



Food and Agriculture  
Organization of the  
United Nations



# SOIL IS ALIVE!

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

25%

Yet,  
we know  
only 1% of  
this universe

1%





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# SOIL CONTAINS THE MOST DIVERSE TERRESTRIAL COMMUNITIES ON THE PLANET

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

**8 cm**

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

**1 ha**

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

**1 g**





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

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

7d 24h  
365d



Soil organisms  
support plant  
growth and  
improve  
agriculture  
production

58%

SUSTAINABLE SOIL  
MANAGEMENT  
COULD PRODUCE  
UP TO 58%  
MORE FOOD





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# SOIL ORGANISMS...

Are a source of medicines  
and support human health

Contribute to the  
remediation of soil  
pollution by breaking  
down contaminants



SOIL IS A VAST  
AND NATURAL  
PHARMACY

MOST ANTIBIOTICS  
ARE MADE FROM SOIL  
MICRO-ORGANISMS

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





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# SOIL BIODIVERSITY IS IN **GREAT DANGER** FROM

Unsustainable soil  
management  
practices



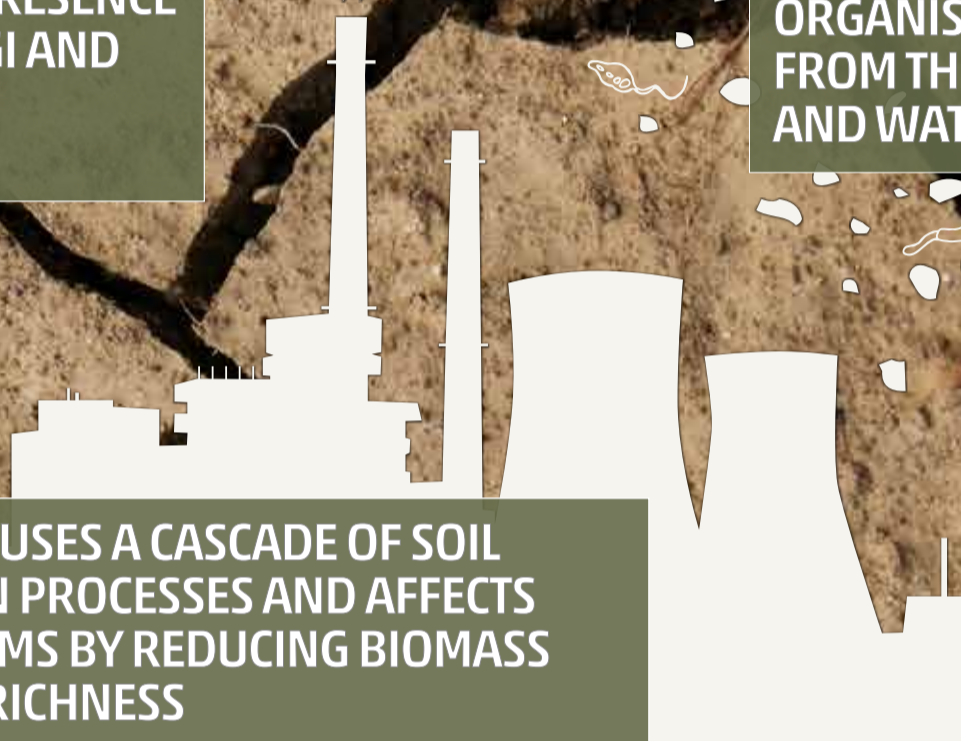
MONO-CROPPING LIMITS THE PRESENCE OF BENEFICIAL BACTERIA, FUNGI AND INSECTS, AND CONTRIBUTES TO ECOSYSTEM DEGRADATION

# 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





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SUPPORT  
AGRO-ECOLOGICAL  
TOURISM

# WHAT CAN YOU DO?

DISPOSE OF  
YOUR GARBAGE  
AND MASKS  
RESPONSIBLY

OPTIMIZE  
THE USE OF  
FERTILIZERS IN  
GARDENS/  
FARMS

CLEAN-UP YOUR  
NEIGHBOURHOOD

TAKE PART IN  
WORLD SOIL DAY  
AND RAISE  
AWARENESS

REDUCE YOUR  
FOOD WASTE BY  
COMPOSTING

STIMULATE  
INTEREST IN SOIL  
BIODIVERSITY  
AT SCHOOL

TAKE A  
MAGNIFYING  
GLASS AND ENJOY  
THE SMALLER  
THINGS IN LIFE



Thanks to the financial support of

