Quarterly Viewpoint

FROM THE DESK OF RATTAN LAL

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Seizing the Moment

Finally, after a long wait full of anxieties and helplessness, soil science is receiving the attention that it deserves by policymakers from around the world. Notable examples include launch of the "4 Per 1000" initiative at COP21 in Paris in 2015, Adapting African Agriculture (AAA) at COP22 in Marrakesh in 2016, and the Platform for Climate Action in Agriculture (PLACA) at COP25 in Madrid/Santiago in 2019. Above all, an important example is "The Growing Climate Solution Act of 2020" being debated by the U.S. Senate. The Act specifically states that "the agriculture and forestry sectors hold the potential to serve as critical climate solutions." Indeed, this is a very positive development and a step in the right direction. The Act also enumerates that "At scale, agriculture and land use practices can sequester carbon at as low as \$10 per Mt CO2e, making it the most cost-effective carbon sequestration method currently available."

While there is a need for additional research on developing and fine-tuning methods of measurement, monitoring and verification of soil organic carbon stock and its changes at farm or landscape/watershed scale, soil scientists have made commendable progress in the science and practice of soil organic carbon in relation to its assessment and management on the one hand and provisioning of several critical ecosystem services on the other. Therefore, it is important that soil scientists seize the moment and work with policymakers for translating science into action for addressing issues of local, regional and global. significance. This is the opportunity that soil scientists have been waiting for, and policymakers are looking up to the soil science community for guidance on the theme of re-carbonization of the biosphere in general and world soils in particular with focus on farming carbon and its commoditization as a salable farm commodity that can be traded in a market. The scientific community must be proactive and work enthusiastically with policymakers and help implement the pro-soil initiatives being proposed.

Sincerely,

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