ACTA SCIENTIFIC AGRICULTURE (ISSN: 2581-365X)

Volume 3 Issue 4 April 2019

Guest Editorial

Soils: Call for Constant Focus

Venera Tsolova*

Professor, Institute of Soil Science, Agrotechnologies and Plant Protection, Bulgaria

***Corresponding Author:** Venera Tsolova, Professor, Institute of Soil Science, Agrotechnologies and Plant Protection, Bulgaria.

Received: February 26, 2019; **Published:** March 15, 2019

The terms Anthropocene and Homogenocene have been recently proposed to designate the present geological age in which the man becomes a major geological and biological factor. This is an era in which biodiversity is declining as human activity accelerates the degree of extinction of species. At the same time, ecosystems around the World seem more and more similar due to the invasive species that have been introduced in different geographic regions. The era in which soils that sustain life on Earth are substantially altered or disturbed as a result of industrialization, urbanization and intensification of agriculture. The coal industry alone has left dramatic footprint on soils and environment and this trend will remain after 2030 when a peak in coal production is expected in countries like China.

Globalization and the growth of urban populations all over the World also cause irreversible changes of soil cover. Today, about 55% of the World's population lives in cities and this rate may rise up to 68% by 2050. Rapid growth of cities and industry modifies extensive areas by enriching them with salts, acidifying agents and heavy metals; compacts with heavy machines and permanently seals with asphalt and concrete. As a result, 33% of soils are moderately to severely degraded due to erosion, salinisation, compaction, acidification and contamination. Climate change, which is currently on focus, is also an important factor for reducing the soil functions.

The natural degradation processes that occur in all cultivated soils are also active change drivers and only conservation practices can mitigate these processes. Overall, sustainable soil management includes four strategies that can both increase food production and minimize harmful environmental impacts.

- Minimizing further destruction of soils and restoring the fertility;
- Stabilization of stocks of soil organic carbon and soil organisms;
- Stabilizing or reducing the use of nitrogen and phosphorous fertilizers, with exception of regions with nutrient deficiency where an increase is recommended and,
- Deepening our knowledge of the status and trends of changes of soil environment and causalitys at macro and microscale.

In the mankind era it is important to know that soils are not only our ally in food production but also the filter of Earth, the atmosphere modifier and biodiversity bearer without which the life on Earth is impossible.

Literature

The selected part of "Tackling food insecurity at the urban level - turning global commitments into local realities" (Urban Food Actions Platform of FAO) and "Soils are endangered, but the degradation can be rolled back" (International Year of Soils 2015 report) are used.

Volume 3 Issue 4 April 2019