



A CASE STUDY ON SETTLEMENT OF NORTH DISTRICT OF SIKKIM IN EASTERN HIMALAYA'S

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ABSTRACT

The paper is based on field survey & investigation which was carried out in different blocks of North districts of Sikkim. As settlement not only shows the multi-relational dimension but it also exhibits the variation, boundaries as a whole, it also generates a typical landscape. The focus is given more on Rural Settlement of particular area, particularly focuses on demographic growth and land use changes of area using integration of remote sensing to identify various types of changing land use pattern. This includes house type or style, food habits, dressing, belief etc, the Lepcha and Bhutia have some kind of similarities in the construction of houses unlike Nepalese who developed a different style of constructing houses all together. With an objective of Identification of different settlement pattern/ form and their classification on the basis of ecological and non-ecological factor

KEYWORDS: GIS, SETTLEMENT, Morphology, House Type, Nepali, Bhutia, Lepcha

INTRODUCTION

Sikkim lies at 27.33°N latitude and 88.62°E longitude, in the eastern Himalayan range at an elevation of 1,650 m (5,410 ft). It is one of the fastest growing town of Sikkim. It has a major portion of its area under the snowy mountain rugged topography and ranges of greater, middle Himalayas which hinder the growth and development of the settlement. Sikkim is of immense importance to India due to its typical location it shares international borders with Tibet (China), Bhutan and Nepal, therefore majority of its area is under restricted area for the defense purpose. Due to unavailability of suitable plots for settlement, Agricultural land and Forest land are being utilized. Settlement mainly occurs those places where lack of job opportunities, extreme climate, rugged terrain, underdeveloped agriculture, etc. Sikkim is a small hilly state in the north east, most of part of this state is covered with mountains. Specially north Sikkim faced extreme climatic condition over the year. This problem is associated with extreme terrain, rugged, inaccessibility and interrupted growth in settlement. Oberoi and Singh (1980) discussed the main cause of settlement, employment, unemployment. Nath and Chaudhary (1995) said that main settlement is rural settlement. East Sikkim has the highest rate of settlement because it has great opportunity in job and various sectors.

METHODOLOGY AND DATA BASE

First of all we collect those methods and techniques, which are concerned with the collection of data, both primary and secondary data. For the study of past land-use, processing and re-evaluation of secondary data available can be done from numerous departments such as Urban Development & Housing Department, Census of India, Survey of India, Rural Management Development Department, Gangtok Municipal Corporation, etc. Primary data can be collected through field survey or field research by means of Questionnaires, Opinionnaire, Personal Interviews, Focused Interviews, Group Interviews, Telephone survey, etc.

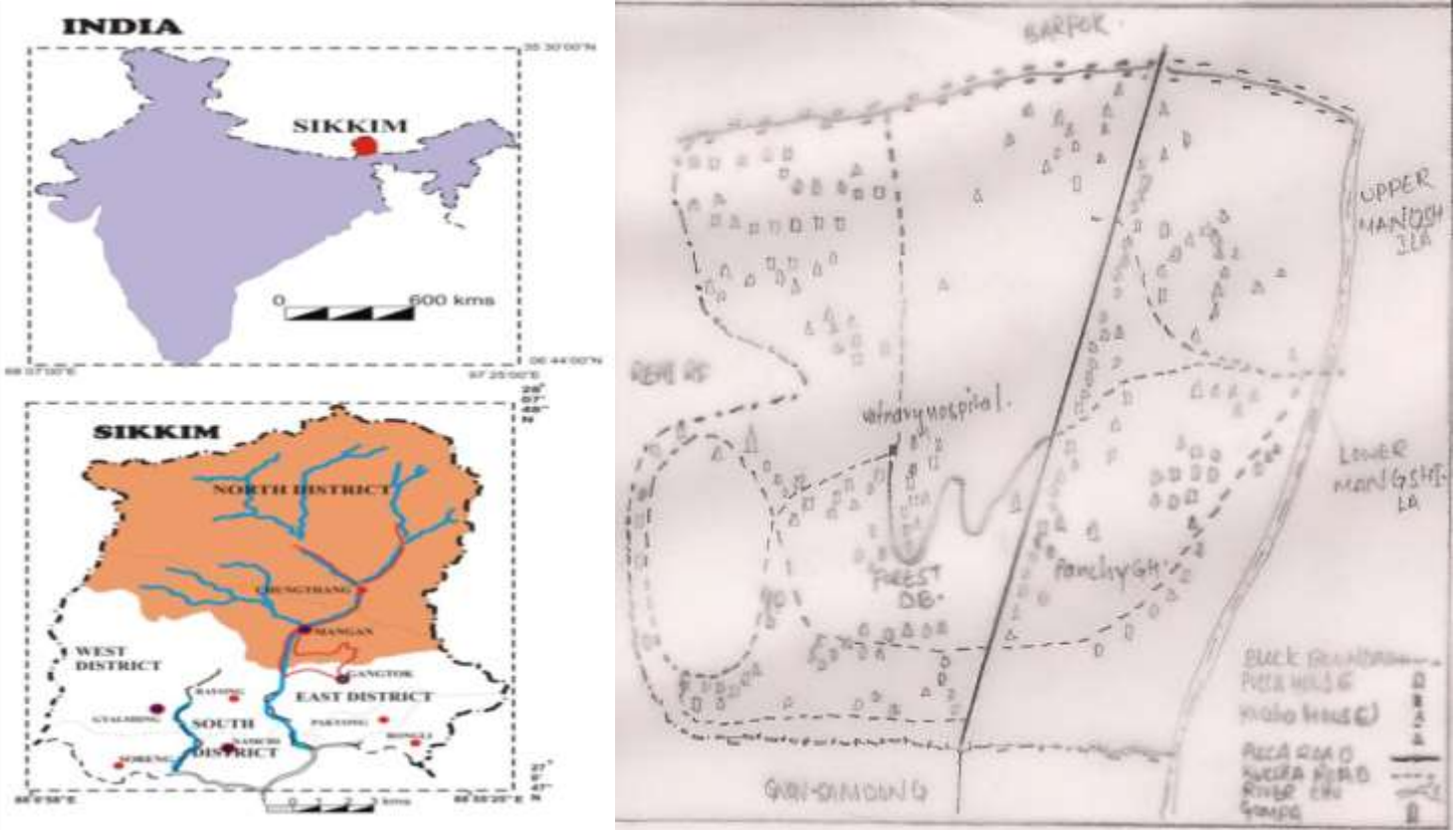
2nd method includes those static techniques and calculations, which are used for establishing relationship between the available data and the unknowns.

METHOD-3

3rd method includes those methods, which are used to evaluate the accuracy of result obtained.

SURVEY SAMPLE STUDY AREA

Sikkim: North District, Hee-Gyathang Busties



The selected sample area is located in lower “Dzong” named “HeeGyathang”. In north district (Mangan, the area is border by the ringchu on the north and on the east by tista river. The altitude ranges from 1500 to 2500 meters it is separated from Gnon-Samdong by the Manmuchu. Gnon-Samdong has block status as far as land use and survey departments are concerned uncer separate Mandal but comes under one panchayat know as HeeGyathang Panchayat, here the member of panchayat is selected from both the blocks.

it is found that Hee Gyathang block has revenue busties, forest, cultivated lands they also have uncultivated lands due to topographical difficulties much of the land here are left fallow which are basically waste land and are called “Banjo” in local language, the total area of Hee Gyathang is 1922.33 hectares which is inhabitant by 1162 populations (census 2001) which has increased to 1576 persons (primary data). Population here are consist of schedule tribe 90.99 person schedule caste 1.08 person other back ward classes 2.73 persons, Most backward classes 4.00 person and others consisting of 1.21 person. The immigrant are usually laborers who comes here for cardamom harvesting, here the cultivation of cardamom is one of the most important agricultural activity.

MORPHOLOGY

Morphology of urban and rural area as well as necessity of individual and society. Due to its geographical location Sikkim has a scarcity of flat land which hinter the proper growth, development and extension of settlement.

The first phase in the constructing of the housing was constructed at landing this area is in periphery of Gangtok, recently the department has constructed the housing for the slums who are residing in the market area specially near M G Marg star hall. The department of UD & HD has provided social housing in several Urban areas. The following are the numbers and location of such housing in the state Irrigation system has developed here however it has benefitted only a fringe of population of Sudur busty, Mathyong, Tartong. The transport and communication is very poorly maintained jeepable road runs parallel to the water channel. The electricity is in a slow progress. Unlike other tribes were adopting modern culture technology and education the lepcha population of this region sticked to their tradition. But now a days they are coping with the modern way of life though slowly competing with other diatricts of the state, few house



hold gadgets are used. They build their houses with traditional way of construction in which the thatched were seen but now this thatched roof mud wall are replaced by tin and tiles etc, in Hee Gyathang out of 277 houses 28 are pukka 165 are semi pukka and 84 are kachha. The literacy rate was very low in this block but with the government effort more and more educational institutions are being opened in Hee Gyathang block there are 3 primary schools and one middle school is situated in Mathyong and for the high school facilities students has to go to Mangan Sr, Secondary School. In 1982 the total strength of the student in the middle school was 184 and there were 16 teachers, children would learn only English and forget their own language and culture but slowly that fear was gone and with the new enthusiasm they adopted education system. Here the Lepcha government encourage education in this region by introducing Lepcha as a state language, in the olden days the people here were not in favour of sending their ward to school due to fear that their language is taught first than Nepali, Hindi and than English, due to the trend of the lepcha language as a state language there are more language teachers coming from this region as a graduate teacher in the department.

RESULTS & DISCUSSION

The house type in the state has been modified as per the availability of construction material. Previously connectivity of Sikkim with other surrounding region was considerably poor and ill maintained which resulted into the high cost of construction, hence the most of the houses were constructed with cheap and locally available material, after the merge with Indian Union the connectivity, infrastructural and technology developed in the state which resulted in development of the construction methods and advancement of the technology which changes the shape, size and the style of the houses. slope specially along the connectivity lines such as NH31A district highway, sub district roads Hee Gyathang block out of 1576 population 279 are under 0 to 6 years who are not sent to school 251 of population are illiterate 1046 are literate making the literacy rate of 80.65 % (primary source data)

Location	No of units
Rongali	8
Chandy	4
Sishney	6
Tashiding	4
Lingding	24 in first phase and 40 in second phase

CONCLUSION

After a vivid analysis of evolution of settlement its form and pattern, it can be concluded that the settlement of Sikkim has drastically changed, the number of house hold are continuously in increasing as a consequence of population explosion, Morphology of urban and rural area as well as necessity of individual and society. Due to its geographical location Sikkim has a scarcity of flat land which hinders the proper growth, development and extension of settlement. Majority of settlement has developed along the hill.

In the urban area the demand of the house is more from the middle and the lower income group as there is less number of Government land, the pressure on the Government to provide suitable sites and houses to the people. In the Urban area there is a high demand of rented house, there are many Urban problems faced by almost all the urban centers in the state the more is in the capital. The government as well as the NGO's like Sikkim Development Foundation, VHAS and ECOSS are doing the need full.

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