



History, achievements, and future challenges of Japanese Society of Soil Science and Plant Nutrition

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Modern soil science was introduced just after the reformation of Japan in 1867 by Max Fesca, Oskar Kellner and other German teachers together with their Japanese students, who were traced back to Justus von Liebig and thus started studying and teaching soils based on agrogeology and agricultural chemistry. After the German teachers left, the graduates from agricultural colleges formed the Foundation of Agricultural Sciences in 1887, based on which the Society of the Science of Soil and Manure, Japan, was established in 1927. The research, education and extension activities then expanded to Korea, Manchuria and Inner Mongolia as well as Taiwan and Sakhalin in accordance with a military invasion to China and Southeast Asian countries until the end of WWII.

After WWII together with the reformation guided by the General Headquarters (GHQ) of the Allied Forces, soils research and educational units increased in number in the universities and governmental institutions. The society started publication of the journal in English, "Soils and Plant Food" in 1955, which was renamed to "Soil Science and Plant Nutrition (SSPN)" in 1961. There formed a variety of discussion groups in the society such as soil microbiology, pedology, clay science, soil physics, plant physiology, and forest environment, which became independent in the 1960s.

Economic growth of Japan in the 1970s accomplished self-sufficiency in rice production and extended the range of crop to grow, however, a variety of environmental issues came out. A new division was established in the society for solving soil-related environmental problems. The society became more involved in international activities and hosted a number of international conferences, workshops, etc., the most significant of which was the 14th International Congress of Soil Science at Kyoto in 1990. The society proposed there a regional organization to cope with the unique issues, e.g. improvement of paddy rice cultivation, for Asian countries and established East and Southeast Asian Federation of Soil Science Societies (ESAFS) in 1991. Since the early 1990s the research topics have become more related to the global as well as regional environmental issues.

Major achievements in the history of the society may include 1) development of research particularly on paddy soils and volcanic ash soils, 2) consistent commitment to the education for constructing sustainable society, and 3) international cooperation in improving rice production in the developing countries particularly in Tropical Asia. Today 2,699 members are registered in the society, which includes 9 divisions and holds an annual meeting every year. Two journals are bimonthly published, i.e. "Japanese Journal of Soil Science and Plant Nutrition" in Japanese and "SSPN" in English and the latter was recognized as a cooperating journal of IUSS in 2010. Future challenges of the society are 1) more commitment to international organizations, e.g. EGU in addition to IUSS, SAFS and other soil-based communities, 2) enhancement of international cooperation for developing countries not only in Asia but also Africa, and 3) acceleration of soils research and education in association with related disciplines for constructing a holistically harmonized society on the planet earth.