

ABSTRACT

This habilitation work summarizes, in a natural evolution, all the concerns and academic activities, scientific research, development and technology transfer carried out by the author after obtaining the title of Doctor of Agronomy (2012) until now, as well as the plan for the future development of the university career, from an academic, scientific, technological transfer and professional prestige improvement perspective.

The work is based to a large extent in the context of the fields of intelligent specialization and how they have applicability in the field of sustainable rural development, contributing to the increase of the socio-economic level of the Romanian rural space.

The habilitation thesis is entitled "***Renewable energy resources, technological transfer and entrepreneurship in the North-West Region of Romania***" and focuses on the 3 research directions approached during my university activity:

- *research on the analysis of the financial feasibility of renewable energy resources in the North-West Region of Romania*, which continues the concerns started as a doctoral student of the university in the period 2009-2012;

- *research in the field of innovation and technology transfer within Romanian universities*, in general, respectively within our university in particular, using modern concepts (triple-helix, quadruple-helix) and applied methodologies verified and implemented in modern universities from Western Europe and from the United States of America, with the aim of making the level of our research compatible with the advanced ones in the West, to correlate in a more efficient way the university educational offer with the demand on the labour market and to ensure a better participation of the university in the economic and social environment, with and for society;

- *the analysis and prospects of economic growth of the North-West regional entrepreneurial environment*, in a national, European and international context, to affirm our university as an entrepreneurial university that actively participates in the development of the private environment in Romania (North-West Region).

The first part of the paper includes the achievements recorded during the university career until now, of an academic, scientific and professional research nature, which contributed to the improvement of personal and university prestige. These achievements were realized in:

- 7 specialized books, of which 3 scientific books, developed on the 3 previously mentioned research fields, 3 didactic manuals (2 in Romanian and 1 in English), according to the disciplines of academic specialization and 1 practical work guide (English), published by publishing houses with national recognition;

- 13 scientific articles published in journals in the field of habilitation, ranked/indexed Web of Science Clarivate Analytics, of which 11 in journals with an impact factor and 2 in journals without an impact factor, 8 as first author or corresponding author and 5 as secondary author;

- 17 scientific articles published in journals indexed in other international databases, of which 11 as first author or corresponding author and 6 as secondary author;

- 26 scientific works published in the volumes of national or international conferences;

- over 139 citations in scientific articles or books, of which over 81 citations in scientific articles from Web of Science Clarivate cited/indexed journals and over 58 citations in journals indexed in other international databases (33) or scientific books (25), which led to international visibility and, consequently, the recognition and impact of scientific activity, translated through a Hirsch index with a value of 5;

- 1 research project and 2 educational projects in which I was the project director or project partner manager;

- 1 research contract in which I was project director;

- 13 research projects in which I was a member of the project team (researcher, expert, trainer);

- 10 consulting and technology transfer contracts (project management) with private companies from the business environment;

- 8 Erasmus mobility for teaching or training, in Poland, Serbia, Albania, Moldova, Bosnia-Herzegovina, Czech Republic, Slovakia, Spain;

- more than 10 participations in international scientific symposia and conferences, respectively more than 15 participations in international brokerage, innovation and technological transfer conferences.

Throughout my professional career I have been open and actively participated in lifelong learning and continuous professional training, completing a series of courses and training or improving myself as an expert in a number of fields such as: project management, trainer, evaluator, public procurement expert, negotiation techniques, access to European structural and cohesion funds, entrepreneurial skills, social economy entrepreneur, landscape florist, young farmer, small business quality management systems, implementation and auditing of quality management systems, e-learning and blended learning, modern teaching techniques.

All these involvements and specializations aimed at continuous training and improvement, the acquisition of transversal or superior skills and competences, finally materialized in multiple experiences and competences used both in the training of new skills for students, in research-development-innovation and technological transfer, as well as in the implementation of research projects or in the development of economic contracts with the business environment.

The research-development-innovation and technology transfer activity also brought me a series of awards, the most important of which are:

- European Value Multipliers Gala, 4th edition (North-West Regional Development Agency and Northern Transylvania Direct Europe Center, Cluj-Napoca, 2012) – the grand prize in the Competitiveness category, for winning and successfully implementing the project "Institute of Advanced Horticultural Research of Transylvania";

- Award of research results – Articles, Competition 2018;

- The "Honor et Gratitude" medal offered by our university, for involvement in the institutional development of the university 2019.

The professional expertise acquired throughout my career allowed me to become a member of some national and international professional or scientific associations, in some of them also occupying management positions over time.

The second part of the habilitation thesis is dedicated to the presentation of a plan for the evolution and development of the professional, scientific and academic career, which will continue and expand to a higher level of excellence the concerns up to now.

From an academic point of view, my work will focus on the permanent updating of the information transmitted to students, on the identification and improvement of new teaching-learning techniques that optimize the creation of skills and competences, on the use of modern means and tools (ICT, interactive learning), improvement in the use of foreign languages (especially English) in the teaching activity, involvement in student activities, participation in international training and teaching mobilities, development of the faculty (and university) internationalization strategy. Obviously, in the context of the habilitation, the future activity will include the coordination of students in the doctoral field (in addition to the master's and bachelor's).

The scientific activity will continue and develop the 3 basic concerns mentioned before, in integrated teams of researchers, teaching staff and students (masters, doctoral students), in partnerships with the economic environment and the community, including by attracting funds through research grants and contracts with the economic environment. The research results will be published in national and international journals, especially in those indexed Web of Science Clarivate Analytics, respectively they will be disseminated in workshops, meetings, internal and international events.

Therefore, the present approach, for my habilitation in the field of **Engineering and Management in Agriculture and Rural Development**, respects all performance indicators and quality standards that this position entails, and is part of a normal university development approach that any teaching and research staff must undertake at the appropriate time.

Conf. dr. Sebastian-Călin VAC