

## LITERATURE REVIEW

of dissertation for obtaining a doctorate degree in: higher education field: 3. Social, business and legal sciences, professional field: 3.8 Economics, scientific field: Organization and management (agriculture and sub-sectors).

**Author of the dissertation:** Izet Hamez Hoti – extramural PhD student at the Department of Management and Marketing at the Agricultural University, Plovdiv.

**Theme of the dissertation:** "Strategic management of the energy production of agrarian products in Kosovo".

**Dissertation reviewer:** Prof. Asen Ivanov Konarev PhD in Economics, University of Food Technology - Plovdiv, higher education field: 3. Social, business and legal sciences, professional field: 3.8 Economics, scientific field: Economics and Management (by branches), appointed for a Member of the Scientific Jury with Order No. ПД-16-32 / 14.01.2020 of the Rector of the Agricultural University - Plovdiv.

### 1. Brief introduction of the applicant

Izet Hoti was born in 1960 in Çikatovë (Glogovac), where he completed his primary education. He then completed his secondary education - the Electrical Engineering High School in Pristina in 1977.

He then joined the Kosovo Energy Corporation, but continued his education, graduating from the University of Pristina in 1983. He completed his specialization in Mitrovica, graduating in 1998. In 2013, he completed a Master's degree in Management and Marketing at the University of Pristina.

He currently works as Chief Technology Training Engineer at the Thermal Power Plant "Kosovo B", where he manages the annual curriculum for all areas of employees and students' training and professional practice.

### 2. Relevance of the problem

The problem of strategic management of various energy sources, both globally and regionally, is of increasing relevance and importance. The focus of this dissertation is on biomass. In the justification of relevance, the doctoral student includes three groups of factors:

- economically;
- environmental;
- social.

For each group, he reveals two aspects:

- positive;
- negative.

Comparing objectively the positive and negative effects, the doctoral student claims that promoting biomass as an energy source is the right solution under the specific conditions of Kosovo.

### 3. Purpose, tasks, hypotheses and research methods.

I agree with the stated purpose of my dissertation, considering that, in addition to assessing the many impacts that result from the use of biomass, the research is mainly aimed at improving the strategic management of energy production from agricultural products.

There are logically well defined and arranged 5 tasks, the solution of which would lead to the achievement of the purpose:

- critical analysis of strategic management;
- adaptation of the methodology;
- diagnostics of the raw material base;
- analysis of energy production from agricultural products;
- proposal for a project on energy from agricultural products.

The subject matter of the research is very well-formulated and the subject matter can be improved.

I also deem that the conceptual thesis of the dissertation is well-formulated, accepting the importance of the three leading sub-themes:

- about the potential of biomass as a resource;
- about the improvement of the sustainability of the energy sector;
- about the importance of management strategies for the development of the agricultural sector.

It was stated that one approach and six analyzes were applied to the study, but my introduction to the dissertation showed that the methodological toolkit was much larger.

#### **4. Visualization and presentation of the results obtained**

The dissertation is relatively well-illustrated. It is presented on 150 pages, including 42 tables and 11 figures.

The name of some figures and tables did not overcome language barriers. In addition, the figure on page 128 has no number and designation. For some figures and tables it is not possible to understand whether they are an author's product or they are borrowed from the literature used.

I deem that under the criterion of "visualization and presentation of results" the dissertation is much better than the abstract of the dissertation.

#### **5. Discussion of the results and the literature used.**

The dissertation has an optimal volume for the professional field - 150 pages, including the used literature. I think that in structural terms it is well-shaped in style: theory-analysis-proposals. The second section could be given a more specific name.

In the first section, the doctoral student tries to outline a strategic framework for the study in two verticals:

- economic feasibility of using biomass energy;
- the justification for subsidizing with state funds for biomass processing.

The frame includes three more horizontal lines:

- appropriate indicators for measuring the results of the use of biomass;
- economic effects arising from different biomass treatment scenarios;
- profit for the public sector from the use of biomass for heating.

A methodology for quantifying the various biomass uses is well-presented in this section. In addition to the direct economic effects of the use of biomass, four other groups of impacts are outlined:

- environmental effects;
- effects on the macro environment;
- effects on the microenvironment;
- effects on sustainability and security.

The second section begins with a detailed analysis of agricultural biomass. What gives me a good impression of this and the next section is the very good technological competence of the doctoral student on energy issues, which resulted in a high-quality economic-

technological product. But some of the tables and some of the texts have been translated incorrectly in Bulgarian. The dissertation and the abstract would be better if they were in English - if that is possible, of course.

In this section are well-presented:

- the total amount of biomass from agricultural waste in Kosovo;
- the potential energy result from the use of feed and other green cereals for biogas production;
- not particularly good - the low heat of combustion of agricultural waste;
- the same applies to electricity, heat and co-produced energy by burning biomass from crops;
- the amount of electricity and heat generated by the burning of biogas from green cereals;
- the energy potential of biomass from orchards and vineyards.

In the third section, the doctoral student with good economic and high technological competence has developed strategic guidelines for managing the energy production of agricultural products in Kosovo. I welcome the differentiation of costs into three groups:

- investment;
- operational;
- for biomass.

It is very specific to subsequently determine the types of costs for each group.

The good methodological differentiation of costs created allows the doctoral student to present convincingly the following:

- the cost of electricity from grain biomass;
- the cost of heat from grain biomass;
- the cost of cogenerated electricity from grain biomass;
- the cost of electricity produced from green plants;
- the cost of electricity produced from biogas of animal origin, etc.

Comparing a large number of parameters, the doctoral student states that the cost of producing biomass electricity is higher than the TPP Kosovo A and B, working with lignit, but the result is reversed.

In the final part, the PhD student summarizes the main results of the research very well. I accept for trustworthy the statement that the dissertation provides comprehensive results on the existing potential of all biomass species present in Kosovo. This potential has been thoroughly analyzed according to the origin of the biomass, using systematics in three groups:

- wood biomass:
  - ✓ from forests;
  - ✓ from fruit-growing and viticulture;
  - ✓ from the wood processing industry.
- agricultural biomass:
  - ✓ from crop production;
  - ✓ from stock-farming.

A very good knowledge of the economic and technological features of the energy sector enable the doctoral student to make meaningful recommendations. I could emphasize the following:

- the characteristics of the energy strategy of Kosovo;
- incentive tariffs for all renewable energy sources;
- the amendment of the Energy Act to the requirements of the European Union;
- identifying priority segments of renewable resources to promote foreign investment;
- removal of customs duties on imports of machinery and equipment for the production of energy from renewable sources;

- upgrading the system for administering RES/ renewable energy sources/ projects through the introduction of counter-service technology;
- the creation of a system of green certificates to stimulate foreign investment.

Following these significant proposals, it is convincing to conclude that a strategic management approach is a factor in harnessing the energy potential of the agricultural sector in Kosovo.

The literature used is presented in 85 sources. In quantitative terms, it is optimal for the development of a good dissertation. It is not arranged according to the origin of the literature. In addition, an attempt was made to translate the original names of some sources. I believe that the citation and presentation of the literature could have been better refined.

## **6. Dissertation contributions.**

Generally, I accept the reference for dissertation contributions, distinguishing them as follows:

Scientific contributions:

- defining the basic concepts and definitions for the use of agricultural products as energy sources.

Scientific and applied contributions:

- identified major risks in the use of agricultural products for energy production;
- the benefits and costs identified in the production of energy from agricultural products;
- the analysis of the waste energy production project.

I deem that the dissertation has other contributions, such as:

- formulating the key features of the energy strategy in Kosovo;
- the exact proposals to the institutional bodies for amendment of the Energy Act, for incentive tariffs, etc .;
- the assumptions for promoting foreign investment;
- proposals for improvement of the RES project administration system.

## **7. Critical notes and questions**

While objectively assessing all the difficulties encountered in the management of international students, I will also make the following remarks:

1. Linguistic and stylish presentation of the dissertation could be improved.
2. There are tables and figures with unclear content and designation.
3. The figure on page 128 is not numbered and designated.
4. Citation and presentation of the literature used could be improved.
5. The abstract could be more precisely drafted.

My introduction to the dissertation does not generate any questions to ask the doctoral student.

## **8. Published articles and citations**

A list of 4 dissertation publications is presented, which in quantitative terms meet the requirements of the Regulation of the Agricultural University - Plovdiv. As a taxonomy, they can be divided as follows:

- independent - 2 pieces;
- in co-authorship - 2 pieces.

In collective publications, the doctoral student is the lead author.

No citation reference was provided.

I believe that the presented abstract reflects objectively the structure and content of the dissertation. I repeat that it could have been drawn more precisely.

### **Conclusion**

Based on the various research methods and the applied by the doctoral student, the correctly performed experiments, the summaries made and the conclusions drawn, I believe that the presented dissertation corresponds to the Act for the Development of the Academic Staff in the Republic of Bulgaria and the Regulations of the Agrarian University for its proposal, which gives me a reason to rate it POSITIVE.

I also allow to propose to the Honorable Jury to vote positively and award Izet Hamez Hoti the educational-qualification degree PhD in Organization and Management (Agriculture and the Industries).

09.02.2020  
The city of Plovdiv

The review was prepared by:  
Prof A. Konarev, PhD in Economics

