

The impact of valley dam construction on environment in Karamoja. A case study of

Longorikipi Dam; Bokora Corridor Wildlife Reserve, Karamoja, Uganda

BY

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Abstract

The study was carried out in Bokora Corridor Wildlife Reserve in Karamoja at Longorikipi dam.

The major objective of the study was to investigate the impact of valley dams and livestock on the wildlife and vegetation of Karamoja.

Vegetation sampling was done using 4 transects each of 1 km long all starting from the dam. In each transect, 9 plots were made for sampling grasses and shrubs making a total of 36 plots in the whole study site. The plots measured 30m x 30 m. In each transect, the first 6 plots were at an interval of 50 m and the last 3 at an interval of 250 m. The point intercept Method was used for grasses and herbs in the same plots in which 3 lines of 30 m were made and counts were done at an interval of 20 cm making a total of 450 counts in a plot and a total of 4050 counts in a transect, hence a total of 16200 counts in the whole study site. Data of grasses and herbs were used to assess grazing intensity. A total of 66 vascular plants were recorded. 3 species were trees, 6 were shrubs, 26 were herbs, 16 were grasses and one was a sedge while 14 were either shrub or tree.

Statistical data analysis was done for shrubs, grasses and herbs that showed that vegetation degradation decreased with increasing distance from the dam. Climate and grazing were observed

to be the major factors influencing the vegetation of Bokora Corridor WR. It was found that grazing affects mainly the herb layer.

For observation of wild mammals and birds, four transects of 1000 m each were made and observations done at any point along these transects. 24 species of wild mammals were recorded while for birds, 27 species were recorded out of which one is rare and one is globally more wild game and birds at the dam in the wet season than in the dry season while there are more livestock at the dam in the dry season than in the wet season.

Gun shots were a common sound at the dam in the dry season and many wild mammals and birds were killed.