

USE OF ADAPTED CROPS AND VARIETIES

OBJECTIVE

To reduce the negative impacts of climate change on agricultural systems and ensure stable agricultural production.

DESCRIPTION

The introduction of new crops or varieties, or bringing back traditional crops allows diversification of agricultural production, with positive effects on biodiversity and ecosystem services, in particular if cultivated in association with conservation of agriculture practices (including: minimum soil disturbance, permanent soil organic cover and crop species diversification). It also strengthens the ability of the agro-ecosystem to respond to biotic and abiotic stresses and reduces the risk of total crop failure. Moreover, the cultivation of adapted crops and varieties can improve soil carbon storage by accelerating atmospheric carbon sequestration.

EXPECTED RESULTS

Regulation of energy supply, of water quality, ensuring carbon sequestration, and increasing the presence of pollinators.

RESULT INDICATORS

Hectares cultivated with crops and varieties [ha]

INVOLVED ACTORS

Farmers, small-and-medium sized enterprises, farm advisory services, breeders, researchers, and policy makers.

EXPECTED TIMELINE FOR ACTION

- Short term (1-4 years)
- Medium term (5-10 years)

BEST PRACTICES

- Montpellier - France
- Alentejo - Portugal
- Segovia - Spain
- Heilbronn - Germany
- Friuli Venezia Giulia Autonomous Region - Italy
- Marche Region - Italy
- Apulia Region - Italy

CRITICALITIES

Strengthening of scientific and technical capacities at many levels, integration of research efforts, collaboration between researchers and farm advisory services, and provision of clear messages and instruments to policy makers and stakeholders. Available resources and reasoned investments in climate change adaptation.

SCOPE OF THE ACTION

- Adaptation
- Mitigation

TYPE OF PROPOSED ACTIONS

- Green

SECTOR OF ACTION

- Agriculture / Forests / Land use
- Aquaculture / Fishing
- Biodiversity / Conservation of ecosystems
- Public health
- Water resource management

CLIMATE IMPACTS

- Change or loss of biodiversity
- Drought
- Extreme temperatures
- Floods

IMPLEMENTATION SCALE

- Municipality
- Region / Country

SOURCE

<https://climate-adapt.eea.europa.eu/help/share-your-info/general/use-of-adapted-crops-and-varieties>