



From the Patron

SOIL HEALTH: ITS SIGNIFICANCE IN 'ONE HEALTH'

Interrelations between soils, plant, animal and human health is not a new knowledge to this world. However, it has assumed greater significance under the new circumstances when zoonotic diseases like H1N1 flu, Nipha, Covid-19 etc have started affecting human life in more serious ways than earlier. Hence, transdisciplinary research efforts to develop effective mechanism to tackle the human health threats at its origin have become more important. 'One Health' approach is one such initiative that emphasises securing human health by ensuring the ecosystem and animal health. In this approach researchers interpret HEALTH as an abbreviation of six words viz., Humans, Ecosystem, Animals, Living, Together, and Harmoniously.

Ecosystem health has strong positive linear relationships with the quality and quantity of its resources like soil, water, and biodiversity. Unfortunately, agriculture that requires alterations in the ecosystem through habitat destruction, biodiversity erosion, and use of scarce natural resources is also disruptive to the ecosystem health. However, we cannot stop practicing agriculture for the sake of ecosystem health as food is a basic need of human and animal life but, we can practice it through sustainable management of natural resources. For that, not only farming community but the soil researchers also need to act wisely to ensure the rebuilding of soil health so as to keep the succeeding components of the soil-plant-animal-human continuum healthy.

In fact, healthy soils lead to healthy plant growth and can also provide higher crop yields required for ensuring enough food to feed the growing population from existing farmlands.



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This will definitely help to reduce the expansion of agricultural fields by destroying forest lands, the habitat of a large array of various life-forms. Destruction of these natural habitats forces many of this wildlife to move out of their territory to human inhabited areas. Unfortunately, some of them transfer serious infectious diseases to human beings. Accordingly, the health of soil, plant, animal, and human beings are interconnected with the same thread and it is difficult to make one component healthy leaving others aside. Hence, soil health makes the foundation of "One Health" and it needs to be conserved and sustained in order to achieve a healthy human life today and tomorrow.

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