact-oriented system of monitoring and evaluation;

Enhancement of the competence and competitiveness of the structural subdivisions.

- Formation of a common value system and dissemination of the ethics rules;
- Enhancement of the corporate social responsibility (CSR);
- Form clear mechanisms of accountability and transparency;
- Introduction of an automated system of management;
- Mapping of cooperation (clarification of the mechanisms of information dissemination, control of the process, and cooperation between all subdivisions and branches of the professional educational institution and their governance);
- Ensuring coherence of internal legal acts with the relevant international and national legal acts;
- Develop and introduce systems of training and performance review of the University's employees according to categories;
- Elaborate and further develop differentiated criteria of bonuses for the faculty, administration and support staff and bonus mechanisms;
- Develop in-house mechanisms of encouraging and dissemination of the progressive teaching practices, encourage the modern teaching methods and technologies;
- Consider the possibilities of introducing social and/or medical insurance packages;
- Establishing a data base necessary for analysis and efficient planning of the University's activities;
- Revision of the quality assurance system;
- Building the University's organizational and governance capacities;
- Develop student support services, promote the activities of the student organizations;
- Promote student career services by developing dual education and the consultancy and training systems;
- Formation of an online platform for joint use of resources.

#### **MANAGEMENT KPIs**







- Student-faculty, student-administration staff, studentsupport staff and faculty-support staff relationships;
- Number of doctors and candidate doctors of science;
- Level of satisfaction of the employees;
- Average age of faculty.

### **COOPERATION**

Continuous development of the University in conditions of uninterrupted cooperation with the ecosystems of agricultural and related sectors on national and international levels



#### **OBJECTIVES**



Ensuring mechanisms of efficient cooperation with stakeholders in the public, private, NGO and international sectors;

Delivery of service to the public by providing continuous education programs and consultancy;

Rebranding of the University and its positioning in the ecosystems of agriculture and related sectors as an agritech teaching and research excellence center;

Promoting the legislative frameworks in the education, agrarian and related sectors.

- Formation of cooperative network and platforms jointly with the stakeholders, appreciating the regular work with the Diaspora:
- Jointly developing policies and events and support in their implementation;
- Building the University's communication mechanisms and capacities;
- Establishing active connections with employers in the sector;
- Present the University's resources and capacities in B2B platforms, thus providing the University's participation in production processes;
- Form a unified system of continuous education, ensuring the interconnection between the public demand and the university supply;
- Input of the University's educational and scientific potential in agricultural and related sectors as resources to be used by external stakeholders;
- Raising awareness about agritech education among the public;
- Developing agritech and biotech startups;
- Cooperation with local and international universities;
- Developing and putting forward recommendations and legislative initiatives on legal reforms in sectors related to the activity of ANAU.

#### **COOPERATION KPIS**



#### **Geography of cooperation**

- Number of joint projects and programs (including also exchange programs), by countries and by universities;
- Number of research centers and researchers carrying out scientific/research activities, by countries;
- Persons having provided donations and financial support, by countries, approved grants, by countries;
- Foreign applicants, by countries;



## Services delivered to state governance bodies and the public

- Volume of services provided by ANAU subdivisions to economic entities in agriculture, agri-processing industry, and the sectors supporting agriculture;
- Volume of consultancy provided for state governance bodies, number of recommendation packages developed on legislative gaps.

# HUMAN RESOURCES AND INFRASTRUCTURES

Ensuring human resources and infrastructures in line with the University's mission, vision and goals



#### **OBJECTIVES**



Modernization of the infrastructures and material and technical resources of the University, renovation of the buildings, ensuring physical access and safe environment;

Providing human resources in compliance with the University's needs;

**Ensuring conditions for smart learning** in the University;

Formation of a museum complex.

- Inventory, sort and classify the existing resources;
- Carry out renovation works in the educational buildings, simultaneously ensuring adaptation of the conditions to the needs of people with musculoskeletal problems;
- Expand and improve the dormitory and the rest house;
- Develop the security systems of the educational buildings and ensure safe environment;
- Recruiting staff suiting the mission, vision and Strategic Plan goals adopted by the University;
- Renovate and technologically reequip and modernize the research and educational laboratories and classrooms, emphasizing the IOT and STEM directions;
- Providing proper conditions for maintenance of cultural values and their publicity.

#### **HUMAN RESOURCE AND INFRASTRUCTURE KPIs**



#### **Ensuring professional progress of the staff:**

- Number of employees trained;
- Volume of financial investments made for human capital development.



## Ongoing building of infrastructure, resources and student laboratories in compliance with modern education and the University's mission, vision and SP goals

- Surface and number of the University's restructured and renovated buildings, volume of the financial investments made;
- Number of educational and research laboratories reequipped and furnished with up-to-date equipment, volume of investments made, number of classrooms equipped with modern technical means.

## 1 to 6 KEY PERFORMANCE INDICATORS

#### **ENSURE THE UNIVERSITY'S REBRANDING AND**

INTERNATIONALIZATION OF EDUCATION: in a student-centered, smart learning environment, prepare highly qualified specialists competitive in the local and international job markets.



## Accredited educational programs demanded in the local and international job markets

- Number of graduates working in their related professions, size of the average salary;
- Number of agreements signed on organizing paid internships:
- Increase in the number of applicants;
- Number of accredited educational programs.



#### Foreign language educational programs

- Increase in the internal and external mobility among students, faculty and employees:
- Increase in the number of students and faculty fluent in foreign languages;
- Increase in the number of foreign language educational programs and foreign applicants.



Number of short-term and mid-term courses, number of summer schools

With the wish to evaluate our development progress and our input in implementation of national priorities, the following Key Performance Indicators (KPIs) have been defined:

#### TRANSITION TO AGRITECH EXCELLENCE CENTER

INTERNATIONALIZATION OF SCIENCE: strengthen the cooperation between the scientific and research centers of the University aimed at carrying out theoretical and applied research.



Scientific activity aimed at implementation of the Sustainable Development Goals and solution of the national priorities; internationalization

- Efficient cooperation with international research and educational agencies: number of joint projects implemented, number of joint articles published, number of trainings;
- Number of international conferences participated;
- Increase in the number of articles published in journals with high citation index;
- Growth in the number of research grants (international and local);
- Volume of financial flows aimed at implementation of research works.



Sustainable generation change, rejuvenation of science



Amount of the implemented, commercialized, exported scientific results applicable in the learning process.

- Increase in the number of students involved in research processes;
- Increase in the number of young researchers;
- Average age of the researchers in the centers.

## 7 to 17 KEY PERFORMANCE INDICATORS

#### **ENSURE THE UNIVERSITY'S REBRANDING AND**

#### **Financial autonomy**

- Alternative financial flows
- Endowment funds. financial inflow:
- Number of local and international grants;
- Volume of financial flow;
- Volume of donations.

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- Volume of financial flows for advisory, information, training and laboratory services

Volume of the incomes of the teaching-experimental and production farms

- 10
- Volume of financial flows received from implemented, commercialized, and exported scientific results

With the wish to evaluate our development progress and our input in implementation of national priorities, the following Key Performance Indicators (KPIs) have been defined:

#### TRANSITION TO AGRITECH EXCELLENCE CENTER

Shape economic and social values that will lead to introduction of innovations in the sector and stronger dialogue with the society.

- Degree of automation and digitalization of the management
- Human resource management and sustainable generation change
- Student-faculty, student-administration staff, studentsupport staff and faculty-support staff relationships;
- Number of doctors and candidate doctors of science;
- Level of satisfaction of the employees;
- Average age of faculty.
- Employee welfare
  Availability of social programs, increase of salaries
- Geography of cooperation
- Number of joint projects and programs (including also exchange programs), by countries and by universities;
- Number of research centers and researchers carrying out scientific/research activities, by countries;
- Persons having provided donations and financial support, by countries, approved grants, by countries;
- Foreign applicants, by countries.

- Services delivered to state governance bodies and the public;
- Volume of services provided by ANAU subdivisions to economic entities in agriculture, agri-processing industry, and the sectors supporting agriculture;
- Volume of consultancy provided for state governance bodies, number of recommendation packages developed on legislative gaps.
- 16 Ensuring professional progress of the staff
- Number of employees trained;
- Volume of financial investments made for human capital development.
- Ongoing building of infrastructure, resources and student laboratories in compliance with modern education and the University's mission. vision and SP goals
- Surface and number of the University's restructured and renovated buildings, volume of the financial investments made;
- Number of educational and research laboratories reequipped and furnished with up-to-date equipment, volume of investments made, number of classrooms equipped with modern technical means.

