



Editorial

SOIL IS THE KEY DETERMINANT OF HUMAN HEALTH

Soil influences human health in variety of ways. The best known is its role in food production. However, it also affects human health by way of carbon sequestration, detoxification, water and nutrient retention, and maintaining biodiversity.

By sequestering carbon it mitigates global climate change which influences human health in several ways. For example, severe and prolonged heat events, forest fires, deterioration of air quality, floods, erratic rainfall, expansion of vector-borne diseases, and increases in food- and weather-related infections are being observed as a result of climate change.

Soil is the original source of nutrients supplies to humans. Whatever may be the food habit, the ultimate source of nutrients are plants which derive their nutrients like N, P, K, Ca, Mg, S and several others through soil.

Soil is also the host of a variety of microorganisms vital for soil functions and human health. Many of these microorganisms play direct role in development and regulation of the human immune system. Researches have shown that contact with soils, and microbes drive immunoregulatory responses in humans that positively influence mental and physical well-being. Several bacteria and fungi, improve plant-soil properties, such as water relations and aggregate stability.

The above clearly shows that healthy human life thrives on healthy soils and, therefore, soils need to be cared. Because poorly managed or ignored soils

can get contaminated and pose health risks to human. This includes contamination with heavy metals such as arsenic, lead, cadmium, and other heavy metals, organic pollutants, pathogenic microorganisms such as viruses, enteric bacteria, fungi, and parasites causing diseases such as hypothyroidism/multinodular goiter, Keshan/Kashin.

Soils can get polluted often as a result of lack of awareness. Poorly managed irrigation, pesticide and other chemical applications, continuously enriching the soils by dumping of pollutants and poorly managed tillage and other agronomic operations all can lead to deterioration in soil health. A holistic approach is needed to inform and make aware the people at large about the role of soil in human health and how vital it is to nurture and protect the soils.

The current issue of *Harit Dhara* includes articles related to nutrient management of crop plants, few stories from the farmers' fields and issues associated with agriculture in hilly terrains. I am sure that the issue will be useful and interesting to the readers.

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Editor In Chief