HEALTHY SOILS ARE THE BASIS FOR HEALTHY FOOD PRODUCTION

The importance of maintaining healthy living soils

Soils maintain a diverse community of organisms that:
- help control insect & weed pests and plant disease
- form beneficial symbiotic associations with plant roots
- recycle essential plant nutrients
- improve soil structure

Healthy soil contributes to mitigating climate change by maintaining or increasing its carbon content.

Soils serve as a buffer to protect delicate plant roots from drastic fluctuations in temperature.

Healthy soils, food security & nutrition

In many countries, intensive crop production has depleted the soil, jeopardizing our ability to maintain production in these areas in the future.

Soil health and its fertility have a direct influence on the nutrient content of food crops.

In the past 50 years, advances in agriculture technology has led to increased food production, but sometimes with negative impacts on soils and the environment.

95% of our food is directly or indirectly produced on our soils.

It can take up to 1000 years to form 1 cm of soil.

Soils supply

- essential nutrients
- water
- oxygen
- root support

That our food producing plants need to grow and flourish

Sustainable soil management could produce up to more food.

Sustainable soil management includes various approaches:

- Agroecology: a systems approach based on a variety of technologies, practices and innovations, including local and traditional knowledge and modern science.
- Agroforestry: includes both traditional and modern land-use systems where trees are managed together with crops and/or animal production systems in agricultural settings.
- Organic farming: is agricultural production without the use of synthetic chemicals or genetically modified organisms, growth regulators, and livestock feed additives.
- Zero tillage: is a technique used in conservation agriculture to maintain a permanent or semi-permanent organic soil cover that protects the soil allowing soil microorganisms and fauna to take on the task of “tilling” and soil nutrient balancing.
- Conservation agriculture: follows three principles (minimal soil disturbance, permanent soil cover and crop rotations) to improve soil conditions, reduce land degradation and boost yields.

Sustainable soil management promotes the sustainable management of soils.

95%

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