

STUDIES OF PHYSIOGRAPHY, CLIMATE AND NATURAL VEGETATION OF NORTH KOSI PLAINS.

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Abstract

The present paper deals with Physiography ,climate and natural vegetation of north kosi plains region. In political form this physical sub region is Sapaul , Araria and Kishanganj district. This area located between 25°24' to 26° 34'N latitude and 86° 22'E to 88° 32'E longitude extending over an area of 77139 square with a total population 51875534 according to 2001 census. There are three survey stations in north kosi plains –(1) Sapaul (2) Araria and (3) Kishanganj. An Physiography ,climate and natural vegetation survey for using different respects by people of this above area. The information of survey of Physiography ,climate and natural vegetation of north kosi plains region used as forest, agriculture, horticulture and floriculture for social and economic development by people of north kosi plain basin.

Kew Words: Physiography ,climate , natural vegetation , North kosi plains.

Introduction

North kosi plains is a part of kosi region .in political form this physical sub region is Kishanganj district. This area located between 25°24' to 26° 34'N latitude and 86° 22'E to 88° 32'E longitude extending over an area of 77139 square with a total population 51875534 according to 2001 census . The Kosi, formed by seven important Himalayan streams (or SAPTKOSI) in the eastern Nepal, receives no tributary in the plains because of its raised bed; it needs the Ganga at present near a little below Kargola. It is called the “sorrow of Bihar” and the wildest and the most devastating of the Indian rivers and flow through several capricious channels.

DRAINAGE “Drainage lines hold particular significance in the region - not only do they provide redeeming topographic breaks in the general flatness of the plain and provide sub-regional or even local uniqueness and individuality in the different parcels of land, but they also govern to a great extent, the human occupancy of land, particularly the agricultural land and settlement”. The drainage pattern is dendritic in general, and the general characteristics feature available throughout the plains is that the rivers meet at acute angles, and several tributaries form parallel or sub-parallel lines so the main streams.

Forest:- There is no forest available in the district but there is a plan for planting various types of trees, viz., Sisam, Eucalyptes, Gulmohar, Sakhua, etc., along the Kosi canal under the Forest Extension Division, Purnia. Land use, Agriculture and Irrigation Practices:- Agriculture is the main occupation of the people in kosi plains. In general, there are four agricultural seasons in one year; (i) Bhadai (ii) Aghani (iii) Rabi & (iv) Garma. During Rabi the important crops, which are grown in the district include wheat, rice, corn, mustard, jawar etc. Paddy is mainly grown during June to November. The climate allows round the year vegetable cultivation of cabbage, cauliflower, carrot, radish, chili, capsicum, beans and long beans, gourd, potato, onion, coriander, turmeric, ginger, Garlic etc. The staple cereal of this plain area is rice. Irrigation plays a vital role in the agriculture in this area.

Climate and Rainfall:- The area has warm and humid climate with high temperature and medium to high rainfall. The temperatures are lowest during December-January with an average minimum of 8^oC to 10^oC and maximum of 24^oC to 25^oC. The temperatures in the hottest months of April to June are minima 23^oC to 25^oC and maxima 35^oC to 38^oC. The normal rainfall for the district stands at 1404 mm. Most of the rainfall (80% to 90%) is received from mid-June to mid-October. The late September October rains (locally known as „Hathia“) are very crucial to agriculture in the region and their timing and distribution make all the difference between plenty and scarcity.

Soils:- The soils are of poorly drained type. The areas close to the Kosi channels possess soil types of sandy loam, loamy sand and sand character, whereas, the areas away from the river channels consist of silty sand to sandy silt in nature. The soils in general are fine textured away from the river course and rivulets and coarse textured along their courses.

Flora and Fauna:- Paddy and wheat are grown in the alluvial and reclaimed soils the Kosi affected areas still contain Kans and Pater forest, though reclamation is in progress. Small trees such as babul, jhaua, Harjora etc., and water berries such as Makhana, Ramdana and Motha grass are also found, Sabai Grass, Munj and varieties of cane etc., also grow in this area. Though the Kosi has destroyed a large number of fruit bearing trees, the district still produces a large quantity of mangoes. Other common trees are Mahua, Jackfruit, Plantain, tamarind, bair, Jamun and Kath jamun, Khajur, Sal, Sesum, and Semal, Lichi, Guava, lemon watermelon, coconut and betelnut are also grown.

Objective

The present investigation has been made to understand the Physiography ,climate and natural vegetation of north kosi plains

Methodology

Study Area

In present investigation there are three survey station in north kosi plan – (1) Sapaul (2)Araria and (3) Kishanganj . An habitat survey for using different respect by people of this above area.

Result and discussion

The information of survey of Physiography ,climate and natural vegetation of north kosi plains and arrival of floods man habitat change the living condition .they migrate from one place to another place. They struggle for food and water. The domestic animal were die. The people here also face many diseases . transportation were interrupted of this area. The house of these people were drowns due to floods. The people have to endure the floods. After rising people came when the water dries and start living again in this area. This information was received by visiting this area. People of this plan area dependent on agriculture and also do horticulture and floriculture.

The Kosi, formed by seven important Himalayan streams (or SAPTKOSI) in the eastern Nepal, receives no tributary in the plains because of its raised bed; it needs the Ganga at present near a little below Kargola. It is called the “sorrow of Bihar” and the wildest and the most devastative of the Indian rivers and flow through several capricious channels.

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Vegetation

The vegetation may be classified into:

I . Sub Tropical Pine Forest, II. Temperate Moist Broad Leaved Forests

(I) Sub Tropical Pine Forest

Pine (*Chir*) forests ordinarily extend on the southern slope from 1100 to 2300 meters and on the northern slope from 1100 to 2200 meters elevation and are well distributed in the watershed. Chir is found on almost all geological formations which occur in this zone on the hot exposed with shallow soil.

(II) Temperate Moist Broad Leaved Forests

These forests are scattered in the pockets of the watershed where the elevation is above 1820 meters. The temperate moist broad leaved forests of the watershed can further be divided into the following

(a) Temperate Moist Deciduous Forests

The temperate moist deciduous forests found in the deeper moist soils areas in the north eastern part of the watershed. The undergrowth is usually thin in the undistributed forest owing to the heavy shade of the trees. *Pangar (Aesculus indica)*, *Maples (Wallichiana ap.)*, *Saru (Tetula alnoides)*, *Akhor (Jhglans regia)* and *Angu (Eraxinus micrantha)* are the main species forming part of this forest type.

(b) Banj (Quercus incane) Forests

Banj (Oak) is the predominating species existing from the highest point in the basin to the Chir zone. The dividing line between Banj and Chir is vague, but towards its lower limits Oak follows ravines and watercourses particularly in the northern aspect down to 1800 meters.

Conclusion

Physiography ,climate and natural vegetation survey for using different respect by people of this above area. The information of survey of f Physiography ,climate and natural vegetation of north kosi plains region used as forest, agriculture, horticulture and floriculture for social and economic development by people of north kosi plain basin.Agriculture and floriculture plying massive role in social and economic development of the north kosi plan area .

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