

Discovery and conservation of **CROP GENETICS**

13

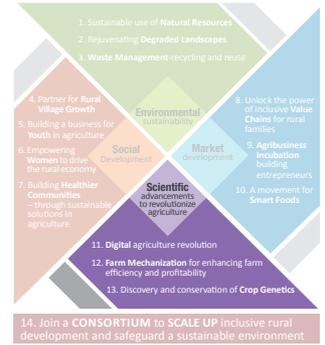
Long-term **protection of crop genetics**

Unlocking the potential of genomics for **future food production**

Coping measures for **climate change**

Be ready to **tackle pest and disease crises**

Reduce poverty and provide **nutritious food**



Recent advances in genomics and molecular breeding technologies provide new opportunities to accelerate breeding of advanced crops.

The new technologies can provide faster, cheaper and reliable genotyping data and ultimately new crop varieties that are high yielding and biofortified, leading to better nutrition, better resistance to pests and diseases and greater ability to cope with climate change.



Impact pathway

1 Genebank operations – long-term conservation of genetic material

2 Characterizing genetic diversity in the genebanks by evaluating entries under specific stresses

3 Identifying traits developed by farmers of yester-year to help farmers of today deal with climate change and increase nutritional quality and profitability

4 Using this genetic diversity to accelerate the development of nutritious varieties using advanced genomic technologies and bioinformatics

