17 JUNE - WORLD DAY TO COMBAT DESERTIFICATION AND DROUGHT

Desertification is land degradation as a result of deforestation (permanent removal of indigenous forests and woodlands) which has resulted in the demands of increased populations for settlement, to grow crops and to graze animals. Over-cultivation, over-resting, over-grazing, badly timed burning of veld, slash and burn, over-drafting of ground water, collection of firewood and poor irrigation practices are further causes of desertification. The impacts of these practices are most prevalent in arid, semi-arid and sub-humid areas such as most of South Africa.

During 2010 whilst we highlight Biodiversity desertification is most definitely a threat to biodiversity. Biodiversity and soil are strongly linked as soil is the medium for a large variety of organisms that interact with the wider biosphere (the regions of the surface and atmosphere of the Earth where living organisms exist). Soil provides a vital habitat for all kinds of plants, animals, bacteria, fungi and algae whose role is to recycle plant and animal matter from above ground. By doing their job they are maintaining soil fertility by passing minerals up the food chain to maintain healthy plants as well as naturally regulating climate by fixing carbon.

If this does not happen the soil becomes susceptible to wind and water erosion leading to further stresses that the soil ecosystem cannot tolerate. Loss of vegetation and moisture lead to saline and non-productive soils. Floods become more severe and landslides may occur. Removal of vegetation increases evaporation and with less moisture in the soil this may lead to changes in the climate patterns leading to lower rainfall.

Let us not allow our planet, Earth, to lose its name. Let us strive to reduce the 300 – 400 million tonnes of topsoil that South Africa loses every year. In many cases desertification is reversible with proper rehabilitation and reclamation. Improve the ability of the soil to hold water by maintaining vegetation cover, mulching, using organic fertilizers, feeding the soil compost, brush packing, till planting and reseeding.

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