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The Soil and Environmental Sustainability

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Abstract: Currently, a globally popular fast developing endeavour and trend is environmental conservation or sustainability. The usual protagonists in articles, books, discussions, and lectures are the three famous and important natural elements: soil, water, and air. These are the prime materials in sustaining all life-forms of the planet and in actualizing a balanced ecological system. While sustaining life, however, they in turn need to be sustained. The author herein limits his concern to the soil—the most accessible, familiar, and friendliest of the elements.

The article revolves around the paradigm shift in the realm of agriculture or farming, the consequences of abandoning tradition in favour of chemical dependence and technological practices, the reasons why pursuing soil-wellness is an endeavour worth pursuing, and suggestions how this can be actualized by sharing the fundamentals of sustainable agriculture as discussed in Keith Mikkelson's Sustainable Agriculture in the Tropics (Philippines: Aloha House Inc., 2005). The basic claim of Mikkelson is "feed the soil, not the plant" and realizing this requires practicing the ten fundamentals of sustainable agriculture. These are: proper crop rotation; legume usage; companion planting; insect habitat; cover cropping; green fertilizers; minimal tillage; mulching; animal integration; and composting (this is Mikkelson's arrangement from the least to the most labor intensive).

The author concludes that pursuing this noble endeavour naturally starts from small beginnings and will hopefully prosper into becoming one that includes a wider range or scope. As an inspiring idea, encouraging the continuous pursuit of soil-wellness, he cites "The butterfly effect theory" that asks: "Does the flap of a butterfly's wings in Brazil set off a tornado in Texas?"

Key Words: Foliar; humus; inoculation; minimum tillage; sustainable agriculture