

**ASSESSMENT OF THE IMPACTS OF INVASIVE PRICKLY PEAR CACTUS
(*OPUNTIA STRICTA*) ON LAIKIPIA RANGELANDS**

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ABSTRACT

Prickly pear cactus was introduced into Africa during the colonial days as an ornamental plant. Presently, it has widely spread in the Kenyan rangelands and has become a major problem to the tropical countries, especially Eastern part of Kenya. The purpose of this project was to assess its impacts on Laikipia rangelands. All parts of this plant are highly regenerative, including seeds and other plant fragments. Dispersal methods are mainly through animals and water. The fruits are edible to some animals, and once they feed on them, they transfer the seeds to other places via their droppings. Animals may also carry plant fragments on their feet, thus transferring them to other places. Moving water may carry the fragments and deposit them to different places. This explains why the plant has highly invaded the rangelands. The plant highly invades disturbed sites, and overgrazing and deforestation are major factors that have contributed to the invasion. Measures to curb these activities need to be adopted to prevent further expansion. Climate change that is a result of global warming is also a major contributing factor to the invasion, as the plant is typical to warm and dry climates of the tropical regions. Increased atmospheric temperatures have created a conducive environment for its establishment and survival. The project employed a socio-economic survey that utilized questionnaires, observation, photographs and existing documented information methods of data collection to derive the most information that the community had about the plant, especially regarding its impacts and uses. Six different sub-locations were visited, and in each, one acre of land was selected as the study site. Here, rectangular-shaped quadrats were used to estimate the species abundance. Data was then analyzed using Statistical Package for Social Sciences (SPSS) computer software version 23. This research was aimed at improving rangeland condition by preventing further invasion of cactus plants.