

RAINFALL IN LAXMANGARH TEHSIL

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Abstract

The monsoon current from Bay of Bengal reach, the eastern part of Rajasthan by the end of June are even some time in the second half of July. The amount of rain fall over Laxmangarh tehsil thus naturally becomes small.

This amount of rainfall goes on decreasing from East to West. Rainfall occurs in the first week of July. August records the maximum rain-fall. Some of the week of rainy season may also experience either floods or severe droughts.

The rainfall is uncertain and its fall highly erratic during rest of the year. The rainfall data further reveals that there has been appreciable upward or downward trend in the amount of rainfall during the recent years there has been a finite tendency for the rainfall increase.

Monsoons rains constitute about 86 percent of the annual rainfall. The variation in the annual rainfall from year to year is very high.

Normally and Extremes of Rainfall year(2001)

Month	Normal Rainfall	Average Number of Rainy Days
Jan	10.3	1.2
Feb	13.2	2.2
Mar	4.4	0.9
April	8.3	0.7
May	8.7	3.4
June	56.2	4.0
July	80.5	9.0
Aug	564.1	0.5
Sep	4.1	0.3
Oct	2.3	0.8
Nov	2.3	0.2
Dec	6.5	4.3
Annual total rainfall		

In the period of last 89 years starting from 1901 to 1989 the highest annual rainfall was recorded in 1988. The lowest (29.1 below normal) annual rainfall was recorded in 1956. The average annual rainfall in tehsil is 247.9 mm in year 1990.

SOIL

Soil is the most valuable asset of any region as on it depends the prosperity of the people and productivity of the land. Soil is the top covering of the earth formed from the erosion of rocks and vegetation, a mixture of many substances. It is the soil that plants grow for it has the necessary compounding of mineral and biological matter which together imparts fertility to the land.

Soil is basically organized from the rock materials which are supported by the deposit due to transportation by rivers. The weathering factors are climate, vegetation, relief, time and biological organism. Dominance of one or the other weathering factors give rise to soil variation in a particular area. Broadly speaking the soil of Laxmangarh tehsil is from a part of alluvial plain.

The soil of this association are very deep, dominantly coarse textured, light yellowish brown to dark yellowish brown, well drained to excessively drained, non-saline lying on nearly to moderately sloping lands. These soils are very susceptible to wind erosion

Excessive drainage, low fertility and low water holding capacity along with sever wind erosion are the main problems of these soils. Bajra and Kharif pulses are the important crops on these soils at places.

Rabis crops are also grown wherever underground water for irrigation is made available.

TYPICAL PROFILE

The profile was examined is an open dug pit the west of village tunwa

A. Physical Characteristics:-

Depth(cm)	Percolation rate(cm/hr)	Caco3	Sand	Silt	Clay	Textural
0-60	6.28	0.3	84.27	7.70	8.80	Loam sand
60-105	8.20	0.0	85.34	8.00	7.45	Loam sand
105-150	8.29	2.5	78.02	12.00	10.05	Loam sand

UNDERGROUND WATER QUALITY

Out of the total irrigated areas of 14470 hectares, 12766 hectares i.e, 94 percent of area is being irrigated by well. Thus it is evident to undergrounds wells from the main potential source of irrigation in the sil. It is essential to know the quality of well waters in order to assess their suitability for irrigation purposes.

The water table level is also important from the stand point of water logging and consequent salinity alkalinity problem that may arise as a result of rise in water table.

The water table is general varies from 10 to 20 meters and fluctuates between 1 to 3 meters from monsoon to summer thus the water table is the district if below the critical limit of 3 meters. The recuperative capacity of well in general is poor as the precipitation is the only source of recharging.

The quality of well water from Sikar to Jhunjhunu area is general is good and suitable for irrigation. The result indicates that Laxmangarh tehsil's water are medium to highly saline alkaline sodium is predominant. It range from 0.67 to 102.60 meq/litre followed by magnesium varying is concentration from 0.4 to 30.4 meq/litre, which is higher than calcium in all waters.

The electrical conductivity varies from to 12 mm hos/cm. bicarbonates are usually preset in most of the waters. Soleplates and chlorides are the dominant anione and prefect in 60 to 70 percent of sample examined.

The boron concentration ranges from.

GEOLOGY

Laxmangarhthesil has established stratigraphic sequence and vault planes within the board structural framework. Such geological formation found in Laxmangarh tehsil are boarding divided into three groups.

1. Kaswale group of the sikar group.
2. Asammaticraoka of junjunu group
3. Formation of water depression with alluvium.

1. Kaswale group-quantize and mica schist of Ajabgrahs group are both prominent nad persistent. These units are exposed between in the north up to harwara in the south.

M.S.h. there is much variations in the soils within short distance because of caolin depositions. These recent caeolion deposited on top of older soil materials are very common.

Salasar series dominate this association in between chomosils, are found stalised. Sand dunes of varying heights which cultured during

Charif only the soil of this association are very deep, dominantly cause textured, lightly yellowish,

Brown to dark yellowish brown well drained to excessively drained, non, calcareous and non-saline, non sodic lying on to nearly level to moderately slopping lands. These soils are very susceptible to wind erosion.

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