Struggle against desertification, which is a result of misusage of lands, is a challenging experience that needs site specific management plans suitable by considering the natural components in target area, and, with the success of the projects, revenue of conservation studies even in an arid land is sustainable with appropriate land management studies as performed in Karapinar. Assessment of the changes in natural resource quality also requires long term monitoring. This study outlines the changes achieved in soils and vegetation quality in a sand dune area of Central Turkey maintained since 1960s. Results revealed that natural vegetation provided maximum recovery in soil and vegetation quality by increasing soil organic matter and plant nutrients than afforested sites. This 50 year project set an important guideline for conservation studies which may be undertaken at similar sites of the world.