

PROMOTION OF WATER SENSITIVE FOREST MANAGEMENT

OBJECTIVE

Reduce water scarcity.

DESCRIPTION

Forest management measures can increase water yield, regulate water flow, and reduce drought stress for a forest. By intercepting precipitation, evaporating moisture from vegetative surfaces, transpiring soil moisture, capturing fog water and maintaining soil infiltration, forests influence the amount of water available from groundwater, surface watercourses and water bodies. By maintaining or improving soil infiltration and soil water storage capacity, they influence the timing of water delivery. By minimizing erosion, they minimize impairment of water quality due to sedimentation. Forests can also protect water bodies and watercourses by trapping sediments and pollutants from other upslope land uses and activities. In addition, along streams, forests provide shade, thus reducing water temperature.

EXPECTED RESULTS

Maximizing the wide range of forest benefits without detriment to water resources and ecosystem functions.

RESULT INDICATORS

Volume of withheld water [m³]

INVOLVED ACTORS

Competent authorities for river management, farmers, forest services, policymakers.

EXPECTED TIMELINE FOR ACTION

- Long term (> 10 years)

BEST PRACTICES

- Italy
- Austria

CRITICALITIES

High costs for afforestation.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Green

SECTOR OF ACTION

- Agriculture / Forests / Land use
- Coastal management

CLIMATE IMPACTS

- Drought
- Floods

IMPLEMENTATION SCALE

- Association of municipalities
- Municipality

SOURCE

<https://climate-adapt.eea.europa.eu/metadata/adaptation-options/water-sensitive-forest-management>