

PERENNIAL CROPS AND CROPPING SYSTEMS

Landscape Resilience for the Future

Perennial agriculture, including perennial grains, oil seeds and legumes as well as forages and trees can take sustainable intensification to the next level and achieve productivity goals as well as social benefits and functioning ecosystem processes and services.



INVEST IN RESEARCH Today we have many technologies available to perennialize agriculture. Investments must be made through public and private sector partnerships to ramp up research, mainstream perennial agriculture into diverse farming systems on the ground and establish a conducive policy environment.

GET IT ON THE GROUND And scale it up, supporting farmers-to-farmers networks, providing enabling policies and programmes, improving availability of locally adapted germplasm and adaptation to local systems.

'PERENNIALIZE' AGRICULTURE To ensure sustainable and resilient agriculture and food systems.

EXAMPLES OF PROMISING PERENNIAL CROPS



Rice

Perennial rice holds the potential to significantly reduce erosion in fragile upland environments from annual cultivation.



Sorghum

Perennial sorghum has been developed and is now being tested in fragile environments such as sub-Saharan Africa.



Intercropping legumes with cereals

More than 9 000 farmers in Africa are now testing and growing different combinations of semi-perennial pigeon pea germplasm and integrated cash crop.



Agroforestry

Agroforestry can offer food, fodder, nutrients fuel and fibre. Livestock can be fed on leaves and pods, resulting in efficient and integrated crop/livestock systems.

BENEFITS OF PERENNIAL AGRICULTURE

1. Perennial species (crops, forages and trees) are those able to re-grow and continue to reproduce grains, seeds, fruits, and biomass after a single harvest.
2. Building perennality into agriculture systems is the intentional integration of perennialized crops, in diverse farming systems, landscapes and agro-ecosystems to:
 - > make farming more financially resilient and diversified;
 - > contribute to the overall well-being of farmers, farm workers, and rural communities;
 - > enhance diversity and productivity of farm and landscape level;
 - > preventing soil erosion and and promote efficient water storing;
 - > reduce amount of energy for agricultural operations; and
 - > learn and build on farmers' ecological knowledge and operationalize sustainable intensification.

