ANALISIS OF LAND-USE PATTERN IN SINDHUDURG DISTRICT : A GEOGRAPHICAL ANALYSIS

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Abstract

Land is the basic and limited natural resource. Land plays the key role in the determination of man's economic activities as well as social and cultural progress. All agricultural, animal and forestry production depend on the quality and productivity of the land. The terrestrial ecosystem which comprise of food, energy needs of livelihood. Land use is a special context is essential to understand a regional zonation of the area of optimum land use degraded areas etc. Land use of region is a combiner easel of the natural setup and human dynamism within social economic setup and technological development. In this research paper an attempt has been made to analyse the general land use pattern in Sindhudurg district. Study of land is pattern important for the development of agriculture sector, industrial sector as well as keep balance in environmental condition. This study plays vital role in the point of view the planning and development of the region.

Keywords: Land use pattern, Human Dynamism, National Planning, Underdeveloped.

Introduction

Land use is the surface utilization format of all developed and vacant land on a specific point, at a given time and region. Day to day the importance of the land use land cover study is increasing with continuous increase in population as well as urbanization also. After the industrial revolution, the world population is increasing at a progressively faster rate affecting the nature of earth surface. Human use of land resources gives rise to land use which varies with the many purposes it serves ***(Briassoulis, 2000)***. Land cover is the biophysical state or the natural state of the earth's surface particularly immediate surface ***(Terner et al., 1995)***. In this contest most, previous natural resources have used better life resulted, most changes in land use land cover pattern on the earth surface. There is observed, agricultural area being converted in to urban uses, forested land convert into agricultural practice in all over the world. In this situation most of the positive and negative changes occurred on the earth surface. That does why there is necessary to planning and regulation for minimize negative impact on natural environment. Land resource is very important for human being because direct and indirect many types of processes as like economical processes depend upon it. Land resources are natural wealth and property of a country. So, there are proper utilization of natural resources such as land resources is most important because of near about 70% population depend upon directly and indirectly on land for livelihood.

In Sindhudurg district utilisation of land increasing with increase in population, increasing in agriculture, increasing in industrialisation and mining also. It shows varies is from tahsil to tehsil. The utilisation of land is need to have a general framework of strategic and effective management and analysis of their characteristics and also used for developmental planning in the study area.

Study Area

Sindhudurg district is the southern part of coastal area that is known as the Konkan. Sindhudurg district situated between 15^0 17' north latitude to 16^0 40' North latitude and 73^0 19' longitude to 74^0 13' East longitude. It is bordered by Ratnagiri district on the north, Arabian sea on the west, Goa state on the south, Belgaum district of Karnataka state and Kolhapur district on the east also. The total area of the district is 5087 sq. km. Physiographically Sindhudurg district has divided into three section that is Khalati, Valati and Sahyadri hills region respectively. The coastal strip is called Khalati and its adjacent area called Valati. Sindhudurg district has 8,48,868 (Male-4,16,695, Female-4,32,173) population as per 2011 census. Mean monthly minimum temperature near about 16^0 C. and maximum temperature near about 33^0 C. Annual rainfall range is 2000 to 3000 mm.

Objectives

1. To study the general land use pattern in the study area
2. To study the impact of physical setting and social economic factors on the land use pattern in the study region
3. To study the utilisation of land use in the study area.

Data Base

The present study based on secondary data which is obtained from social economic abstract of Sindhudurg district 2012 and gazetteer of the Sindhudurg district. For the calculation used the simple statistical techniques and calculated the proportion of every and each type are land use category.

Explanation

General land use pattern in Sindhudurg district is shown in chart with tehsil wise utilisation of land.

I) Area under Forest

The total geographical area of the Sindhudurg district is 503950 sq. ha. Out of this area 38643 sq. ha. is under the forest during the year 2012. It is the lowest proportion in the study region. The area under the forest presented with a varies from tehsil to tehsil the highest area under forest is found in Kudal tehsil (25.4%), where the lowest forest area is found in Malvan tahsil (0.7%) due to the physical condition and existence of the Arabian sea. Below 10% area of forest is found in Devgad (7.7%), Vaibhavwadi (7.7%) and Dodamarg (7.7%) tahsil general we have to experience the area under forest is a very less in Sindhudurg district.

Tahsil-wise General land use pattern in Sindhudurg District (2012)

(Area under hectares)

Sr.no	Tahsil	Total Geographical area	Area under Forest	Area not available for cultivation	Uncultivable Land	Follow Land	Net sown Area
1	Devgarh	78127	3004	35077	211	20810	16193
2	Vaibhavwadi	41612	2744	8838	730	14635	10847
3	Kankavli	77339	8997	12837	10203	541	28351
4	Malvan	61829	298	22347	8896	5388	21329
5	Vengurla + Sawantwadi	113573	11358	25236	933	6540	40457
6	Kudal	81897	9843	20562	13786	4611	31145
7	Dodamarg	49573	2399	18371	408	5465	14315
	Total	503950	38643	143268	35167	57990	162637

Source – *Socio-Economic Abstract of Sindhudurg District (2012)*

II) Area Not Available for Cultivation

Total 143268 sq. ha. area is under not available for cultivation in Sindhudurg district. The highest area under this category is presented in Devgadh district is 35077(24.4%) the lowest area of not available for cultivation is found in Vaibhavwadi tehsil (6.1%) and Kankavli (8.9%). Above 10% area under the not available for cultivation are found in Malvan (15.5%) tahsil Sawantwadi (17.6%), Kudal (14.3%) and Dodamarg (12.8%).

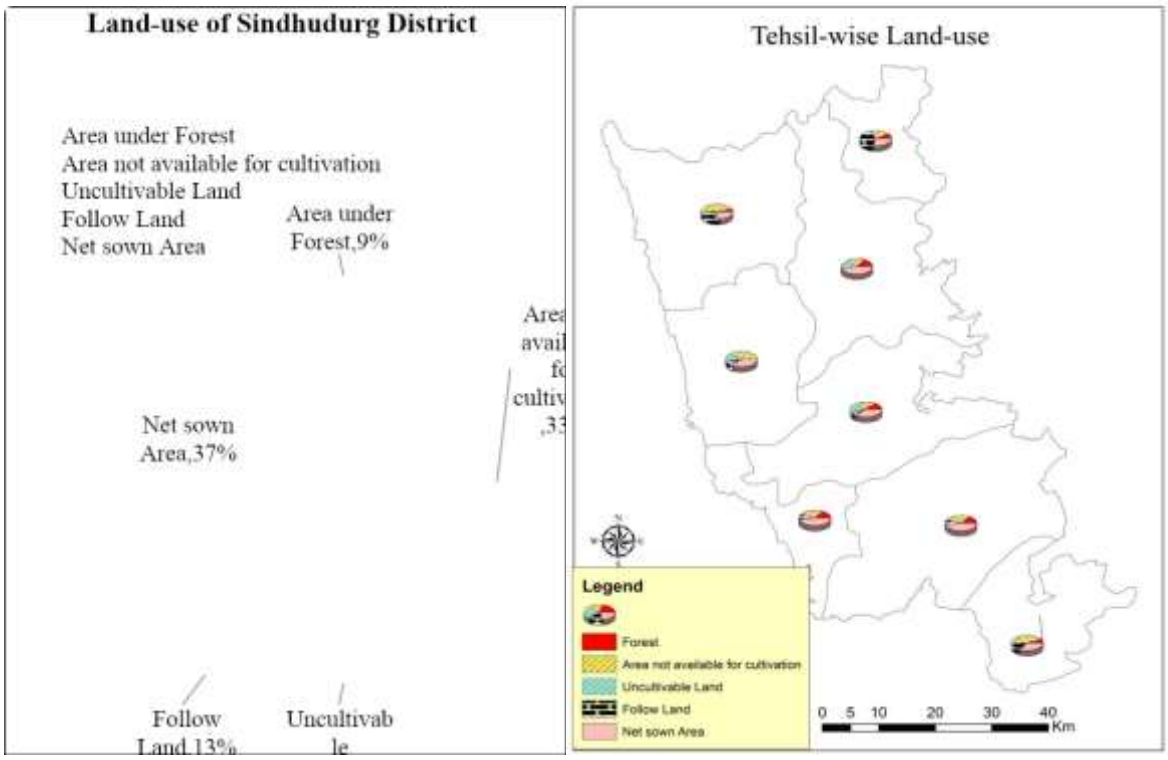
Tahsil-wise General land use pattern in Sindhudurg District (2012) (Area in %)

Sr. no.	Tahsil	Total Geographical area in %	Area under Forest in %	Area not available for cultivation in %	Uncultivable Land in %	Follow Land in %	Net sown Area in %
1	Devgarh	15.5	7.7	24.4	0.5	35.8	9.9
2	Vaibhavwadi	8.2	7.1	6.1	2.0	25.2	6.6
3	Kankavli	15.3	23.2	8.9	29.0	0.9	17.4
4	Malvan	12.2	0.7	15.5	25.2	9.2	13.1
5	Vengurla + Sawantwadi	22.5	29.3	17.6	2.6	11.2	24.8
6	Kudal	16.5	25.4	14.3	39.2	7.9	19.1
7	Dodamarg	9.8	6.2	12.8	1.1	9.4	8.8

Source – *Compiled by Authors*

II) Other Uncultivable Land (Excluding Fallow Land)

In Sidhudurg district, reveals that, 35167 sq. ha. (6.9%) area under the uncultivated land. The highest area under the category is found in Kudal tahsil (39.2%) whereas the lowest area found in Devgad tahsil (0.5%). Below 5% area of this category is found in Dodamarg (1.1%), Vaibhavwadi (2%), Sawantwadi (2.6%).



Source – *Socio-Economic Abstract of Sindhudurg District (2012)*

IV) Fallow Land

There is 57990 sq. ha. (11.5%) land is under fallow land. The proportion of fallow land is varies from tehsil to tehsil. The area under this category, below 10% area is found in Kudal (7.9%), Malvan (9.2%), Dodamarg (9.4%). The highest area under this category is found in Devgad tahsil (35.8%) whereas the lowest area under this category are found in Kankavli (0.9%). Above 10% area under the fallowing land is noticed in Vaibhavwadi (25.2%) Sawantwadi (11.2%).

V) Net Sown Area

There is noticed that, 62637 sq. ha. (33.2%) area is under the net sown area. The highest area under the net sown area found in Vengurla and Sawantwadi (24.8%). The lowest area under this category noticed in Vaibhavwadi tahsil (6.6%). It is observed that, below 10% area under this category is found in Dodamarg (8.8%), Devgad tahsil (9.9%). Above 10% area under net sown area presented in Malwani (13.1%), Kudal (19.1%), Kankavli (17.4%).

Conclusion

It is observed that, general land use pattern is varying from tehsil to tehsil due to the physiographic structure, climatic condition and economic activities. There is noticed, the highest proportion of the area under the net sown area 33.1% whereas lowest area found in under the uncultivated land 6.9%. The highest area under the forest is presented in Kudal tehsil (25.4%). There is lowest area under the forest found in Malvan tehsil (0.7%). It is also need and important for a better management of natural resources and development in study region. There are most potentiality for the precious utilisation of land and natural resources.

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