The International Year of Soils (IYS) was launched on World Soil Day, 5 December 2014. Why is now the time for such a commitment to the world’s soils? The purpose of the IYS is to promote universal recognition of the importance of soil for life. Soil has long been taken for granted and, as such, limited efforts have been dedicated to assure its sustainable use and management. The status of soil degradation is now of global concern. We hope the IYS will be pivotal to informing the general public of the importance of keeping soils healthy.

Why is soil considered a non-renewable resource?

Natural soil formation is generally a very lengthy process; it is estimated that forming one centimetre of soil can take hundreds to thousands of years. In contrast, its loss [through soil erosion or other methods of degradation] can occur in just a few days. As this loss is not recoverable within a human lifespan, we say that soil is non-renewable.

What are the main practices currently underlying most soil degradation and loss, and how can they be adapted to make them less harmful?

Unsustainable soil management practices include: improper irrigation; overuse of inputs (fertilisers, pesticides); cropping on slopes without any conservation practices; eliminating all soil cover; slash and burn agriculture; and highly mechanised agriculture, among others.

Some key drivers of soil degradation are: urbanisation, population growth, climate change, intensive agriculture, overgrazing and deforestation.

Soil must be considered as a living system – only then will we be able to apply sustainable management practices that maintain the ecosystem services it provides for human wellbeing.

IYS CAMPAIGN: KEY MESSAGES

• Healthy soils are the basis for healthy food production
• Soil is a non-renewable resource, essential for food security and a sustainable future
• Soils store and filter water, improving our resilience to floods and droughts
• Soils support and host a quarter of the planet’s total biodiversity
• Soils help combat and adapt to climate change by playing a key role in the carbon cycle
• Human pressures on soil resources are reaching critical limits
The top 1 m of soil can store in excess of 400 mm of rainfall, helping to prevent flood risk.

1/3 of the world's soils are considered moderately to highly degraded.

In rural sub-Saharan Africa, 83% of people depend on the land for livelihood, but 40% of Africa's soils are already degraded.

1/2 of the global population (~3 billion people) live or work in buildings constructed of soil.

1 cm of soil formation takes hundreds to thousands of years.

Sustainable soil management can lead to a 58% increase in crop yield.

1 m² of forest soil can contain over 1,000 invertebrate species.

Soils are estimated to store 15 gigatons of carbon worldwide – 3 x more than all vegetation and forest.

If the global population exceeds 9 billion, agricultural production must increase by 60% to meet demand for food.

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