

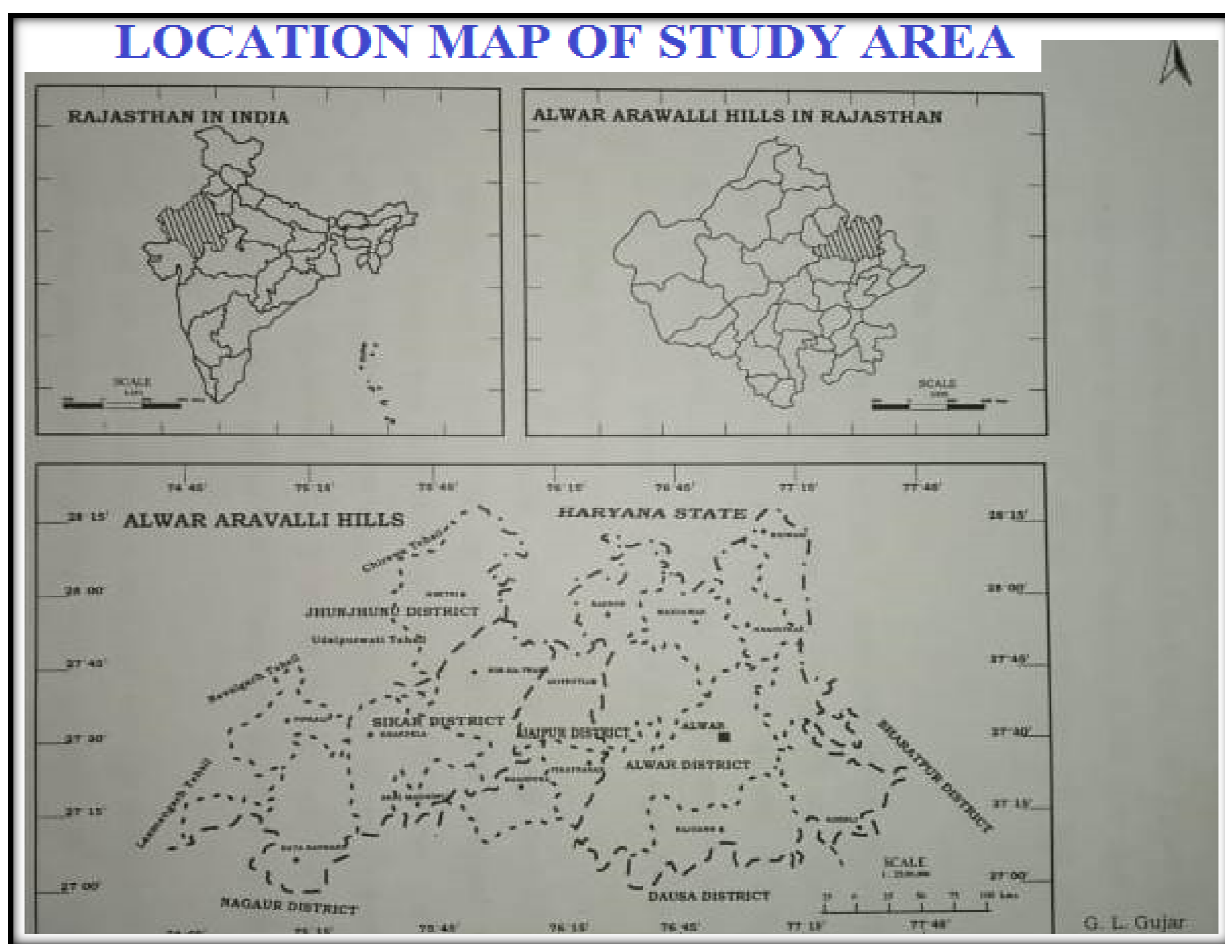
## Impact of Environmental Degradation and Desertification on Arawalli Hills, Alwar

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### Study Area

Alwar Arawali hill is located in the entire part of the state of Rajasthan. The latitudinal range is  $27^{\circ} 4$  minutes to  $28^{\circ} 4'$  and the longitude extension is located between  $74^{\circ} 45'$  and  $77^{\circ} 13'$  east longitude. Its area is 16,845.39 sq km. According to the population of 2011, there are 65,290,255 persons. The density of population is 320 persons per square kilometer.



**Objective:** To assess the nature of environmental degradation in the proposed study area.

### **Hypothesis:**

1. The contradiction between socio-economic development and environmental protection actually arises from efficient management of resources and scientific development programs.
2. The problem of environmental degradation is mainly related to illiteracy, poor employment and unavailability of economic output.
3. Due to the nature of the proposed study area, there are significant problems related to development in these areas. Among the so-called subjects, these areas are lagging behind other competing areas in the race for development.

### **Methodology: -**

Supervision in the synthesized study of statistics and information related to environmental studies is the saturn of the analytical and electoral methods, both qualitative and quantitative methods are used in data analysis.

Various photographs related to environmental degradation have been included.

### **Desertification :-**

*De Mar Tone* has defined the desert as an area where there is varied (different) and steady rainfall. It is accepted that the main weather characteristics of the desert are lack of rainfall instability, along with other main reasons are high temperature etc. Is from evaporation of |

According to HS Sharma, a long-term land phase of desertification through which the production land is said to become infinite ecological desert.

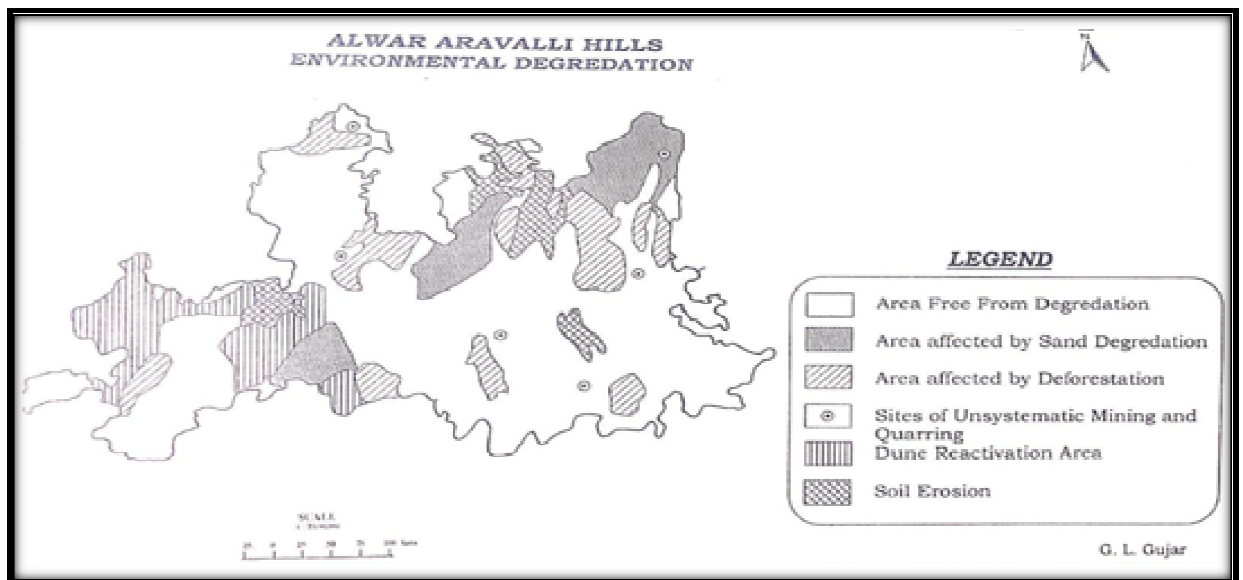
“Constant use of the production land, which destroys its power, the soil turns into a desert.

### **Soil erosion**

This is a main problem due to which the speed of water and wind is mostly 140 km per hour in the desert region due to which it evaporates and its layer of land flies from one place to another making sand dunes due to which good The land is buried under the sand, which is the main reason for desert.

### **Water level: -**

Due to lack of continuous rainfall, increase in animals, increased population, hardening of the upper surface due to mining, increase in tribal numbers, increase in road network, irrigation has led to more exploitation of water source due to ecology. The misuse of water sources has also started, the result was the water level has gone down.



### Shifting of Sand Dunes



**(Regeneration activities in stable dunes near Ronali)**

### Air deposit

Sand deposited by parties in the Alwar Aravali hill region (sq km)

Source: - Prof. Dabaria has identified 12 rates by 1986 out of which four  
passes fall in the Aravalli hill region.

Name of rates	Length in kilometers	Access to sand layer and sand dunes in the affected area	Centralization of major sand layer and rock dunes Alwar Aravali Near range
Ghatwa Roopgarh	11.00	520.00	Ghatwa, Datramgarh Khachariwas Renwal Bagwas, Bahal
ajorrevasa Ranoli	7. 50	112.00	Bajor Rewasa Ranoli Pulsana Srimadhopur Rangas Khejroli
Guda Kantli Pass	5 .00	100 .00	Kaanatalee ka upper drainage area
Singha Degrota	22 .00	330 .00	Muradpur Pacheri Rambas Roha Vas Jaitpur of Madhavgarh and surrounding area

#### Minerals and Mining (Mines)



(Black marble activities and pile of waste material in Bhaislana )



Mining operations near Alwar (Kati Valley)

#### Forest Destruction



Cutting branches from trees for goats, Village Khalaki Dhani



Women carrying firewood for an oven from the area of Sariska (near Nangal Heady)

## Pollution:-

Air pollution



Smoke coming out of brick kiln (Near Ajitgarh)

## Environmental Impact Assessment

Parameter	Importance of specified parameters (units)	Environmental impact unit (E. I. U.)			Changes in the environmental impact unit by baseline value		Net change in Environmental Impact Unit (due to E.M.P.)
		A	B	C	B-A	C-A	
Water	100	75	65	72	-10	-3	7
Air	50	40	32	37	-8	-3	5
Land	100	75	60	73	-15	-2	13
Sound	50	40	33	38	-7	-2	5
Grand Total	300	230	190	200	-40	-10	30

Source- Lodi Company (Sikar), Village Neemali



## Dust Pollution



Dust blew from the crusher in chitoli Dungri



"Dust pollution flying from the thresher machine in the barn. Village Kankrana"

## Climate Change

Year	Monsoon arrival date	Table Number two Monsoon Return Date	Number of periods
2001	01.07.2001	01.10.2001	93
2002	28.06.200	18.09.2002	83
2003	11.07.2003	19.09.2003	71
2004	03.07.2004	14.09.2004	74
2005	15.07.2005	17.09.2005	64
2006	03.07.2006	13.09.2006	84
2007	01.07.2007	22.09.2007	83
2008	10.07.2008	13.09.2008	64
2009	23.06.2009	18.08.2009	57
2010	14.07.2010	06.09.2010	55
2011	30.06.2011	12.09.2011	72
2012	13.07.2012	15.09.2012	64
2013	15.07.2013	07.09.2013	55

**Source :-** Thirteen monsoon in Rajasthan 2001 to 2013. A Schematic study Rainfall Reports. Irrigation Department, Jaipur 2013, Hydrollogy Deptt.

**Conclusion:-**

It is concluded from the study that the socio-economic development and environment in the study area is the sum of the physical and cultural conditions there. Diversity is found in the physical conditions in the subdivisions of the study area. In the same way there is the level of development affected. Due to the combination of good physical conditions in the eastern plain region and the western plain region, the level of development is found to be high.

The following conclusions are drawn in the present paper

The Directorate of Mines and Geology in the research area is actively engaged in the exploitation of minerals in this study area. Among the minerals produced by the mines in



this area, are Cheja stone, marble, limestone,, patti katla, chart, quartz, soapstone, dolomite feldspar, china clay, silica sand, granite, iron ore, copper ore, barite, and calcite. In terms of land use, forests cover 8.95% of the area in the study area. The maximum area of forest land is in the Alwar hill region of the study area, which is a hilly region. As a result of the planting of trees and expansion of forest areas, there has been a partial increase of 1 percent in the study area..

In the state, 9.61 percent of the area is uncultivated land for agriculture, which are used for unfertilized land, roads, ponds, settlements etc. Due to the land reform program and forest development in barren land, there has been a reduction in unfit land in the study area..

#### Suggestion -

Afforestation for environmental protection with the cooperation of the Government of Japan and various types of NGOs. Anicuts and dams on rivers have been made by Tarun Bharat Sangh for water conservation. This area can be used by planting trees and housing at mining curse places. The 4 passes identified by Pro. S. S. dabriya in Aravalli hills come in the study area.

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