# Forest economics within the activities of the Czech Academy of Agricultural Sciences

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**Abstract:** Czech Academy of Agricultural Sciences (CAAS) is a professional and social institution whose basic mission is to influence the scientific level of research activities and education in its field of competence, to take care of its continuous development and to effectively popularize the acquired scientific knowledge. Within the CAAS and its Department of Forestry, the Commission of Forest Economics has been operating for a long time, focusing on forest and wood economics and policy. A total of 11 research directions are defined in the forthcoming Concept of Research, Development and Innovation of the Ministry of Agriculture for the period 2023+, the professional part of which is covered and guaranteed by the CAAS. The following directions are included in forestry and wood processing: "Forestry and related industries" and the direction "Forest and agricultural economics and policy in this context and especially the activities of the Commission of Forest Economics of the Department of Forestry of the CAAS. In the temporal and factual context, it mentions the published monograph "Czech Academy of Agricultural Sciences and a Quarter-Century of the Commission of Forest Economics".

**Keywords:** Commission of Forest Economics; forestry; forest and wood economics; forest policy; Department of Forestry

The Czech Academy of Agricultural Sciences (CAAS) adheres to the tradition and continues the activities of the Czechoslovak Academy of Agriculture, established in 1924 as a central scientific agricultural institution, supporting research, education and application of scientific knowledge in practice. The current CAAS was established by the Ministry of Agriculture of the Czech Republic (CR) in 1993 and its basic mission is to influence the scientific level of research and education in its field of competence, to take care of its continuous development and to effectively popularize the acquired scientific knowledge. It is a professional and social institution representing the scientific research and academic community externally, both in the Czech Republic and abroad. According to the updated data on the membership base (as of January 1, 2022), CAAS has 732 members.

According to the CAAS Organizational Rules and Rules of Procedure, the fields of natural, technical, economic and social sciences from the sectors of agricultural and forest primary production, processing and use of agricultural and forest products and raw materials, protection and use of basic natural resources, landscape creation and rural development, educational activities and awareness raising

activities are considered as agricultural research. The project and grant platform for research is the National Agency for Agricultural Research (NAZV) that belongs under the Ministry of Agriculture – Department of Precise Agriculture, Research and Education. CAAS publishes 11 peer-reviewed scientific Open Access journals (CAAS 2022).

A total of 11 research directions are defined in the forthcoming Concept of Research, Development and Innovation of the Ministry of Agriculture for the period 2023+ (eAgri 2022), the professional part of which is covered and guaranteed by the CAAS. The following directions are included in forestry and wood processing: "Forestry and related industries", and "Forest and agricultural economics and policy" integrated with agriculture.

The research activities in forestry are conducted mostly by the Forestry and Game Management Research Institute with its headquarters in Jíloviště-Strnady (FGMRI) and two faculties: Faculty of Forestry and Wood Sciences of the Czech University of Life Sciences in Prague (FFWS CZU) and Faculty of Forestry and Wood Technology of Mendel University in Brno – FFWT MENDELU (OLH 2022).

CAAS is divided into 11 departments which are its basic organizational units. One of them is the Department of Forestry (DF) focusing on sustainable forest management and wood production as an irreplaceable renewable raw material. DF is a professional guarantor of the scientific journal Journal of Forest Science (JFS). DF currently has 48 members. The DF five-member committee is chaired by Professor Vilém Podrázský (FFWS CZU), who is also the vice-chairman of the CAAS board. Together with the vice-chairman Associate Professor Vít Šrámek (FGMRI), the other members of DF committee are: Dr. Dušan Kacálek (FGMRI), Associate Professor Václav Kupčák (FFWT MENDELU) and Associate Professor Petr Zahradník (FGMRI). Organizationally and according to the professional focus of DF, it consists of five commissions: biological, forest economics, forestry technology, forest protection and hunting, non-productive functions of the forest.

In this context, the paper focuses on forest and wood economics and policy and research in these areas (based on the system of science disciplines at universities), but mainly it captures more than 25 years of the Commission of Forest Economics of DF CAAS. In addition to the role and mission within CAAS and DF, the activities of this commission are an example of close cooperation between the Department of Forestry and Wood Economics (FFWS CZU) and the Department of Forest and Wood Product Economics and Policy (FFWT MENDELU). In this cooperation, the publication entitled "Czech Academy of Agricultural Sciences and a Quarter-Century of the Commission of Forest Economics" was created.

# FOREST AND WOOD ECONOMICS AND POLICY

Hans Carl von Carlowitz (1645–1714) is considered to be the founder of forestry. In his work entitled "Sylvicultura oeconomica" (1713), the term "sustainable use" ("nachhaltende Nutzung") is used for the first time. The first comprehensive system of forestry sciences is attributed to Wilhelm Gottfried von Moser (1729–1793) on the basis of his publication "Grundsätze der Forst = Oeconomie" from 1757 (Kupčák et al. 2020).

The development of economic principles in the European forestry began around the 18th century and was closely linked to the then forest management and forest statistics (the study of the balance between income and costs and the determination of the profitability of forest management methods). In Central Europe, it was associated primarily with forestry in Germany and the Austro-Hungarian Empire. According to Bartuněk (1994), the development of economic principles in the European forestry can be divided into six concepts: cameralist sciences, liberalism, rent theory, "school of net income from the land" and "school of net income from the forest", and the concept of profit maximization. Despite the theoretical and practical benefits of these concepts (e.g. the principle of yield continuity and balance and "learning about the normal forest", the forest interest rate), on the other hand, the most economically profitable trees were preferred - up to the establishment of monocultures. These tendencies were based on the concept of "forest as a capital" and in connection with the onset of the industrial revolution and the development of production in the 19th century, when the importance of wood as a raw material was growing rapidly and a number of new woodworking industrial activities were emerging.

In the second half of the 20th century, issues of simultaneous ecological and economic use of natural resources came to the forefront within the so-called

"principle of sustainable development of life". According to Pulkrab (1993), there are two different scientific approaches: attitude of the neoclassical economists and that of environmental economists (environmental economics). Neoclassical economists emphasize the utilitarian approach and the degree of rarity (marginal utility) to the optimal allocation of natural resources. Environmental economics seeks the optimum quality of the environment and its interdisciplinary approach, emphasizes a holistic approach and rejects "monetary reductionism". This period was to some extent the beginning of disputes between foresters and ecologists, forestry and nature protection respectively. Until then, forest ecosystems were guaranteed and protected for centuries by appropriate responsibility of foresters.

After 1990, there were fundamental competence and institutional changes in the Czech Republic. Forestry as a sector was incorporated under the Ministry of Agriculture, wood processing was included in the framework of the Ministry of Industry and Trade, and forest as a component of the environment under the Ministry of the Environment. Previously, during the federal organization of the state, it was all within the competence of the Ministry of Forestry and Water Management and the Woodworking Industry of the Czechoslovak Republic (Kupčák et al. 2020).

According to Švihla (2003), social interests in democratic countries are primarily expressed in legislation. Forestry is a sector of material (market) and intangible (non-market) production - forest production as a part of social production, while material and intangible production cannot be strictly separated from each other. The growing importance of forests and forest management (FM) has led to the emergence of forest policy (first used by W.G.F. Roscher in 1860) and later national forest policy (see e.g. the government-approved principles of national forestry policy, national forestry programs), but also the common forestry policy of the European Union. The resolution of the 4th Ministerial Conference on the Protection of Forests in Europe (Vienna, 2003) quotes, for example: "Economic viability of forest management is a key pillar for the sustainable development of forests and has a decisive role for forest maintenance and multiple benefits for society". However, the true value of this premise depends on the wood production function of forests and FM, where this function is essentially "for the benefit" of the society generated "at the expense" of forest owners and wood processors (Kupčák et al. 2020).

The current economics of FM CR is a sectoral economics, the subject of which is the use of production and location factors, of which the basic factor is the forest. According to Bartuněk (1994), the forest can be defined as a natural, economic and social phenomenon. The forest as an economic phenomenon is when it becomes the object of appropriation, while the main long-term goals of forest ownership and forest management are the regulation of growth processes of forest tree species, removal of forest production and the relevant socio-economic aspects. The forest here acts as an object of national economy. In the sectoral classification of the economy, forestry belongs to the primary sector (extraction of products and raw materials from nature and cultivation), woodworking to the secondary sector (industry, processing of primary products and production of tangible goods), so-called "contractual partners in forestry" to the tertiary sector (services, trade) while science, research, education, consulting are the quaternary sector (knowledge-based sector).

The term "forest production" is sometimes discussed. In the market environment, however, according to Bartuňek (1994), forest production is part of social production because:

– it is a commodity production because the final products (especially wood) are subjects of exchange,

– the relations between the exchange entities are market relations,

- the results of production activity and forest production can usually be expressed in natural units (units of measurement) or value characteristics (money).

# FOREST AND WOOD ECONOMIC RESEARCH

The history of forest economic research in the Czech Republic is primarily connected with the establishment of the University of Agriculture in Brno in 1919, where the Department of Forestry was one of the first departments to be established there. It was founded and for a total of 30 years led by Professor Rudolf Haša (1881–1963). Professor Haša was a pioneer in a comprehensive understanding of natural resources, economic goals, and technical means in forestry; his main publications include, for example, "*Ways of realizing the eco-*

nomic principle and the principle of economic continuity in accordance with forest production" (1929).

At present, only the above-mentioned forestry faculties deal with forestry and wood economic research (including sectoral policies), and within the CAAS also the Commission of Forest Economics (see also the basic mission of CAAS for research and education). At FGMRI, founded in 1921, the scientific research activities of the former Department of Economics (1952), later the Department of Forest Economics (1959) and finally the Department of Forest Policy, ceased to exist after 2010.

Paragraph 1 of the Introductory Provisions of the Act on Higher Education Institutions (No. 111/1998) lays down that "Universities as the highest level of the educational system are the top centres of education, independent knowledge and creative activity and have a key role in scientific, cultural, social and economic development of the society by: a) preserving and enriching knowledge and according to their type and focus they cultivate scientific, research, development and innovation, artistic or other creative activities"... In the subsequent Government Regulation No. 275/2016 on the areas of education in higher education (hereinafter the Regulation) there are two thematic areas (out of 14) defined for undergraduate and postgraduate studies within area 16 - FORESTRY AND WOODWORKING:

(*h*) Economics, administrative service and management of forestry and wood-processing industry,

(*i*) Business and management in the forestry, woodworking and furniture industries.

These areas are further reflected in the Regulation in the framework profile of the graduate program and specified in the relevant study programs; for undergraduate study programs, areas (h) and (i) are also represented in the composition of profile subjects of the state examination (note: at both above-mentioned faculties – see accreditation files). In addition to the third level of higher education (scientific training), postgraduate or doctoral study programs are a scientific research platform and a legal condition for the existence and development of scientific disciplines at universities (incl. professional-related accreditations for habilitation proceedings and professorship appointment proceedings).

The Department of Forestry and Wood Economics FFWS CZU in Prague (DFWE) is currently the workplace of the doctoral study program "Economics and Management of an Enterprise" and the newly accredited doctoral program "Economics and Management of Forestry and Wood Industry". DWFE is also the guarantor of the accredited habilitation proceedings and professorship appointment proceedings in the field of "Economics and Management of Forestry and Wood Processing". The Department of Forest and Wood Economics and Policy (DFWPEP) in Brno guarantees the doctoral study program "Economics and Management", branch "Economics and Management of Renewable Natural Resources". (Until 2008, the field of habilitation proceedings "Forest and Wood Economics and Policy" was accredited here). Within the CAAS, as mentioned above, forest and wood economic research has long been the main subject of activity of the Commission of Forest Economics.

# COMMISSION OF FOREST ECONOMICS OF DF CAAS - HISTORY AND ACTIVITIES

CAAS Commission of Forest Economics (until 2014 as CAAS DF Economic Commission) has a long history. References to its activities can be found, for example, in the journal Lesnická práce (LP) as early as in 1959 (LP 7, vol. 1959, p. 316), then in LP 3, vol. 1975, p. 133; LP 1, vol. 1977, p. 44; LP 1, vol. 1983, p. 40; LP 4, vol. 1984, p. 187; LP 11, vol. 1985, p. 488; LP 10, vol. 1987, p. 476; LP 2, vol. 1988, p. 51d; LP 1, vol. 1990, p. 44; LP 6, vol. 1994, p. 18; LP 12, vol. 1994, p. 3. The paper deals with the period since 1995, and for the completeness - even then there were articles about its activities - see: LP 2003 (vol. 82, no. 2, p. 64-65), LP 2004 (vol. 83, No. 4, p. 2), LP 2006 (vol. 85, No. 4, p. 18-19), LP 2013 (vol. 92, No. 12, p. 34-35), LP 2016 (vol. 95, No. 5, p. 56), LP 2018 (vol. 97, No. 10, p. 98-99).

The roots of the current Commission of Forest Economics DF CAAS (hereinafter CFE or just the Commission) go back to the turn of the 70s and 80s of the last century, when this platform made it possible to discuss current problems in forestry in Czechoslovakia. The Commission met 3 to 4 times a year in various parts of the country. The meetings were two days long and usually ended with an excursion, sometimes outside the forest facilities, but always with an economic focus. The main personalities at the time were especially Associate Professor Zdeněk Bluďovský and Professor Jiří Bartuněk. These personalities also decisively contributed to the resumption of the Commission's activities after 1990 (or since

1995): Assoc. Prof. Zdeněk Bluďovský (FGMRI) as chairman, together with vice-chairman Prof. Jiří Bartuněk (Faculty of Forestry and Wood Technology, University of Agriculture in Brno – today's Mendel University in Brno). In the years 1998–2019, the Commission was led by Professor Luděk Šišák (DFWE CZU), with vice-chairman Assoc. Prof. Václav Kupčák (DFWPEP MENDELU) as approved at the Commission meeting in Vimperk in 1997; since 2019 the chairman of this commission has been Associate Professor Roman Sloup (DFWE), vice-chairman is Dr. Dalibor Šafařík (DF-WPEP) as approved at the Commission meeting in Třebíč in 2019.

Commission meetings have been convened regularly twice a year since 1995 (approximately 40-50 participants). The spring meeting (turn of April/May) is usually held in Moravia and guaranteed by DFWPEP, the autumn meeting (October) in Bohemia under the auspices of DFWE (Bohemia, Moravia and Silesia are three macroregions in the Czech Republic used for the general country division). The meetings usually take two days: on the first day, in addition to the permanent items of the program (information on the activities of CAAS and Commission of Forest Economics of the DF CAAS, the current state of forest economic research, current economic situation in forestry, organizational issues), the main topic selected and agreed on during the previous meeting is discussed. Information on scientific projects and their results (outputs) are mainly provided for forest economic research. The second day is dedicated to a professional outdoor excursion in the region where the meeting is held.

The preparation of the meetings is mostly provided in cooperation with the chairman and vice-chairman of the CFE, together with a representative from a pre-selected organization in the Czech Republic where the meeting takes place (state forest enterprises, national parks, school forest enterprises, business entities in forestry, municipal forests etc.); it is a common practice for meeting venues that locations and outdoor tours are not repeated. Part of the preparation is also addressing selected members or participants for processing and presentation on the topic of the meeting (usually about 5 contributions); in many cases, external experts who deal with these particular issues are also contacted.

Members and participants of the CFE meetings are representatives of universities and secondary

forest schools, representatives of Ministry of Agriculture of the Czech Republic, Ministry of the Environment of the Czech Republic, Forest Management Institute in Brandýs nad Labem, Forests of the Czech Republic (Lesy České republiky, s.p.), Military Forests and Estates (Vojenské lesy a statky, s.p.), employees of national parks, state administration and other personalities operating in forestry and forest and wood economic research and practice. The meetings are also international in nature - they are regularly attended by partners from the Slovak Republic, especially from the Technical University in Zvolen, the Forest Policy and Economics Section of the Forestry Department of the Slovak Academy of Agricultural Sciences (SAPV 2022), and the National Forest Centre in Zvolen. Representatives from Poland also took part in the CFE meeting; at several meetings, for example, Professor David H. Jackson from the University of Montana (who repeatedly worked at the DFWPEP in Brno as a visiting professor within the Fulbright program for research and lectures) participated. The representation of members and other stakeholders, as well as the activities of the Commission itself, are based on the above-mentioned basic principles of CAAS. The internal principles of the CFE also contribute to this, which include, for example, informal negotiations (open and professional public), free expression, plurality and discussion of opinions. From a methodological point of view, they are based on a discursive approach to topics - these are produced and reproduced through practice. In some cases, certain opinions or recommendations were adopted by consensus on this issue, which were subsequently forwarded to the relevant institutions.

Own meetings for both days are usually chaired by the chairman of the Commission, excursions are led by representatives of the organizations in whose area of operation the meetings are held. Minutes are taken from each meeting and distributed to participants; similarly, published proceedings are available. A publicly accessible website under the CAAS portal has been maintained and continuously updated with the activities of the CFE for a long time (http://www.cazv.cz/ek), with complete information about the meetings, incl. minutes, contributions, proceedings and photo galleries (KLE 2022). Since 2020, it is a separate website of the Commission of Forest Economics of the Department of Forestry of the Czech Academy of Agricultural Sciences (see http://kleolh.cz/).

# COMMISSION OF FOREST ECONOMICS OF THE DF OF CAAS - SUMMARY OF ACTIVITIES AND MAIN OUTPUTS

Since the renewed activity of the Commission in 1995, a total of 48 meetings have been held, at which 52 defined topics were discussed (the main topics). Sixteen proceedings were published (mostly in the category Proceedings of seminars with international participation with ISBN – International Standard Book Number) with a total of 158 contributions, usually closely linked to the topics (note: topics of the meetings – see the titles of the proceedings), but also to the solved projects, suggestions and discussion topics from the meeting etc. These were the following proceedings:

- "Information and Information Systems in Forestry in the Czech Republic" (published in 2001),

– "Economic Aspects of Forest Protection" (2005, ISBN 80-7157-892-4.),

- "Injuries and Compensation for Forest Management Restrictions and Their Possible Impact on Forest Categorization" (2006, ISBN 80-213-1459-1),

"Economic Aspects of Forest Vegetation
Management - Floodplain Forests" (2006, ISBN 80-7157-987-4.),

- "Economic Aspects of the Reconstruction of Substitute Forest Stands in the Ore Mountains" (2006, ISBN 80-213-1595-4.),

- "Economic Aspects of Integrated Forest Management" (2007, ISBN 978-80-7375-102-9.),

- "Forestry and Higher Territorial Self-Governing Units" (2008, ISBN 978-80-7375-225-5.),

- "Forestry and the Business Environment" (2009, ISBN 978-80-7375-329-0.),

– "The Human Factor and Labour Economics in Forestry" (2010, ISBN 978-80-7375-434-1.),

- "Forest Management Efficiency with Regard to the Shape of the Low Forest" (2010, ISBN 978-80-213-2144-1.),

– "The State of Forest and Fulfilment of Forest Functions in the Šumava National Park" and "Forest Management in the Conditions of Territorial Self-Governing Units" (2011, ISBN 978-80-213-2241-7.),

- "Management in Vojenské lesy a statky, s.p. (Military Forests and Estates, state enterprise)" and "Economic, Ecological and Social Aspects of Management in the Krkonoše National Park" (2014, ISBN 978-80-213-2450-3.),

- "Comprehensive Forestry and Economic Audit, Verification Analytical Studies in Forestry", "Problems of Game Breeding and Game Management in the Czech Republic in Terms of Administration, Organization and Economy" (2014, ISBN 978-80-213-2556-2.),

- "The Social Pillar in Forestry and the Importance and Development of Fast-Growing Plantations in the Czech Republic" (2015, ISBN 978-80-213-2671-2.),

- "Forest and Landscape" and "Economics of Forest Restoration in Spruce Stands" (2016),

- "Specifics and Problems of Forest Management in Connection with Changing Social and Natural Conditions, Including the Expected Climate Change" and "Issues of Multifunctional Forestry with Emphasis on Recreational Services" (2017),

"Information and Business Information Systems in Forestry" and "Issues of Multifunctional Forestry – Connection to the Scientific Project" (2018, ISBN 978-80-263-1467-7),

"Forest Policy, Operational and Economic Aspects of Bark Beetle Outbreaks" (2019)

- "Model of Structural Changes in the Forestry and Wood Industry" (online, 2020, ISBN 978-80-7509-757-6),

- "The Current Economic Situation of the Forestry and Timber Complex and the National Recovery Plan"; "Effective Communication in Forestry" (2021)

As mentioned above, the CFE meetings have been a suitable opportunity and platform for consultations about solved projects (including their presentations and popularization) – with an emphasis on NAZV projects. In recent years, these have been, for example:

– QJ1220313 "Differentiation of intensities and management practices in relation to ensuring forest biodiversity and economic viability of forest management" (2012–2016, responsible participant Assoc. Prof. V. Kupčák)

- QJ1530032 "Current and strategic possibilities of sustainable provision of forest functions and services of multifunctional forest management to the public in terms of socio-economic, political and legal aspects in the Czech Republic" (2015–2018, Prof. L. Šišák),

– QK1820041 "Forest ownership fragmentation and its impact on forest policy" (2018–2020, Professor V. Jarský)

– QK1820358 "The potential of structural changes of sustainable forestry and wood processing" (2018 - 2020, Assoc. Prof. V. Kupčák).

Some projects were solved with the direct participation of actors from practice, for example, to solve

the project NAZV QJ1220313, it was, in addition to the Department of Forest and Wood Economics (CZU), the state enterprise Military Forests and Estates (Vojenské lesy a statky, s.p.).

Initiation and organization of international scientific conferences can also be included among the important activities of the Commission. For example, in 2015 it was the conference "Economic viability within the forestry-wood sector" (at the School Forest Enterprise in Kostelec nad Černými lesy), in 2019 the conference "Economic viability of the forestry-wood sector in the contemporary conditions" (School Forest Enterprise "Masaryk's forest" - Křtiny Chateau), in 2020 it was an online conference from Brno (DFWPEP) "Model of structural changes in the forestry and wood industry". The proceedings with the same title were published from the conference in Křtiny (1st Ed. 2019, ISBN 978-80-7509-691-3; 17 papers, of which 11 foreign papers). From the conference in 2020 the proceedings "Model of structural changes in the forestry and wood industry" were published: a collection of papers from an international online scientific conference (1st ed. 2020, ISBN 978-80-7509-757-6; 12 contributions, of which 4 foreign papers). In addition to the participants from the National Forestry Centre in Zvolen and representatives from DFWE CZU and DFWPEP MENDELU, there were participants from the following sector-oriented departments from the Technical University in Zvolen:

– Department of Economics and Management of Forestry, Faculty of Forestry,

- Department of Economics, Management and Business, Faculty of Wood Sciences and Technology,

– Department of Marketing, Trade and World Forestry, Faculty of Wood Sciences and Technology.

### PUBLICATION "CZECH ACADEMY OF AGRICULTURAL SCIENCES AND A QUARTER-CENTURY OF THE COMMISSION OF FOREST ECONOMICS"

A certain milestone in the activities of CFE was the publication of Kupčák et al. (2020) entitled "Czech Academy of Agricultural Sciences and a Quarter-Century of the Commission of Forest Economics" (Mendel University in Brno, 1<sup>st</sup> Ed. 2020, 310 pp. ISBN 978-80-7509-762-0.), which captures and summarizes the activities of this commission for the period 1995–2020. The introductory chapters briefly define the focus and content of CFE activities – forest and wood economics and policies. Relevant historical aspects are also described to emphasize the substantial sectoral specifics, with the dominance of process and production longevity in forestry, and with the importance of the ontological approach in forestry in general. Due to the genesis and present of forest economic research, as well as the organizational guarantee and cooperation in the Commission's meetings, the following chapters provide brief information on the history and present of DFWE and DFWPEP. The subsequent chapter results with its information on CAAS and DF, incl. organizational integration and the role of the CFE.

The decisive part of the publication is devoted to the individual Commission meetings, which are described here – starting with the location (and introduction of the organization within which the meeting takes place), through the main agenda of the first day, to the excursion part of the second day, including photo documentation. The basic source of information here was the documentation that is kept within the CFE, published in the proceedings; the main centralized source is the CFE website within the CAAS portal. From a general methodological point of view, a retrospective documentary search approach was used for the selection and subsequent comprehensive processing of information.

The publication also includes a list of key outputs, especially on the topics of the Commission's meetings, published proceedings and the Commission's participation in international scientific conferences. In the end, not only due to the time frame of 25 years of activity, the chapter Afterword and Acknowledgments is appropriately included.

The publication also contains numerous appendices. There is, for example, a descriptively arranged list of CFE meetings, incl. a complete overview of topics and the situation of the meetings (locations), complete and supplementary photo documentation etc. A separate appendix to the published proceedings is a list of authors and titles (and references as the case may be) to their publications. The last remarkable appendix is a map overview of locations in the Czech Republic (but also in Poland and Slovakia), where the individual meetings of the Commission were held in the years 1995–2019 (on a map background from mapy.seznam.cz, 2019).

#### CONCLUSION

The aim of the contribution was the information on the subject and importance of forest and wood economics and policy, incl. research in this area. In this context, the main content focus and goal were information on the activities of the Commission of Forest Economics of the Department of Forestry CAAS.

At DF CAAS, the members of CFE are currently represented by Associate Professor Miroslav Hájek, Dr. Petra Hlaváčková, Dr. Michal Hrib, Prof. Vilém Jarský, Dr. Martin Chytrý, Assoc. Prof. Václav Kupčák, Dr. Petra Palátová, Professor Karel Pulkrab, Assoc. Prof. Roman Sloup, Dr. Dalibor Šafařík, Prof. Luděk Šišák; Prof. Jiří Bartuněk is an honorary member. As part of the annual evaluation of the CAAS activities, the CFE has long been evaluated as the most active one among the commissions of the Department of Forestry.

The CAAS awards medals and honourable mentions for its extraordinary contribution to the development of science and research in the agricultural sector. Based on the proposals of the DF CAAS, approved by the CAAS Board, the medals were awarded to these members of the CFE: Prof. Karel Pulkrab (CAAS Bronze Medal in 2010, Silver Medal in 2015), Assoc. Prof. Václav Kupčák (Bronze Medal, 2014), Prof. Luděk Šišák (Bronze Medal, 2017). In 2019, Dr. Martin Chytrý was awarded a certificate of merit for his contribution to the development of science and research and for the results achieved, which can be used in the agricultural sector.

It is necessary to pick up and thank the personalities who have attended the meetings for a long time and regularly and clearly enriched the meetings with their presence and activity. Thanks belong to all who recorded the minutes of the meetings, for the extensive photo documentation, for the distribution of invitations and the administration of the meetings and conferences; also for editing the proceedings, as well as to all authors involved. Special thanks go to all the persons and institutions who participated in the organization and, in particular, enabled the Commission to work in their field. In addition to the activities of the Commission, the above-mentioned publication "Czech Academy of Agricultural Sciences and a Quarter-Century of the Commission of Forest Economics" was published in 2020, where the activities and personalities are listed by name. Not only due to the organizational change of the CFE management in 2019, the last sentence in the introductory chapter states: "Let the publication be a historical record, but mainly a reference to the followers."

### REFERENCES

- Bartuněk J. (1994): Ekonomika lesního hospodářství. Brno, Vysoká škola zemědělská v Brně: 62. (in Czech)
- CAAS (2022): Česká akademie zemědělských věd. Available at: http://www.cazv.cz (Accessed March 10, 2022; in Czech).
- eAgri (2022): Koncepce výzkumu, vývoje a inovací Ministerstva zemědělství na období 2023+. Available at: http:// eagri.cz/public/web/mze/poradenstvi-a-vyzkum/vyzkuma-vyvoj/koncepce-a-strategie/koncepce-vyzkumu-vyvojea-inovaci-1.html (Accessed March 30, 2022; in Czech).
- KLE (2022): Komise lesnické ekonomiky OLH ČAZV. Available at: http://www.cazv.cz/ek (Accessed March 30, 2022; in Czech).
- Kupčák V., Polster P., Šišák L., Palátová P. (2020): Česká akademie zemědělských věd a čtvrtstoletí Komise lesnické ekonomiky. Brno, Mendelova univerzita v Brně: 310. (in Czech)
- Lenoch J. (2018): Informace a podnikové informační systémy v LH. Lesnická práce, 97: 30–31. (in Czech)
- OLH (2022): Odbor lesního hospodářství ČAZV. Available at: https://www.cazv.cz/odbor-lesniho-hospodarstvi (Accessed March 25, 2022; in Czech).
- Pulkrab K. (1993): Ekonomika a řízení lesního hospodářství. Praha, Vysoká škola zemědělská v Praze: 228. (in Czech)
- SAPV (2022): Slovenská akadémia pôdohospodárskych vied. Available at: http://sapv.sk/sk/odbory (Accessed March 30, 2022; in Slovak).
- Švihla V. (2003): OLH ČAZV k problematice hodnocení funkcí lesa. Lesnická práce, 82: 12–13. (in Czech)

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