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Soil and water conservation in Tunisia

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Tunisia, located on the southern shore of the Mediterranean, remains an arid to semi-arid climate on the three quarters of its territory. It is characterized by limited and fragile natural resources, subjected to an intense exploitation. Water deficit is pronounced, especially in the arid and semi-arid zones. However, significant loss of farmland throughout the years due to soil erosion and especially caused by water. On the other hand, physical, geomorphological, hydro climatic and socioeconomic conditions affecting Tunisian land are particularly favorable to their degradation. Over 60 percent of the useful agricultural land is threatened by soil erosion. Consequences of water erosion are decreasing fertility of land of the arid and semi-arid zone. In Tunisia, water erosion appears to be a chronic phenomenon. It affects 20% of the total land area. Annually, 15 000 ha of arable farming land and 500×10^6 m³ of runoff water are lost. Tunisian soil is subjected to a contrasting climatic conditions like drought,

short duration torrential rainfall, and increasingly important anthropogenic practices. All these factors make the soil fragile and increase their sensitivity to the degradation. Tunisia is characterized by a complex hydrological system, based on a strong complementarity between the surface water and underground aquifers, which form the bulk of the available resources. This complementarity is enhanced by various public strategies for water and soil conservation. The current situation of water resources and their uses in Tunisia present some risks that are common to many regions of the Mediterranean basin, limited water resources are widely used to meet the growing need, a severe climate conditions that reinforce pressure around limited water resources. These required the implementations of techniques for mobilization, valorization of runoff water and reduce soil erosion caused by water.

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