



Convention on
Biological Diversity

Rapid population growth has led to a change from traditional to intensive agricultural systems. About 7,000 plant species have been cultivated for food since agriculture began about 12,000 years ago. Today, however, only about **15 PLANT SPECIES AND EIGHT ANIMAL SPECIES SUPPLY 90% OF OUR FOOD.**

AGRICULTURAL BIODIVERSITY AND CLIMATE CHANGE

1/3 OF THE WORLD'S LAND AREA IS USED FOR FOOD PRODUCTION

and agricultural ecosystems can be found in almost every part of the world. As such, the impacts of climate change on agricultural biodiversity will be extensive and varied.



The added heat stress and drier soils as a result of climate change may **REDUCE YIELDS BY AS MUCH AS 1/3 IN THE TROPICS AND SUBTROPICS** where crops are already near their maximum heat tolerance.

Global agriculture can also contribute to climate change. It is estimated to account for about 20% of total anthropogenic emissions of greenhouse gases. Activities to reduce such emissions of greenhouse gases include: better management of agricultural soils, improvement of fertilizer use efficiency, restoration of degraded agricultural lands, improvement of rice farming techniques in order to reduce methane emissions.

Agricultural soils also have a potential for **SEQUESTERING CARBON**, and thus **MITIGATE CLIMATE CHANGE**. Improved management practices, such as low- or no-tillage practices and the use of crop residues, could enable agricultural soils to absorb and hold more carbon.

The conservation of agricultural biodiversity is a key option for the adaptation to climate change. For example, **THE CONSERVATION OF WILD RELATIVES OF FOOD CROPS** is considered an **INSURANCE POLICY FOR THE FUTURE**, as these wild relatives can be used to breed new varieties that can cope with the changing conditions.

35% OF THE WORLD'S CROP PRODUCTION IS DEPENDENT ON POLLINATORS such as bees, birds and bats. Hence, the conservation of the components of agricultural ecosystems that provide goods and services, such as natural pest control, pollination, and seed dispersal, should also be promoted.

