### **SUSTAINABLE FOOD FOR A SUSTAINABLE FUTURE**

# WORLD PULSES DAY FEBRUARY 10

PULSES AND BIODIVERSITY





# WHAT IS BIODIVERSITY?

The variability among living organisms from all sourses 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.



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



Rhizobia bacteria

### PULSES' BIODIVERSITY

- High biological diversity -

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



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# - The genetic -



- Soil biodiversity -

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 ecosystem 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

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

#WorldPulsesDay http://worldpulsesday.org

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The future of food

