SALINITY AND SALINIZATION: A DRY ENVIRONMENTAL DEGRADATION PROCESS IN SENEGAL

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Soil salinity processes are the most complex soils degradation identified in Senegal. Our poster relates all identified processes in Senegal, measure its extension and provide result of efficient measures to solve environmental and, specifically, agricultural effects. Methodology used here is based on diagnostic of various soil salinity manifestations in Senegal and methods comparison to recommend sustainable Senegalese salt affected soil management. The causes of salinization differ from region to region ranging from naturally occurring salt affected soils due to parent rock material to saline water intrusion through estuaries and rivers, capillarity effects due to drought, man made salinization due to artificial irrigation without appropriate drainage system etc. Because of its recurrence in dry environmental conditions, soil salinity and salinization processes require more attention in Senegalese soil degradation remediation. Salinization processes have to be considered for sustainable salt affected soil management. Physical, chemical and biological methods have to be combined for efficient solution for agricultural areas. At very salty areas, on the so-called “Tannes-soil”, where agricultural activities could any more be conducted, biosaline agriculture is carefully introduced and provides agro-ecological advantages, due to its integrated system of salt affected soil and saline water management, as offered possibilities for agriculture, livestock and fishing. The poster proposes, for Senegalese situation, some methods combination for sustainable salt affected soil remediation; specifically to sustain agriculture production in the global climate changing degradation process.