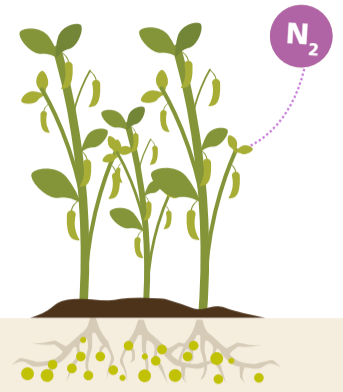




PULSES AND BIODIVERSITY



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.**



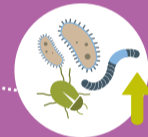
PULSES HELP TO IMPROVE SOIL BIODIVERSITY

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

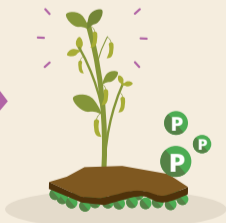
Pulses have a broad genetic diversity from which **several varieties have been developed, including local cultivars that are not exported or grown worldwide.**



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.

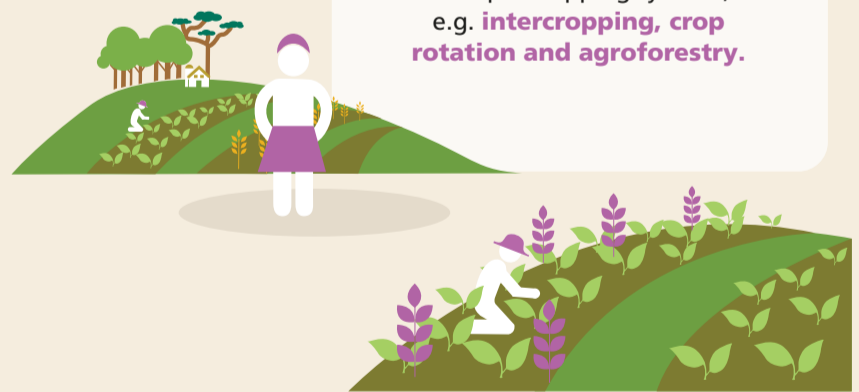


A **high soil biodiversity** provides ecosystems with **greater resistance and resilience against disturbance and stress.**



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.

