

The Modern Ukrainian Model of Quality Assurance in the Agricultural University Education

Olena Vasylenko

Bila Tserkva National Agrarian University
Economics faculty

Address: sq. Soborna 8/1

Bila Tserkva, Ukraine

e-mail: vasylenko521@gmail.com

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Abstract

The modern Ukrainian model of quality assurance in the agricultural university education are undergoing the development stage and need studying to improve the economic efficiency of the institutions. In 2019 started a new wave of dynamic changes in Ukrainian agricultural higher education institutions management was launched aimed to ensure the education quality. The wave was predetermined by National Quality Assurance Agency for Higher Education work start. The paper deals with the analysis of the regulatory framework of the Ukrainian national system of educational as well as the existing models of agricultural institutions of higher education management and impact factors of the employers choice of the agrarian market of Ukraine. It determines the factors forming the modern model of higher education institutions management competitiveness at different management levels and an algorithm for the implementation of the system of agricultural university quality management.

Keywords: *quality assurance, higher education institutions, competition, competitiveness, educational services market, stakeholders.*

JEL Classification: *A22, C52, I20, I21, Q11*

1. Introduction

The modern agricultural market of educational services creates challenges for higher education institutions. These challenges require studying the institutions characteristics in order to improve their economic efficiency.

The issue of competition and competitiveness was not studied in Ukraine until the 90-ies of XX century since there was no need in it while modern conditions of hard competition between institutions of higher education make these economic categories highly relevant [1].

Currently, higher education has been undergoing reformation and it aims to conform to European educational trends. However, the steps taken to implement European standards should be consistent with the national peculiarities including economic aspects of higher education. To meet European standards means to be competitive, i.e. be in demand to educational activities stakeholders.

The modern Ukrainian models of quality assurance in the agricultural university education are under development and should be studied with a view to the formation of algorithm for the implementation of the system of agricultural university quality management.

New dynamic changes in agricultural higher educational institutions management started in Ukraine in 2019. They aim at ensuring management quality and are related to the fact that the National Quality Assurance Agency for Higher Education officially started its activities in Ukraine in February 2019. Currently, the Agency gains the ability to implement the state policy in the sphere of higher education and becomes a change catalyst aimed to build its quality culture [2].

The strategic objectives of the National Agency up to 2022 include [2]:

- implementation of effective procedures for educational programs accreditation;
- facilitating the internal education quality assurance systems functioning in institutions of higher education through information-advisory activities and benchmarking;
- standards harmonization and development of criteria for quality assurance in higher education on the basis of the best international and national practices.

It should be noted that criteria for quality assurance in higher education have been already developed by the beginning of 2020 and the first wave of accreditations of educational programmes has already passed. Special attention is paid to the transparency of the process, the principle of confidence and good will to all participants of the accreditation process.

The reformation of the agrarian institutions of higher education in Ukraine provides for changes in their management, which is based not only on the basis of administrative management, but on the knowledge of market economy, the labour market and the needs of employers as well as. The ultimate goal of management should be strengthening the higher education institutions mission through ensuring a high level of teaching, training and research [3-4]. The university administration need to identify competitive advantages and reorganize the management structure so as not only to stay in the educational services market but to be successful as well.

2. Data and Methods

In 2019, the share of agrarian higher education institutions students in Ukraine was 10.2 % (153,500) of the total number (1,501,000 students of which 387,917 studying for the Junior bachelor degree). Modern network of agricultural education institutions includes 128 institutions, of which 22 higher education institutions and 106 technical schools and colleges. They train specialists in 51 specialties of Bachelor degree and in 46 specialties of Master. 60.8% of full time bachelor students study for agricultural professions, 17.9 % - for economic, 2.5% - for construction, 3.8% - for food processing industry, 2.6 % - for computer technologies, 12.4 % - for other specialties [5].

According to the source [6], the main impact factors of the employers choice of university graduates are: quality of education (51%), reputation of the institution (12%), university affiliate programs (7%), scientific and technical base (4%). The impact factors on the employers of agrarian sphere of Ukraine in the selection of university graduates according to the members of the association "Ukrainian Club of Agrarian Business" in 2019 survey in the context of specialties are presented in table 1.

In this study, we used a combination empirical and comparison methods. Internal models of quality assurance for various agricultural institutions are analyzed. An in-house model of quality management was developed in Bila Tserkva NAU [7]. The national legislative base on ensuring the quality of higher education and educational activities was studied.

3. Results and Discussion

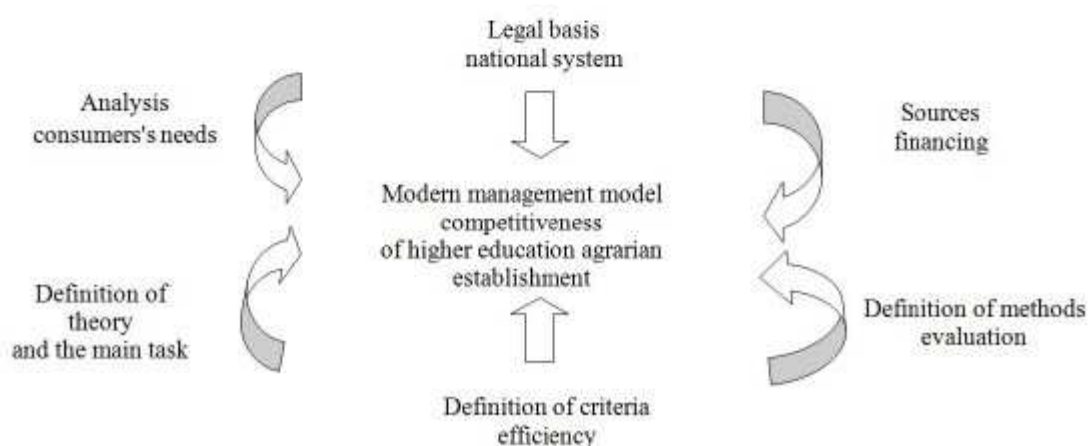
We believe that the main factors forming the model are to be considered to defined the generalized modern models of management in higher education institutions (Fig. 1). These factors are inter related and provide a cyclical process. Consider the following factors through the analysis of the Ukrainian market of educational services and the characteristics of their relationship.

Table 1: Impact factors on employers of agrarian sphere at selection of graduates of higher educational institutions in Ukraine (2019)

Specialty	Impact factors, %					
	Quality of education	Reputation of the institution	University affiliate programs	Scientific and technical base	He (she) is a graduate himself	Others
Agroengineering	48	-	9	13	-	30
Agronomy	58	8	4	8	-	21
Veterinary medicine	46	8	31	-	-	15
Economy	60	12	4	-	4	20
Marketing	47	27	7	-	-	20
FEA Management	65	24	-	6	6	-
Accounting and Auditing	55	20	5	-	-	20

Source: formed by the author according to sources [7]

Figure 1. The competitiveness factors of the modern management model of higher education institution



Let us analyze the legal framework of the Ukrainian national system. To date, it is based on the following basic documents:

- Law of Ukraine "On Education" of September 5, 2017 (Article 41 "Quality Assurance System for Education");
- Law of Ukraine "On Higher Education" of 1 July 2014 (Article 5 "Levels and Degrees of Higher Education", Article 6 "Certification of Higher Education Applicants", Article 10 "Standards of Higher Education", Article 16 "Quality Assurance System for Higher Education"
- Agreement on Association of Ukraine with the European Union, ratified by the Verkhovna Rada of Ukraine on September 16, 2014 (Chapter 23 "Education, Training and Youth");
- National Qualifications Framework of 2011;
- The list of branches of knowledge and specialties, which are subject to preparation of higher education institutions of April 29, 2015;
- Guidelines for the development of higher education standards in 2017;
- Higher education standards.

Based on the above normative legal documents, higher education institutions independently, on the rights to autonomy, develop their own internal quality assurance system. As this is a new experience for Ukrainian higher education institutions, it is recommended to take the principles outlined in the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG - 2015) as a basis, which in particular determines the relationship between the Bologna Process and the education quality.

The Law of Ukraine "On Higher Education" [7] considers the two concepts:

- quality of higher education (set of qualities gained by a person with a degree, which reflects his professional competence, value orientation, social orientation and determines the ability to satisfy both personal spiritual and material needs, as well as the needs of society);
- quality of educational activity (the set of characteristics of the higher education system and its components, which determines its ability to meet the identified and anticipated needs of an individual or society).

The quality assurance system of higher education in Ukraine consists of:

- systems of internal quality assurance of educational activity;
- systems of external quality assurance of educational activity;
- quality assurance systems for the activities of the National Agency for Quality Assurance in Higher Education (NAQAHE) and independent institutions for the evaluation and quality assurance in higher education [8].

When developing an internal quality assurance system for universities, it should be borne in mind that the quality of higher education is ensured at the level of educational programs, and the quality of educational activity at the level of structural units [9].

As Ukraine seeks and confidently takes the first steps towards the implementation of a European quality assurance system, we will consider a comparative analysis of the Ukrainian and European systems characteristic of most HEAs [10-11]. This analysis shows that, for European higher education institutions, the main consumer of educational services is the student and the

employer. The development of the institution takes place in market conditions and aims at improving the quality of education.

In accordance with the standards and guidelines for quality assurance in the European Higher Education Area (2015) [12], the strategies, policies and procedures of higher education institutions should have an official status and be accessible to the general public, that is, management activities should be carried out in accordance with changed or replaced by newly developed internal regulations. Higher education institutions choose their policies independently and define management decision-making procedures aimed at enhancing the competitiveness of higher education institutions in the educational services market and aimed to join the European educational space. Higher education institutions face challenges sometimes problems at each stage of the managerial decision-making due to lack of experience and adaptation of national education to European standards.

Having analyzed the modern models of competitiveness management of higher education institutions in the market of educational services, we can note that the following factors will influence the development of the administrative model of competitiveness of higher educational institutions in the agricultural sector:

- 1) quality of educational services as the main factor of competitiveness formation;
- 2) research of the market of educational services in agricultural and definition of methods of market tendencies forecasting;
- 3) determining the methodology for competitiveness assessing;
- 4) identification of competitive advantages, factors of competitiveness increase and key success factors;
- 5) financial and resource capacity of the university ensuring the competitiveness factors;
- 6) international activities.

Of particular importance in today's agrarian higher education institutions of Ukraine is international activities: cooperation with foreign higher education institutions in the field of joint research and scientific publications; academic mobility of students and teachers; experience exchange including the matters of the institution management and higher education quality assurance. International activities require funding, therefore, Ukrainian higher education institutions have to consider additional funding instruments (table 2) based on the experience of leading European institutions. Scholarships and grants are the most popular ones in Ukraine.

Table 2: Supplementary Financing Instruments

Instrument	Characteristics	States
Scholarships and grants	States and higher education institutions offer financial aid with no refund	most countries
Student loans	Higher education institutions provide different forms of loans	more than 60 countries
Labor capital contracts	Private enterprises offer contracts provided a student is to refund a part of his/her income to investors who receive a share of student's capital.	Chile, Columbia, Germany, the USA

Saving accounts for study	State encourages families to set saving accounts for their children through providing tax benefits	Belgium, Netherlands, Spain, Sweden
Vouchers	Students have the right to study at a higher education institution of their choice	Bulgaria, Hungary

Source: formed by the author according to sources [13]

Having analyzed some process models of foreign agrarian institutions of higher education quality management [14-15], it can be noted that the quality assurance system is a mandatory component of a modern agrarian university management, in which the policy of the institution must be clearly defined; the legal documentation are to provide definition of processes, mechanisms and participants in educational activities.

It is necessary to ensure the quality of educational services at the expense of the reorientation from the functional activity of educational institutions to the process management and the construction of a management system based on close cooperation with entrants, students, employers as the main customers of higher education institutions activity.

Monitoring the consumers satisfaction with educational services: students, graduates, employers as well as monitoring the expectations of stakeholders (entrants and their parents) are prerequisites for quality assurance in higher education institutions. Monitoring is an important management function aimed to improve the quality of education through research into the educational process, expectations, needs and customer satisfaction with educational services.

Information is usually collected through questionnaires, it aims to identify the quality criteria for educational services that are the criteria of highest competitiveness and need improving at the university. The processed results are formulated in the form of a report and they are openly published on the universities websites. Assessment and analysis of the results of the study allow us to develop recommendations for managing the development of the organization, the work of its structural units in improving the education quality.

The results of the scientific study of the theoretical and methodological principles of the current agrarian higher education institutions management on the different levels make it possible to conclude that the development and implementation of a system of internal quality assurance of educational activities is to be the first step in improving the competitiveness of the organization (table 3). Taking into account the presented experience and analysis of modern models of agrarian higher education institutions competitiveness management, we propose an algorithm of the quality management system implementation at agrarian university (Fig. 2).

Table 3: Factors of competitiveness of agricultural higher education institutions at different levels of management

Competitiveness factor	level of institution	Level of educational program
Quality of education	quality assurance of educational process organization	qualification of scientific and pedagogical staff
Reputation of the institution	marketing policy of higher education institution	employment of graduates in the specialty
University affiliate programs	international activities of higher education institution	cooperation with foreign colleagues
Scientific and technical base	Infrastructure of higher education institution	specialized scientific and technical base

He (she) is a graduate himself	cooperation with employers and graduate	involvement of graduates and employers in the revision of the educational program
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Source: created by the author

4. Conclusion

It is found out that the main factors shaping the current model of higher education institution competitiveness management include the following: regulatory framework of the national system; analysis of consumer needs, policy and main objectives; sources of funding, determination of performance criteria and definition of assessment methods.

The quality assurance system is an indispensable component of modern agrarian university the management. The system components such as the policy of the institution, the main tasks, the approved legislative documentation with the defined processes, mechanisms and participants of educational activity must be clearly defined.

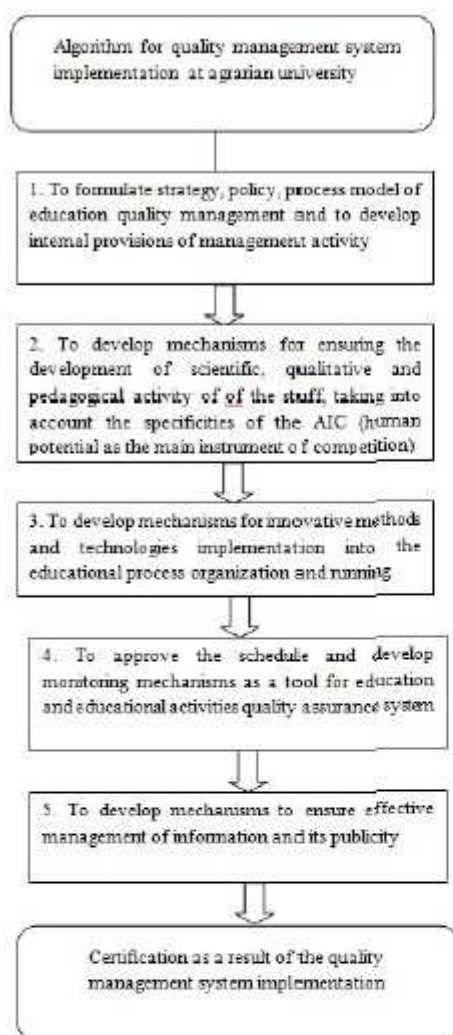
International activities is an important part of modern higher education institution, it involves using additional funding tools such as grants and scholarships.

The factors of competitiveness of agrarian higher education institutions at different management levels are determined.

The algorithm of introduction of agrarian university quality management system is offered.

Educational services quality can be ensured through close cooperation with entrants, students, employers as the main customers of agricultural higher education institutions activity

Figure 2: Algorithm for quality management system implementation at agrarian university



Source: created by the author

References

- [1] Alex Lissits. (2019, July 25) TOP-10 universities in Ukraine. Where to go in agrarian establishments of Ukraine? *AgroPortal*. Retrieved from: <https://agroportal.ua/ua/views/blogs/top10-vuzov-ukrainy-kuda-dvigatsya-agrarnym-zavedeniyam-obrazovaniya/>
- [2] Bristol Veterinary School. Self-Evaluation Report 2 (2014). *Examinations reports for the BVSc Programme: University Veterinary School*. Retrieved from: <https://www.bristol.ac.uk/media-library/sites/vetscience/documents/rcvsser2.pdf>
- [3] Finikova T.V., Sharova O.I. (2014) Monitoring of the Integration of the Ukrainian Higher Education System into the European Higher Education and Research Area: monitoring research: analytic report. *International charity org. International Educational Policy Research Foundation*. Kyiv, Ukraine: Taxon, 144 p.
- [4] Higher Education Quality Assurance Concept of Ukraine. *Towards Trust in Quality Assurance System, 516935-TEMPUS-1-2011-1-F1TEMPUS-SMGR, 15.10.2011-14.10.2014*. Retrieved from: http://dovira.eu/QA_concept.pdf

- [5] Hozhyk A. (2018) Education quality assurance internal system in Ukrainian higher education institutions. Typical Model. *Training for coaches training experts on quality assurance in higher education*. Retrieved from: <https://projects.lnu.edu.ua/quaere/wp-content/uploads/sites/6/2018/10/Model-1.pdf>
- [6] Law of Ukraine "On Higher Education" (2014, October 15) Retrieved from: <https://zakon2.rada.gov.ua/laws/show/1556-18>
- [7] Mospan N.V. Tendencies in higher education financing mechanisms in the European Union / Public Retrieved from: https://www.narodnaosvita.kiev.ua/?page_id=2644
- [8] Quality Policy of the Bila Tserkva National Agrarian University (2018). Bila Tserkva, Ukraine: BNAU. Retrieved from https://btsau.edu.ua/sites/default/files/Faculties/osvita/quality/polityka_bnau.pdf
- [9] Self-Evaluation Report 2017 for the European Association of Establishments for University Education (EAEVE) (2018, January 15-19). University of Veterinary Medicine Hannover, Foundation. Standart Operating Procedure (SOP).
- [10] Shpak O. (2010). Management features in the modern higher education system. *Youth and the Market*, 12(71), 10-13. doi: 10.31558/2307-2318.2019.3.10
- [11] Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). (2015, May 14-15). Approved by Ministerial Conference in Yerevan. Retrieved from: <https://enqa.eu/index.php/home/esg/>
- [12] Statistical and analytical studies of the activities of agricultural educational institutions for 2018. (2019) Kyiv, Ukraine: "Agroosvita".
- [13] Strategy of the National Agency for Quality Assurance in Higher Education by 2022. Retrieved from <https://naqa.gov.ua/mission-and-strategy-agencies/>
- [14] Vasylenko V.A. (2002). Theory and Practice of Management Decision Making: Manual. Kyiv, Ukraine: TsUL.
- [15] Yelets O.P., Bohdan E.V. (2014) The essence of enterprise competition and competitiveness. *Ways and factors of reducing the industrial enterprise production cost*. 82-91. doi: 10.30838/P.ES.224.100119.76.347