Food and Agriculture Organization of the United Nations

World Soil Day

SOILS ALIVE!

Soil is home to more than 25% of our planet's biodiversity

25%

Yet, we know only 1% of this universe

1%

SOIL CONTAINS THE MOST DIVERSE TERRESTRIAL COMMUNITIES ON THE PLANET



In just 8 cm of soil, there are 13 quadrillion living organisms

8cm



The weight of bacteria in 1 hectare of soil is equivalent to the weight of 2 cows

1ha

There are more organisms in 1 gram of healthy soil than there are people on Earth

1g





SOIL ORGANISMS WORK IN A COORDINATED EFFORT TO SUSTAIN LIFE ON EARTH



7^{d} 24^{h}

365^{d}

Species richness is an essential component of a healthy soil, which in turn produces more nutritious and safer food





THE GLOBAL POPULATION WILL REACH ALMOST **10 BILLION** BY 2050

Soil organisms support plant growth and improve agriculture production

58%

SUSTAINABLE SOIL MANAGEMENT COULD PRODUCE UP TO 58% MORE FOOD



SOIL ORGANISMS...

Are a source of medicines and support human health



SOIL IS A VAST AND NATURAL PHARMACY

MOST ANTIBIOTICS ARE MADE FROM SOIL MICRO-ORGANISMS

Contribute to the remediation of soil pollution by breaking down contaminants



Play a key role in climate change adaptation and mitigation by storing carbon in the soil



50%

50% OF THE PLANET'S SOIL PASSES THROUGH THE GUT OF EARTHWORMS EVERY YEAR

YET SOIL BIODIVERSITY IS IN GREAT DANGER FROM

Unsustainable soil management practices



MONOCULTURES LIMIT THE PRESENCE OF BENEFICIAL BACTERIA, FUNGI AND INSECTS, AND CONTRIBUTE TO ECOSYSTEM DEGRADATION

75 bn t Erosion

EACH YEAR, 75 BILLION TONS OF SOILS AND THEIR ORGANISMS ARE STRIPPED FROM THE LAND BY WIND AND WATER EROSION

Pollution

POLLUTION CAUSES A CASCADE OF SOIL DEGRADATION PROCESSES AND AFFECTS SOIL ORGANISMS BY REDUCING BIOMASS AND SPECIES RICHNESS

Surface sealing and urbanization

IN EUROPE, 11 HECTARES OF SOIL ARE SEALED UNDER EXPANDING CITIES EVERY HOUR

11 ha/h



COST OF INACTION:
50 BILLION €
PER YEAR AND COULD REACH
14 000 BILLION €
IN 2050

SOIL BIODIVERSITY IS A NATURE BASED SOLUTION

WHAT CAN YOU DO?

SUPPORT AGRO-ECOLOGICAL TOURISM

MINIMIZE THE USE OF FERTILIZERS IN GARDENS/ FARMS

DISPOSE OF YOUR GARBAGE AND MASKS RESPONSIBLY

TAKE PART IN WORLD SOIL DAY AND RAISE AWARENESS

CLEAN-UP YOUR NEIGHBOURHOOD

STIMULATE INTEREST IN SOIL BIODIVERSITY AT SCHOOL

REDUCE YOUR FOOD WASTE BY COMPOSTING

TAKE A MAGNIFYING GLASS AND ENJOY THE SMALLER THINGS IN LIFE

KEEP SOIL ALIVE

World Soil Day 2020

PROTECT SOIL BIODIVERSITY

GLOBAL SOIL PARTNERSHIP

Thanks to the financial support of

European Commission

Ministry of Finance of the Russian Federation

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Ministry of Economic Affairs of the Netherlands

©FAO, 2020
XXX