

# FARMLAND

## ECOSYSTEM

### WHAT IS IT?

A farmland is an ecosystem because it is made of living and non-living things that interact and exchange energy.

**IN ADDITION TO SUPPLYING US WITH FOOD, FODDER, AND FIBRE, FARMLAND ECOSYSTEMS**

serve as important habitats for many wild plant and animal species, from bats and birds to beetles and worms.

### THE FARMLAND ECOSYSTEM IS DIFFERENT FROM A FOREST ECOSYSTEM

because humans control many of the interactions among the things on the farm. This includes cropland, pasture, orchards, groves, vineyards, nurseries, ornamental horticultural areas, and confined feeding areas.

### WHY IS IT IMPORTANT?

#### AGRICULTURAL BIODIVERSITY IS INDISPENSABLE

for plant stability, and therefore for sustaining crop production, food security and livelihoods for everyone



soil & water conservation



maintain soil fertility



maintain biota



pollination

**PERFORMS ECOSYSTEM SERVICES ESSENTIAL TO SURVIVAL**

### HOW IS IT DEGRADED?



#### NITROGEN POLLUTION

Excessive use of fertilizer is polluting waterways and lowering soil quality while pesticides are harming wildlife and humans



#### INTENSIVE PLOUGHING

Leads to nutrient loss and soil erosion



#### MONOCULTURE (CULTIVATION OF A SINGLE CROP ON LARGE TRACTS OF LAND)

It destroys biodiversity and soil nutrients, uses excessive harmful chemicals to ensure its growth and contributes to soil degradation and erosion



#### OVERGRAZING

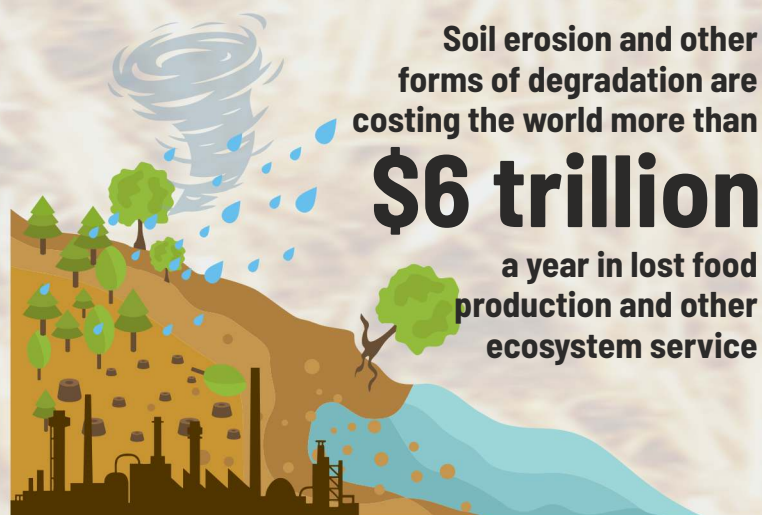
The acts of compaction and erosion as a result of overgrazing impair the land's future natural and agricultural productivity



#### REMOVAL OF HEDGES/TREES

Exposes land to rain and wind erosion

### HOW BAD IS THE SITUATION?



By 2040, land degradation could result in

**12%**

reduction in global food productivity



**30%**

increase in food prices

### WHAT CAN BE DONE TO RESTORE IT?



#### 1. ESTABLISH OR MAINTAIN WILDLIFE HABITATS AND DIVERSE LAND COVER ON FARMS

Year-round vegetative cover to protect soils and rainfall infiltration | Networks of connected wildlife corridors | Non-crop habitats such as hedges and beetle banks | Cover and refuge for pollinators

#### 2. SUSTAINABLE FARMING PRACTICES

Reducing tillage and adopting natural fertilizers and pest control

#### 3. ROTATION OF CROPS

Growing more diverse crops, including trees, and integrating them with livestock-rearing can restore biodiversity and provide more nutritious diets

#### 4. SUSTAINABLE USE OF CROP LAND

Alliances between farmers and animal herders allow use of cropland for livestock grazing in the interim period between two crop cycles

### WHAT CAN MY ORGANIZATION DO?

DEVELOP RESPONSIBLE SOURCING GUIDELINES TO PROMOTE SUSTAINABLE AGRICULTURE PRACTICES



PROVIDE TRAINING AND OTHER RESOURCES TO SMALLHOLDER FARMERS TO DEVELOP RESILIENT FOOD PRODUCTION SYSTEMS

### WHAT CAN I DO TO HELP?



Eat seasonal produce



Buy local and reduce your carbon footprint



Learn about & advocate sustainable farming practices



Pledge not to waste food & encourage your friends, family & neighbours to do the same