



FROM THE DESK OF RATTAN LAL

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Fellow Soil Scientists,

Ex Nihilo Nihil Fit

“Out of nothing comes nothing” is the Latin phrase proposed by Parmenides, a pre-Socratic Greek Philosopher of the 6th Century B.C. The concept is pertinent to numerous properties and processes in soil science. Nothing comes from nothing because work (energy) is needed in every biogeochemical or biogeophysical transformation. The “Law of Conservation of Matter” (matter is neither created nor destroyed) holds true for all pedospheric processes. For example, consider the following ten tenets of soil science:

10 Tenets of Soil Science

#	The Law	Examples and Implications
1	Nothing is appropriated	There are always tradeoffs
2	Nothing is permanent	All processes are in a dynamic equilibrium
3	Nothing is absolute	All soil properties are relative to a baseline
4	Nothing is a panacea	There is no silver bullet for global soil management
5	Nothing is universal	Soil-specificity is the rule
6	Nothing is free	Undervaluing soil leads to the “Tragedy of the Commons”
7	Nothing is empty	Voids in soil contain gases, dilute solution, roots and biota
8	Nothing is a given	Soil must never ever be taken for granted
9	Nothing is a waste	Everything (crop residues) is useful and must be recycled
10	Nothing comes from nothing	Nothing is nothing, all components are inter-connected

Lal (2013)*

Soil scientists have work cut out for themselves and must work hard to succeed in the mission of improving the professional stature of soil science. With the beginning of the New Year 2018, we must *carpe diem* (“seize the day”) and promote the cause of soil science by **Translating Knowledge Into Action And Action Into Knowledge**.

With very best wishes for a happy, peaceful and rewarding 2018, and with the resolve to put **More Carbon In Soil So That There Is Less In The Air**.

Sincerely,

Rattan Lal,
President, International Union of Soil Sciences



* Lal, R. 2013. Soil and ecosystem services. Chapter 2 In Lal, R., Lorenz K., Hüttl, R.R.J., Schneider, B.U. and von Braun, J. (Eds) Ecosystem Services and Carbon Sequestration in the Biosphere. Springer, Dordrecht, Netherlands, 11-31.