

The History, Activities and Future Perspectives of the Serbian Soil Science Society

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Abstract

The future capacity of soils to support life on Earth is becoming questionable and in such a situation an important attention is given to soil science and land use–soil policy. This paper presents the historical overview, conducted activities and roles of the Yugoslav and Serbian Soil Science Society (SSSS) from its beginning to recent days, as well as future plans. The material tackles the development of soil science in Serbia: foundation of the Soil Society, international cooperation, publication of the journal "Soil and Plant" and other publishing activities, structural organization of the Society, organization of congresses and symposia, and impact of the Society to overall well being by development of various programmes. It also highlights the coordination, consulting, and supporting role of the Society in preparation of the soil map of Yugoslavia. The role of SSSS today is aimed at the general scientific, cultural and educational development and benefit of the Republic of Serbia. The Society has its bodies, eight (nine) commissions, eleven sub-commissions and four working groups. In the coming period, the Society will continue its organizational, publishing, educational, and cooperation activities, but also strive to include soils and soil science among national priorities. The permanent legacy of the Society is the inclusion of soil at the core of policies that support environmental protection and sustainable development in line with new challenges.

Keywords: Serbian Soil Science Society, SSSS, Soil congresses and Symposia, Soil map of Yugoslavia, Soil and plant journal

The History of Serbian Soil Science Society

The Serbian Soil Science Society – SSSS (Srpsko društvo za proučavanje zemljišta – SDPZ) is the legal successor of the Yugoslav Soil Science Society – YSSS (Jugoslovensko društvo za proučavanje zemljišta – JDPZ). Therefore, giving the note about nowadays SSSS is not possible without taking into consideration the work of YSSS, as well with the initial work in the field of soil science from nineteenth century up to the recent days, from the former Kingdom of Serbia and Yugoslavia, and after WWII Federal People Republic of Yugoslavia, later Socialistic Federative Republic of Yugoslavia, Federal Republic of Yugoslavia, and nowadays Republic of Serbia.

In Serbia, people were living for centuries depending on soil and its products, with a life strongly embedded in Bible (Gen, 1, 17-19): “Cursed is the ground because of you; through painful toil you will eat food from it all the days of your life. It will produce thorns and thistles for you, and you will eat the plants of the field. By the sweat of your brow you will eat your food until you return to the ground, since from it you were taken; for dust you are and to dust you will return.” As such, the soils were sung for centuries in epic and lyric poetry, and the terms of vernacular pedology were developed well indicating the link of Serbs to soil, land and ground.

The first scientific and applied works on soils in Serbia date back to the nineteenth century. They are related to the establishment of the First State Economy in 1851, and then the Agricultural School in Topčider, Belgrade, in 1853. After the school was abolished, an agricultural and chemical experimental station was established in 1898. This was the site of the first fertilization experiments in Serbia, as well as as of first meteorological measurements, beginings in livestock breeding, production of seedlings, innovations in fruit and vine growing, and afforestation.

The first scientific and applicative works on soils in Serbia date back to the nineteenth century. It was related to the foundation of Agricultural school in Topčider, Belgrade, in 1853. This school became an agricultural and chemical experimental station in 1898. This school was a place for the first fertilization experiments in Serbia, as well as as of first meteorological measurements, beginings in livestock breeding, production of seedlings, innovations in fruit and vine growing, and afforestation. The school in Topčider is an ancestor of modern agricultural institutions in Serbia, as it spreaded the seeds of knowledge over the entire country, covering variuos scientific disciplines, and among them also soil science. In fact, later, in 1950, Institute of Soil Science was founded in Topčider.

The stronger development of soil sciences between two wars, in Kingdome of Serbs, Croat and Slovenian, and after Kingdome of Yugoslavia, were related to works of prof. Aleksandar Stebut from Belgrade, and prof. Mihovil Gračanin from Zagreb. Soil scientists of that period published first textbooks for universities and schools and also first monographs and soil maps, and took active participation in international soil events. These were the decades of vigorous early growth. During that time, in 1931, there was the first initiative from the Department of Pedology, from the Faculty of Agriculture in Belgrade, to organize Soil Science Society. However, this proposal was not realized because in 1931 was founded Geological institute at the country level, which had in its statute pedological department. This lasted until the end of second World War.

After that, in 1946, there was a second initiative from the Pedological department in Zagreb, Croatia, but the organization of the Society stopped because also the organization of International Soil Science Society was stopped in those after war years. The first, foundation, meeting of Yugoslav Soil Science Society took place in Belgrade on November 8, 1953 (Tešić, 1954). This day was recognized as the foundation day of the Yugoslav Soil Science Society. The first president of the Society was Prof. Dr Stevan Nikolić. The Society was founded to enhance the national expertise in soil science and agricultural production, in accordance with ten–years country development programme. The major activities of a new born Society were related to international cooperation and publication of the journal „Zemljište i Biljka“ - "Soil and Plant". International cooperation was organized via membership in International Society of Soil Sciences, through participation in congresses, conferences, meetings, and knowledge exchange. The journal „Zemljište i Biljka“ - "Soil and Plant" was at the beginning the forerunner of the Society, as it was officialy founded on December 8, 1951, at Consultation meeting in Zagreb, after the initiative of the Department for Agrochemistry and Pedology, from the Faculty of Agriculture, University of Belgrade. At the same meeting arose new and succesful initiative to found Yugoslav Soil Science Society. The first publications in „Zemljište i Biljka“ – "Soil and Plant" date back to 1952, one year before the official foundation of the Society. After the establishment of the Society, the journal actually became its "child" (organ). The role of the journal was to publish contributions in soil science and agriculture, both nationally and internationally. At the opening speech of the First meeting of the Society, the participants stated "that the Society should take care about the quality of the journal, which represents one of the organs of the Society, and should be devoted to its improvement". The foundation of Soil Society was greeted by Academic Council of Federative Public Republic of Yugoslavia, Serbian Geological Society, Council of the Faculty of Forestry in Belgrade, Serbian Geographical Society, and Serbian Biological Society. The initiative for the foundation of the Society was provided by a small group of pedologist and agrochemists, but the intention was further spread to wider array of scientific workers. At the first meeting, the Society organized republical sections and scientific committees, and it was decided to held the first Congress of Yugoslav Soil Science Society in 1955, in Portorož, Slovenia.

After the second world war, in 1946, Federal Ministry of Agriculture and Forestry gave an initiative to organize the first conference of pedologist of Yugoslavia, focused on the creation of soil map of Yugoslavia with comments. One of the decision of the conference was to create

pedogenetic soil map of soil types in Yugoslavia in a scale 1 : 100,000 for the purpose of agricultural zoning and appropriate utilisation of modern agricultural measures, in order to improve yields of agricultural crops. The initial soil survey and soil mapping work was not coordinated between the different Federal republics, and after the organization of Yugoslav Soil Science Society, its Commission for soil genesis, morphology, classification and cartography took a role of coordinator for soil surveys and mapping. In this period, an initial proposal to create soil maps in a scale 1:100 000 was left, and a decision to create maps in 1:50 000 scale was adopted. After several years, the work on soil map of Yugoslavia advanced, and after two to three decades the major part of the country was mapped. The coordinating role in creation of soil map of the republics of Yugoslavia is one of the greatest achievements of the YSSS during its lifetime. In Bosnia and Herzegovina, this work lasted for 23 years, and finally finished in 1987 (Jakšić, 1988), whereas in some other republics the work was prolonged in another coming decades. The main reason was the revoke of the Federal fund for Scientific Work in 1971, and differences in financing institutions. The greatest effort in soil mapping in Serbia was carried out by Institute of Soil Science in Belgrade, Institute for Field and Vegetable Crops from Novi Sad, and Institute for Water Management in Belgrade.

The first Congress of YSSS was organized in 1955, in Portorož, Slovenia (Nikolić, 1955). During the venue, the annual assembly of the Society was held. The Congress brought the Resolution, and one of the recommendations was to organise federal soil cartographic centre with a goal to create soil map of Yugoslavia. After the first Congress, the Society organized several consultations, courses and meetings, and also Fifth International Assembly of International Centre for Mineral Fertilizers in Belgrade, in 1956 – Consultations about microelements in agriculture, and fourth World Congress for Mineral Fertilizers in 1961, in Opatija (Croatia). The Society was very active as it has published under special issues several publications, and was a co-editor of the new journal "Agrochemistry", together with Society of entrepreneurs for production of products for chemigation of agriculture, and Society for Plant Protection of SR Serbia. Also, the active role of Society was noted in translation of international monographs, and publication of the edition "Stručna biblioteka agrohemije" ("Professional Agrochemistry Library").

The second Congress of YSSS was organized in Ohrid, Macedonia, in 1963 (Jelenić, 1963). This Congress brought the Resolution containing the guidelines for future development of soil science in Yugoslavia. Also, at this Congress was presented a proposal of Yugoslav Soil

Classification System, by Viktor Nejgebauer, Milivoj Ćirić, Georgi Filipovski, Arso Škorić, and Miodrag Živković (Nejgebauer et al., 1963). After the works of Aleksandar Stebut in the thirties and Mihovil Gračanin in the fifties of the 20th century, on soil classification, this was the first after WWII unified work of soil scientists from different republics of ex-Yugoslavia in regards to soil classification. The so called "Ohrid Classification" was a corner stone for the future development of soil classification in Yugoslavia. The resolution states that it is important to unify the work in the field of soil classification and mapping, soil nomenclature, and to create and publish soil maps with comments, and to organize this work via Federal Fund for Scientific Work. The other Commissions of the Society had also fruitfull work and important conclusions. The overall decision was to organize working groups among all Commissions, which should develop working programmes and notify the problems which should be solved and discussed on the next Congress.

In that period, there was an active participation of the members of YSSS on VIII International Congress in Bucharest, in 1964. In 1965, YSSS actively participated in the organization of International seminar for correlation of soil map legend and soils of Balkan countries and Europe, under the supervision of FAO (Tešić, 1972). In 1965, the journal „Zemljište i Biljka“ - "Soil and Plant" was transferred under the Union of Biological Societies of Yugoslavia, under basic Union's publications "Acta biologica Yugoslavica", as Serie A, as the oldest journal of this serie. In 1965, Society starts with the publication of another important Serie: "Manuals for Soil investigations". The third Congress of YSSS was organized in Zadar, Croatia, in 1967 (Škorić, 1967). It was dedicated to actual problems of soils in intensive agricultural production, to soils with irregular water regime, and soils on karst. The period of begining weaknesses and stabilisation of institutions was left behnd, and the Society was able to cope with high number of important problems from all aspects of soil science, to discuss and solve them in the context of social requirements. After the third Congress, which was thematic in nature and not all commissions were represented, the working commissions were supplemented. The members of the Society were also enrolled in international activities via different working groups of International Union of Soil Sciences (IUSS). European working group for saline soils had a meeting in Novi Sad, Serbia, in 1968. Very important Symposium was held in Bečići, Montenengro, in 1969, devoted to developments and actual problems in soil investigations in Yugoslavia.

The fourth Congress of YSSS was held in Belgrade, in 1972, and it had the highest number of participants, as soil sciences developed very well in the past period (Jugoslovensko društvo za

proučavanje zemljišta, 1972). In this period, there was a very sharp increase in promoted PhD and Magisters from educational institutions in Yugoslavia. The work on the Congress was organized via six Commissions of the Society.

The fifth Congress was organized in Sarajevo, Bosnia and Herzegovina, in 1976 (Jugoslovensko društvo za proučavanje zemljišta, 1976). The themes of the fifth congress were the soils of hilly-mountainous regions, intensive management of soils under drainage and irrigation practices, and soil protection.

The sixth Congress was held in 1980, in Novi Sad, Serbia (Jugoslovensko društvo za proučavanje zemljišta, 1980). The Resolution of the Congress referred to the Problems of Soils under Intensive Management, to Intensification of Agricultural Production at Abnormal Soils, Soil and Land Evaluation, Soil Mapping and Soil Classification in Yugoslavia, and the Environmental Protection and Pedosphere.

The seventh Congress was organized in 1984 in Priština, Serbia (Antonović, 1984). The main topics were following: agricultural production in hilly regions, soil restoration, sustainable land management under field crops, orchards, vineyards, and forests, intensification of crop production under hydro-meliorative systems, and recultivation problems.

The eight Congress was organized in 1988, in Cetinje, Montenegro, with plenary lectures about soils in karstic regions (Jugoslovensko društvo za proučavanje zemljišta, 1988). This was the last Congress of YSSS in ex-Yugoslavia. Each of the events brought their resolutions and conclusions, future directions, and had very well organized excursions.

After the period of the dramatic events of the nineties, YSSS existed but only including active participation of institutions and scientists from Serbia and Montenegro. The ninth Congress was organized in 1997 in Novi Sad, Serbia (Dragović, 1997). The main topics of the Congress were management, arrangement and conservation of soils in 21st century.

The tenth anniversary Congress was organized in Vrnjačka Banja, Serbia, in 2001 (Antonović, 2001) under the title "Soil and new concepts of soil management", with following sections: a) Genesis, classification, cartography and other areas, b) Soil fertility and agrochemistry, c) Soil biology, d) Irrigation, drainage, conservation and e) Soil protection and environment.

The following, eleventh, Congress was organized in Budva, Montenegro, in 2005 (Društvo za proučavanje zemljišta Srbije i Crne Gore, 2005) entitled as "Soil as a Resource of Sustainable

Development". This was the last congress organized together with Montenegrin side. In 2011, the Society was restructured and became Serbian Society of Soil Science.

The twelfth Congress was in Andrijevica, Serbia, in 2011 under the title: "Status and Prospectives of Soil Protection, Management and Use" (Sekulić, 2011).

The Serbian Society of Soil Science organized 13th congress in Belgrade, in 2013 (Saljnikov, 2013). This Congress was the first congress officially demarked as an International Congress. It was organized in four sessions: Plenary session, Soil Use, Fertility and Management, Soil-Water-Environmental Protection, and Soil in Space and Time.

The next, fourteenth, Congress was organized in Novi Sad in 2017, and it was second international congress (Belić et al., 2017). It was entitled as "Solutions and Projections for Sustainable Soil Management" and it had seven sessions.

The third international and 15th national Congress of the Society was organized in 2021, in Soko Banja, Serbia (Gajić et al., 2021). The congress in Sokobanja was organized at the time of COVID-19 Pandemic under the title: "Soils for Future under Global Challenges". It was organized as a hybrid one, with in-person and on-line presence. The participants from 40 countries were involved in the work of the Congress, majority of them via internet because of the COVID-19 pandemic situation. The participants from Germany, Czech Republic, Poland, Italy, Bosnia and Herzegovina and Montenegro were present in-person. The representatives of British, French, Slovak and Spanish soil societies have presentations about the history, work and future activities of their societies. The topics of the Congress were Soil fundamentals, Soil-water-plant-atmosphere continuum, Soil degradation and soil and water conservation, and Soil and water future socio-economic pathways. The thematic areas were selected to support the distinct efforts of agriculture, and humankind in general, to deal with current resource, environmental, health and social issues. This Congress was organized in the International Decade of Soils (2015–2024), proclaimed by IUSS in Vienna Soil Declaration on December, 7, 2015. In the declaration, IUSS recognized the key roles soils play in addressing major resources, environmental, health and social challenges currently facing humanity. Accordingly, the Congress in Sokobanja strived to emphasize the importance of soils through human effects on a landscape level, issues of soil security, role of the soils in climate change mitigation and adaptation, urbanization and sealing of soils, and soil awareness through integrated approaches emphasizing soil functions and services, soil protection and sustainable soil management for a more secured future.

The Society was reorganized in 2011, officially, and the main institutions involved in the work of the society since that time were Institute for Soil Sciences in Belgrade, Faculties of Agriculture from the University of Belgrade and Novi Sad, Faculty of Agronomy in Čačak, Institute for Field and Vegetable Crops from Novi Sad, Faculty of Forestry and others.

The fruitful activities of the Society in the past period were mainly related to the development of the agricultural and other soil related sectors in the country. The activities of the Society were direct or indirect, but they significantly contributed to overall development and well being of the people. Therefore, an important activity of the Society from the first days of its existence, in addition to the coordinating, advisory and supporting role in the creation of Soil Maps of the former Yugoslav Republics, a very important role of the Society was the development of soil fertility control and the application of fertilizer programs. This work was initially given to Extension Services. The first meeting about this topic was organized in 1965 in Belgrade. Next important activity was related to coordination and support to soil fertility control and determination of harmful and dangerous substances in soils.

The Society also organized Scientific Symposia about "Degraded soils and problems of their conservation". Nine Symposia were organised from 1975 to 1991. The first was in Peć (Serbia), in 1975, and the following Symposia were in Tuzla (Bosnia and Herzegovina), Lazarevac (Serbia), Lipica (Slovenia), Varaždin (Croatia), Oteševo (Macedonia), Novi Sad (Serbia), Žabljak (Montenegro), and the last one was in Tuzla (Bosnia and Herzegovina), in 1991. Since 1991, the Society recovered slowly and with difficulty from the above mentioned interruption. After 2011, the Society started to restore its activities referring to Symposia organisations. Therefore, the Commission for Soils and Environment organized symposia at Goč, in 2019 (Belanović Simić and Antić Mladenović, 2019) the Sub-Commission for Irrigation and drainage organized the Symposia in Vršac, in 2020 (Stričević and Pejić, 2020), a first hybrid-type event, during COVID-19 pandemic, and the Commission for Soils and Informative Technologies organised Symposia in Novi Sad in 2022 (Ćirić et al., 2022).

The next important role of the Society refers to publishing activities. In 2022, the journal „Zemljište i Biljka“ – "Soil and Plant" reached to volume 72. Nowadays, it is financed mainly by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia. The most important editors of the journal were Prof. Dr. Stevan Nikolić, Prof. Dr. Đurđe Jelenić, Prof. Dr. Vladimir Mihalić, Dr. Gligorije Antonović and Dr. Elmira Saljnikov (current editor).

The Society has also published the Professional Journal *Agrochemistry* from 1959 to 1989, with 232 releases. The Society also published *Manual for chemical methods in soil investigations* (Bogdanović et al., 1966), *Methods for microbiological investigations of soils and water* (Tešić and Todorović, 1966), *Methodology for soil survey and creation of soil maps* (Filipovski, 1967), *Methods for investigation of soil physical properties* (Resulović, 1971). These manuals were published in sixties and seventies. Also, in that period was published a *Monography Soils of Yugoslavia*, and translated book on *Utilisation and Improvement of Saline and Alkali Soils*. In that period the Society had its newsletter. After the civil war in ex-Yugoslavia in nineties there was a period of deintensified and changed work of the Society. The members of the Society were drastically reduced compared with the Former Yugoslavia.

In that after-war period, in 1997, the Society published *Monograph about Methods in investigations and determinations of soil physical properties* (Bošnjak, 1997). After that, there was a long period of "drought" in publishing activity of the Society, excluding the publications from congresses, symposia and issues of the journal. Finally, in 2022 was published a monograph about soil degradation (Belanović Simić, 2022).

Very important role of the Society is directed to international cooperation. The Society is member of International Society of Soil Science, since its beginnings. The members of the Society were also members of the organs of International Society. Also, the Society was very active in the work of International Scientific Centre of Fertilizers (CIEC). Prof. Dr. Đurđe Jelenić was a president of CIE for almost twenty years, whereas at the position of the Secretary were Prof. Dr. Staniša Manojlović, Prof. Dr. Rudolf Kastori, and Prof. Dr. Srđan Blagojević. After the civil war in ex-Yugoslavia, the Society was reconstructed, changed its name and renewed its membership in International Union of Soil Societies in 2018.

During its lifetime, the Society has gained great contribution from soil scientists from foreign countries. Also, the members of the Society participated in world soil congresses as well as foreign scientists participated in the congresses of the Society. In the period of nineties the Sub-commission for Agro-Hydromelioration under the leadership of Prof. dr. Jordan Milivojević was very active and organized tenths of international visits, especially in Israel, for the members of the Society and overall community. In order not to left behind the marvellious activities of some members of the Society, we decided to give a list (Table 1) of Presidents and Secretary Generals of the Society since its beginnings.

Table 1. Presidents and Secretary Generals of YSSS and SSSS (adopted from Manojlović et al., 1997 and revised)

Period	President	Secretary General	Society
1953–1955	Stevan Nikolić	Đurđe Jelenić	YSSS
1956–1957	Stevan Nikolić	Đurđe Jelenić	YSSS
1958–1959	Stevan Nikolić	Đurđe Jelenić	YSSS
1960–1961	Stevan Nikolić	Milan Todorović	YSSS
1962–1963	Stevan Nikolić	Milan Todorović	YSSS
1964–1965	Stevan Nikolić	Dobrivoje Aleksandrović	YSSS
1966–1967	Stevan Nikolić	Dobrivoje Aleksandrović	YSSS
1968–1969	Arso Škorić	Milan Todorović	YSSS
1970–1972	Živojin Tešić	Dobrivoje Aleksandrović	YSSS
1973–1974	Mirko Leskošek	Nikola Jović	YSSS
1975–1976	Husnija Resulović	Rastislav Korunović	YSSS
1977–1978	Dimitar Popovski	Rastislav Korunović	YSSS
1979–1980	Staniša Manojlović	Gligorije Antonović	YSSS
1981–1982	Budimir Fuštić	Gligorije Antonović	YSSS
1983–1984	Mustafa Dauti	Vladimir Hadžić	YSSS
1985–1986	Jakob Martinović	Miodrag Pejković	YSSS
1987–1988	Grujica Đuretić	Dragi Stevanović	YSSS
1989–1990	Dragoje Dušić	Dragi Stevanović	YSSS
1991–....			YSSS
1995–1997	Vladimir Hadžić	Stojan Stojanović	YSSS
1997–2001	Nebojša Protić	Jordan Milivojević	YSSS
2001–2005	Budimir Fuštić	Gradimir Vasić	SSSSM*
2007–2011	Petar Sekulić	Gradimir Vasić	SSSS
2011–2015	Srboljub Maksimović	Ljiljana Nešić	SSSS
2015–2019	Milivoj Belić	Dragan Čakmak	SSSS
2019–2023	Boško Gajić	Ljubomir Životić	SSSS

*in the period of 2003–2006 with the existence of Serbia and Montenegro, the name of the Society was Soil Science Society of Serbia and Montenegro (SSSSM) – Društvo za proučavanje zemljišta Srbije i Crne Gore (DPZSCG)

Serbian Soil Science Society today

In accordance with the provisions of Articles of the Law on Associations and Statute of the Yugoslav Soil Science Society of February 2, 1996, Assembly of the Yugoslav Soil Science Society on January 28, 2011, issued the Statute of the Serbian Soil Science Society. In the statute it is defined that Serbian Soil Science Society is a social organization and has the status of a legal entity, with rights, obligations and responsibilities stipulated by law and the issued Statute. The

official address of the Society is Nemanjina 6, 11080 Belgrade–Zemun. The current president of the Serbian Society of Soil Science is Boško Gajić, PhD, Full Professor, whereas the Executive Secretary is Ljubomir Životić, PhD, Assistant Professor, both from the University of Belgrade, Faculty of Agriculture. To achieve its goals and tasks, the Serbian Soil Science Society perform several activities based on membership or other activities defined by law. The main activities based on membership are publishing, publication of the journal “Soil and Plants”, publication of collections, monographs and books in the field of soil science, educational activities, and organization of scientific congresses, seminars, symposia, consultations, study trips in the country and abroad, courses, and lectures in the field of soil science.

The role of the Society is aimed at the general scientific, cultural and educational development and benefit of the Republic of Serbia. It continues to develop and realize all aspects of soil science. The mission of the Society is the promotion of soil sciences and application of new findings in the fields of agricultural and forestry production, and overall human and animal well being. Also, it assists teaching and scientific processes in education and academia and cooperate with other scientific societies in the country and abroad. General goals of the Society are related to development and enhancement of all areas of soil sciences. The multifold tasks of the Society are to encourage the practical application of scientific results and foster the advancement of young scientists, to serve as a base for scientific and professional cooperation of soil scientists in Serbia, to contribute to the economic development of Serbia, to foster cooperation between national and international institutions and scientists, and to organize the exchange of scientific information and findings.

The bodies of the Society are the Assembly, Executive Board, President, Secretary General and Supervisory Board. The Society has eight commissions by its Statute from 2011, with additional Commission from the Assembly meeting in 2019. The Commissions are the following: Commission for soil physics, Commission for soil chemistry, Commission for soil biology, Commission for soil fertility and plant nutrition, Commission for soil genesis, classification and mapping, Commission for soil technology, Commission for soil mineralogy, Commission for soils and the environment, and Commission for Informative technologies and soils. There are following sub-commission in the Society: sub-commissions for salt-affected soils, soil micromorphology, conservation of soils and water, soil zoology, forest soil, land evaluation and assessment, soil remediation, soil cultivation, soil conservation, irrigation and drainage, and climatology and

hydrology. The Society has the following working groups: working group for information system and land evaluation, working group for pedotechnology, working group for contaminated soil and groundwater, and working group for urban soils. The Society collects funds from membership fees, participation fees from meetings, voluntary contributions, donations, and sponsorships, gifts, from institutions and individuals, state budgets and other sources in accordance with the law. Serbian Soil Science Society is a member of the International Union of Soil Science, the Association of Agricultural and Food Technicians, the International Scientific Center for Fertilizers, the European Confederation of Soil Science Societies, and the Federation of Eurasian Soil Science Societies. The activities and services of the SSSS are accessible on the web site <https://sdpz.rs/>, which is regularly updated.

Future perspectives

Growing population pressures, industrialization and intensive use of soil exhaust natural resources and limit the performance of soil functions. The additional impacts of climate change and land use changes affect the ability of soils to regenerate and even lead to degradation. The future capacity of soils to support life on Earth is in question. In light of these, soil science again became a major component of each environmental science courses, given that soil plays a key role in elementary natural cycles. Accordingly, the role of Serbian Soil Science Society is again highlighted. The Society aims to contribute to the efforts focused on gaining insight into the impacts of current and future climate, economic, social and political changes on soil resources and the environment, in order to ensure their conservation and efficient use in the production of goods and services that will meet future human demands.

In the coming period the SSSS will continue hosting conferences, publish monographs and books, carry out educational activities, and organize scientific congresses, seminars, symposia, consultations, study trips, courses, and lectures in the field of soil science. The Serbian Society of Soil Science should continue to promote the cohesion and collaboration between soil science experts, but also should aim at creating a real community between persons or groups interested in the different branches of soil science and its applications and its consideration by related disciplines. In a sphere of education, the work of the Society should be focused on the organization of seminars, lectures and courses for younger generations, primary and secondary schools, in order

to promote the importance of soils. In future period, it is of high importance to promote the soil as a key compartment for sustainable development and conservation of environmental quality.

In a scientific area, the future activities of the Society should be focused on renewal of its editions on manuals to investigate soils, on native language. Also, the journal „Zemljište i Biljka“ - "Soil and Plant" will have new numbers and the Society should give an effort to improve the rank of the journal. The work on national soil classification system and its improvement should be continued through Commission for soil genesis, classification and cartography. This group should also work on procedures to correlate World reference base for soil resources (WRB) and national soil classification system.

In the coming period, the Society should also create a leverage plan about how to create a framework for interaction with governmental representatives in the field of soil science, land management and other soil and land-related issues. The permanent legacy of the Society should be the inclusion of soil in the core of policies that support environmental protection and sustainable development, in accordance with new challenges. On one side, the increased climate variability, extreme climatic phenomena, torrential rains and floods are affecting the soils and their buffering capacity, and impeding the maintenance of productivity and biological diversity over the land, and thus triggering soil degradation of already threatened soil resources, whereas on the other side, soil and land sustainable management in less developed countries is an enemy of the economy, and is lacking in practices. These two factors together are multiplying their negative effects on soil resources and are required to be included in legal and institutional framework, so that their negative impacts are going to be reduced to desirable level. In this alarming situation, SSSS can be an alert or voice to listen, in order to improve economic benefit from the land, while at the same time protecting our environment and reduce energy consumption. Its role should be to set up soil and pedosphere in the centre of other Earth's spheres at the "decision makers table", as the soils is a basic constituent of the terrestrial ecosystem, and it cannot be ignored like to be appeared in the past. The superficial consideration of soils received to date must change, and the role of the Society is to do that without letting these circumstances go by. Therefore, the Society must inform and change the perception of the entire society related to soil resources. After that, an increasingly committed society will contribute and change the course of events.

The Serbian Soil Science Society is a learned society and presents a forum for debate for the Serbian soil science community. The Society promotes the soil sciences via publication of a

journal and books and it has a lot of space to conduct the promotion via actions towards young researchers and organization of World Soil Day, and land degradation day. In the future period, SSSS should stand for communication to facilitate the transfer of knowledge, communication to promote soil science, supporting young researchers, and opening partnerships with other professional groups.

To conclude, YSSS was an important contributor to the development of the ex-Yugoslavia. As its successor, the Serbian Soil Science Society should continue to fulfill the same tasks. Nowadays, we are growing, but we may be critical to ourselves and say that we are still in a phase of recovery and development. We should give our efforts to become the corner stone of the development and progress in the country.

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Istorijat, delatnost i budućnost Srpskog društva za proučavanje zemljišta

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Izvod

Sposobnost zemljišta da podrži život na Zemlji u budućnosti je pod znakom pitanja, i usled toga se sve više pažnje poklanja nauci o zemljištu i politici korišćenja zemljišta. U ovom radu je dat istorijski pregled, sprovedene aktivnosti i uloge Jugoslovenskog i Srpskog društva za proučavanje zemljišta (SDPZ) od njegovog nastanka do najnovijih dana, kao i budući planovi. Rad se bavi razvojem nauke o zemljištu u Srbiji i obuhvata: osnivanje Društva za proučavanje zemljišta, međunarodnu saradnju, izdavanje časopisa „Zemljište i biljka“ i druge izdavačke delatnosti, strukturnu organizaciju Društva, organizaciju kongresa i simpozijuma, uticaj Društva na sveobuhvatnu dobrobit preko razvijanja različitih programa. Takođe se ističe koordinaciona i savetodavna uloga Društva u pripremi pedoloških karata u republikama bivše Jugoslavije. Uloga SDPZ je danas usmerena na opšti naučni, kulturni i obrazovni razvoj i dobrobit Republike Srbije. Društvo ima svoje organe, osam (devet) komisija, jedanaest podkomisija i četiri radne grupe. U narednom periodu, Društvo će nastaviti sa organizacionom, izdavačkom, obrazovnom i kooperacionom delatnošću, ali i nastojati da zemljište i nauke o zemljištu uvrsti među nacionalne prioritete. Trajno nasleđe Društva je uključivanje zemljišta u srž politika koje podržavaju zaštitu životne sredine i održivi razvoj u skladu sa novim izazovima.

Ključne reči: Srpsko društvo za proučavanje zemljišta, SDPZ, Kongresi i simpozijumi, Pedološka karta Jugoslavije, časopis „Zemljište i biljka“.

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