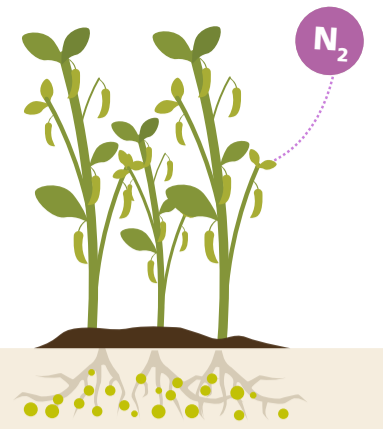


PULSES AND BIODIVERSITY



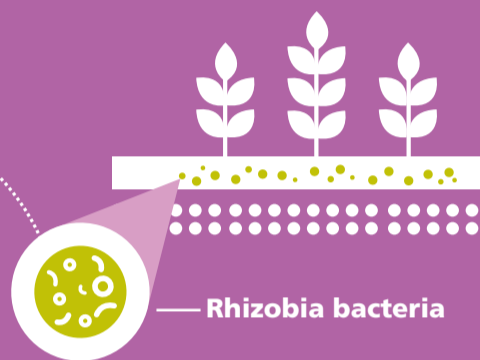
WHAT IS BIODIVERSITY?

The variability among living organisms from all sources and the ecological complexes of which they are part; this includes **diversity within species, between species and of ecosystems.**



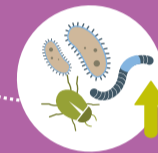
PULSES HELP TO IMPROVE SOIL BIODIVERSITY

Nitrogen fixing bacteria establishes inside the **root nodules of pulse crops**; thus providing nitrogen for the plant and also improving soil fertility.



Rhizobia bacteria

Pulses help to increase soil microbial biomass and activity, thus improving soil biodiversity.



PULSES' BIODIVERSITY

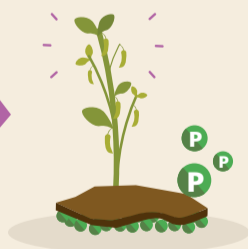


High biological diversity
Pulses have a broad genetic diversity from which **several varieties have been developed, including local cultivars that are not exported or grown worldwide.**

The genetic diversity of pulses is an **essential component for on-farm soil and pest management**, especially for small-scale farmers.



Some varieties of pulses are also able to utilize soil-bound phosphorous. This element plays an important role in the nutrition of plants.

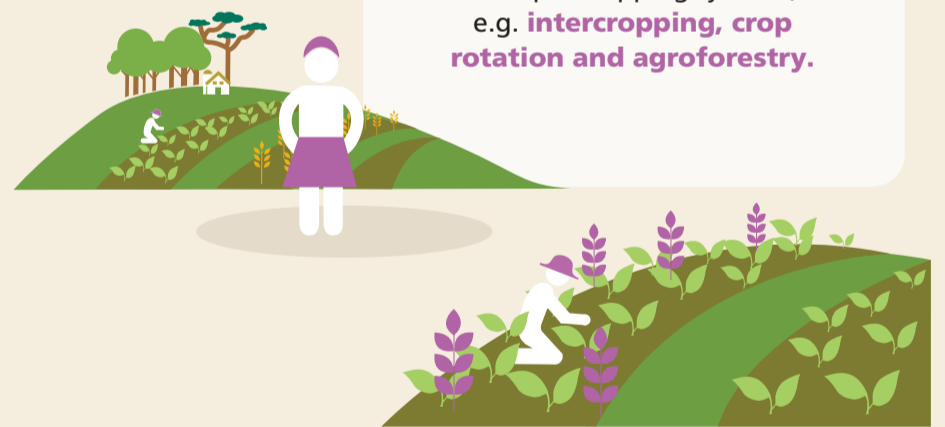


A **high soil biodiversity** provides ecosystems with **greater resistance and resilience against disturbance and stress.**



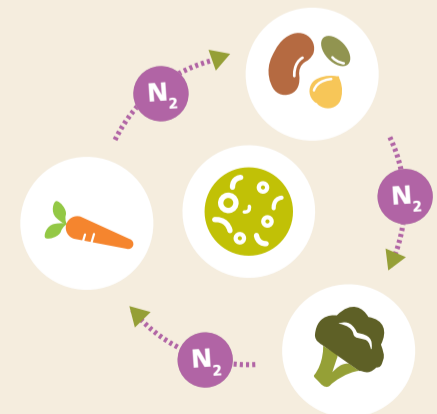
MULTIPLE CROPPING SYSTEMS

Pulses are a crucial component of multiple cropping systems, e.g. **intercropping, crop rotation and agroforestry.**



Including pulses in crop rotations

This **utilizes symbiotic bacteria to fix nitrogen**, which is partly transferred to subsequent crops, thus increasing their yields.



Food and Agriculture Organization of the United Nations



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