

**IMPACT OF HUMAN INTERVENTION ON THE  
TOPOGRAPHY AND ECOLOGY AT KALARIKUNNU,  
CHELANNUR, KOZHIKODE, KERALA, SOUTH INDIA.**

**UGC MINOR RESEARCH PROJECT  
NO. MRP(S)-0207/12-13/KLCA031/UGC-SWRO**



**SUMMARY OF FINAL REPORT**

**Submitted to**

**UNIVERSITY GRAND COMMISSION  
SOUTH WESTERN REGIONAL OFFICE  
BANGALORE**

Department of Botany  
SreeNarayanna Guru College, Chelannur  
Kozhikode

Title of the Project	:	<b>Impact Of Human Intervention On The Topography And Ecology At Kalarikunnu, Chelannur, Kozhikode, Kerala, South India</b>
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## **Summary**

Degradation of midland hills brings about simultaneous collapse of ecosystems including hillocks, valleys and wet lands. The hill ecosystem of Kalarikunnu, Chelannur is facing degradation. It will destroy the pristine ecological balance of the hillocks and valleys nearby. Hence a study was undertaken to understand the impact of human interference

on the topography and ecology of Kalarikunnu, Chelannur, Kozhikode, Kerala with the aims to understand the diversity of flora and fauna associated to Kalarikunnu, Chelannur, Kozhikodu, to analyse the soil and water parameters in explored and unexplored areas of the hill and to evaluate the human intervention on the topography as well as the ecology of the area.

For the present investigation preliminary survey was conducted in and around the Kalarukunnu with the help of Local Government to understand the hill areas and land use methods. Field visits were organized regularly to collect plant specimens during different seasons. Plants collected are identified. Soil and water samples are collected from various regions like foothill, mid area and top hill soils during different seasons. Soil properties like soil moisture content, percentage of organic carbon, soil pH, percentage of available phosphorus, etc were analysed.

The upper plateau of the hill is laterite and it is very hard in texture. It provided with many crevices which may be formed by the continuous activity of the rainfall. At the area some shrubby and small to medium trees are present. In the mid hill and foot hills many medium houses were built and peoples occupy them. The floral diversity is astounding with different species of shrubs, herbs, trees and creepers growing at the surfaces and in the slopes of the hills. The small groves of *Ixoracoccinea*, *Ziziphusoenoplia*, etc. give refuge to a large number of small animals and birds in addition to providing nectar to butterflies and other insects

during the flowering season. Many species are rare and are facing threatening due to the over exploitation. Most of the hill sides have got Cashew nut plantation and thick patches of Bamboos.

In the hill area a huge construction- a water tank- was made by the government authorities in connection with the water supply. As the rate of human interference increased, transformation became noticeable. People attracted by cash crops turned into cultivation of Teak, cashew nut etc. This brought about further laterisation of soil and resulted in intense soil erosion. In the recent times the rate of exploitation was increased and exceeded what has happened for centuries. The hill region was devastated and excavated, the soil digged out and constructed a road up to top hill area. Here there is simultaneous collapse of three eco systems – the hillocks, valleys and the wetlands. The entire hill disappears within a few years time. The seriousness of the situation has not been formally assessed by any official agencies.