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Photosynthesis as the soul of organic farming: Tactics for evolving a sustainable world

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Photosynthesis, in essence, is the phenomenon of transforming light into life. Only green plants, algae, and cyanobacteria can transform light into "living" or a result in the "living" or a result i transform light into "living" energy. This living energy, then, flows into a variety of consumers at subsequent trophic levels. The energy the humanity depends upon lies in the organic molecules in the foods grown following the process what is called agriculture. The Organic Farming Movement is gaining momentum the world over. While this naturally vital farming is woven around and analyzed in terms of farming practices, specific inputs, positive environmental implications, healthy foods and marketing standards, the most critical and phenomenal aspect of the whole farming is missed. It is photosynthesis. If the organic farming is to play a vital role in building up and maintain soil organic content, it must harp on photosynthesis. Performance of a farming system, revealed through its productivity, is not an isolated issue. It is an attribute of (agro-) ecosystem. Organic farming must also lead to enhancing ecosystem functions. Photosynthesis holds the key to enhance ecosystem functioning. Increasing photosynthetic efficiency of an agro-ecosystem will be phenomenal to increase the performance of organic farming. Organic farming should not be marginalized to cultivated land. It should be based on a farming system or agro-ecosystem and photosynthetic efficiency should be increased to its highest degree in all its components (uncultivated land/forests/grasslands/rangelands, cultivated land, gardens, etc.). Biodiversity, soil fertility, and cyclic nutrient flow management in an agro-ecosystem are vital for building up environmental conditions conducive to photosynthesis enhancement and amelioration of organic farming. Ecological security, an attribute of ecological integrity, is a prerequisite for sustainable food and nutrition security, and, therefore, for a sustainable world. A sustainable world, a goal of organic farming, is an imperative of our times.

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