

GEOGRAPHICAL ANALYSIS OF GENERAL AND AGRICULTURAL LAND USE PATTERN OF KANKAVLI TAHSIL, DIST. SINDHUDURG

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ABSTRACT

The concept of the general land use is related to the use of to which land is put in a certain reason at a given period of time. The term land use is virtually self-explanatory. Land use study carries a great importance because it can provide a picture about intensively used, under used and unused land of the area. The actual and specific use to which the land surface is put in terms of inherent primary land use, namely, Land under forest, pasture, cultivation etc.

The general land use of any region is an impact of various factors. Land use is a result of combinations of both natural genesis and human influences which have been brought to bear unit in the past and of those which are still active in the present. Spatial variations in land use are related to physical environment, socio-economics factors are also responsible for shaping the land use in the region. The changing man-environment relationship also plays a key role in defining the land use of particular region.

The basic objective of the land use pattern is to use the available land which is limited. The pattern of land use is complex and dynamic. The land use pattern is different in different regions. The present pattern of land use is result of long continued operation of the whole range of environmental factors but modified by socio-economic and historical elements.

Kankavli Tahsil is in a Sindhudurg district of Maharashtra state. Vaibhavwadi and Rajapur Tahsils make its northern boundary, Kolhapur district make eastern boundary, Devgad and Malvan. Tahsil make western boundary and Kudal Tahsil make a southern boundary of the Tahsil. Kankavli Tahsil lies in between 16 15' 16" to 16 16' 22" North latitudes and 73 42' 19" to 73 43' 23" East longitude with an altitude of 51 mts above mls mean sea level.

*The general objectives of the study region is as follows -
To analyse the spatiotemporal land use pattern in the study regions.*

To study the geographical setting of the region. To examine spatiotemporal changes in agricultural land use in the study region.

Environment influences on the Land use of the study region. Spatio-temporal change in the environment effects on the development of the agriculture. Land use analysis plays a vital role to improve the agricultural Production and to minimize the problems.

The present study is based on the primary and secondary data. Primary data will be collected through the intensive field work by excluding questionnaires, conducting interview of farmers and personal observations. Secondary data will be collective from published Reports, Abstracts, Journals, documents, Such as census hand book socio-economic reviews District statistical abstracts etc.

The General land use pattern has been classified as net sown area, Land not available for cultivation, cultivable waste land, follow land and forest cover.

The data obtained for the period of 1980-81 to 2010-11. This above classification of general land use is used for present day for this study region.

INTRODUCTION

The concept of the general land use is related to the use of to which land is put in a certain reason at a given period of time. The term land use is virtually self-explanatory. Land use study carries a great importance because it can provide a picture about Intensively used, under used and

unused land of the area. The actual and specific use to which the land surface is put in terms of inherent primary land use, namely, Land under forest, pasture, cultivation etc.

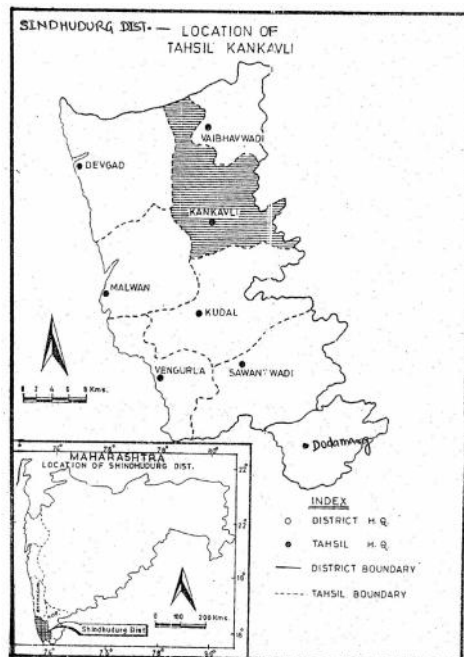
The general land use of any region is an impact of various factors. Land use is a result of combinations of both natural genesis and human influences which have been brought to bear unit in the past and of those which are still active in the present. Spatial variations in land use are related to physical environment, socio-economics factors are also responsible for shaping the land use in the region. The changing man-environment relationship also plays a key role in defining the land use of particular region.

The basic objective of the land use pattern is to use the available land which is limited. The pattern of land use is complex and dynamic. The land use pattern is different in different regions. The present pattern of land use is result of long continued operation of the whole range of environmental factors but modified by socio-economic and historical elements.

STUDY REGION

Kankavli Tahsil is in a Sindhudurg district of Maharashtra state. Vaibhavwadi and Rajapur Tahsils make its northern boundary, Kolhapur district make eastern boundary, Devgad and Malvan Tahsil make western boundary and Kudal Tahsil make a southern boundary of the Tahsil. Kankavli Tahsil lies in between 16 15' 16" to 16 16' 22" North latitudes and 73 42' 19" to 73 43' 23" East longitude with an altitude of 51 mts above mls mean sea level.

In Kankavli Tahsil the rainfall is high. Annual rainfall range is from 3000 to 3500 mm. the climate of Tahsil is hot and moist. The area of Tahsil is 77339 hectares. There are 104 villages and only one town. The total population according to 2001 census is 123542 and the density of population is 177 persons per square kms. Out of total geographical area 11.63% of the land is under the forest cover and 13.19% of land is under uncultivable waste land.



OBJECTIVES

The general objectives of the study region is as follows-

- (i) To analyse the spatiotemporal land use pattern in the study regions.
- (ii) To study the geographical setting of the region.
- (iii) To examine spatiotemporal changes in agricultural land use in the study region.

HYPOTHESIS

- (i) Environment influences on the Land use of the study region.
- (ii) Spatiotemporal change in the environment affects on the development of the agriculture.
- (iii) Land use analysis plays a vital role to improve the agricultural Production and to minimize the problems.

RESEARCH METHODOLOGY :-

The present study is based on the primary and secondary data. Primary data will be collected through the intensive field work by excluding questionnaires, conducting interview of farmers and personal observations.

Secondary data will be collective from published Reports, Abstracts, Journals, documents, Such as census hand book socio-economic reviews District statistical abstracts etc.

GENERAL LAND USE

The General land use pattern has been classified as net sown area, Land not available for cultivation, cultivable waste land, fallow land and forest cover. The data obtained for the period of 1980-81 to 2010-11. From socio-economic review and statistical abstract and District census hand book of Sindhudurg district, converted into the percentage to the total Geographical area. To avoid the fluctuations, Thirty years data is averaged and used for analysis. The percentage is categories in different group. The volume of change of these categories for Thirty years was computed and volume

of change was shown in above mentioned figures and interpreted the text. The analysis gives the proper understanding of general land use and relevant aspects providing the base for further investigation. Government of India has now officially classified land under twelve categories finally grouped into five classes such as-

- (a) Forest Land
- (b) Net sown area
- (c) Land not available for cultivation
- (d) cultivable waste land
- (e) Follow land

The above classification is used for present day.

Table 1
Kankavli Tahsil - General Land Use-Pattern (1980-81 to 2010-11)

Sr. No	Land use Types	1980-1981		1990-1991		2000-2001		2010-2011	
		Area in Hectares	Area in %	Area in Hectares	Area in %	Area in Hectares	Area in %	Area in Hectares	Area in %
1	Net sown Area	24800	32.00	21900	28.33	28596	36.92	29025	37.52
2	Land not available for cultivation	14400	18.00	10700	13.64	12004	15.52	12837	16.59
3	Cultivable waste land	29300	37.85	35300	45.66	24352	31.38	10203	13.19
4	Follow land	1200	1.55	600	0.77	3988	5.15	541	0.69
5	Forest Area	8200	10.59	9000	11.64	9230	11.93	8997	11.63
	Total Area	77400	100%	77300	100%	77337	100%	77339	100%

Source : Sindhudurg District Handbook Sindhudurg 1981, 1991, 2001 Socio-Economic Review and Statistical Abstract 2010-11.

Table 2
Kankavli Tahsil - General Land use Pattern Change

Sr. No.	Land use Type	Change in %	Change in %	Change in %	Change in %
		1981-91	1991-2001	1981 to 2001	1981 to 2011
1	Net sown Area	-3.67	+8.64	+4.97	+5.52
2	Land not available for cultivation	-4.36	+1.88	-2.48	-1.41
3	Cultivable waste land	+7.81	-14.18	-6.47	-24.66
4	Follow land	-0.79	+4.38	+3.6	-0.86
5	Forest Area	+1.05	+0.29	+1.34	+1.04

Source : Socio-Eco. Review and Statistical abstract of Sindhudurg District 1980-81 to 2010-11.

In 1981 the net sown area was 24800 hectares accounting 32% of the total geographical area after twenty years in 2001 it was recorded as 29025 hectares which was 37.52%. In the first decade (1991), it was decreased by 3.67% and in next decade (2001) it was increased by 8.64%. In the study period from 1981 to 2011 it was increased by 5.52%. It was less than the Maharashtra State.

Land not available for cultivation has indicated the fluctuation in the study period. The Land under this category from 1981 to 2011 it was decreased by 1.41% as well as cultivable waste land from 1981 to 2011. It was decreased by 24.66%. Even fallow land also decreased 0.86%. But under the area of forest is from 1981 to 2011 it is increased 1.04%.

Table 3
Kankavli Tahsil - Agricultural Land use pattern(1980-81 to 2010-11)

Sr. No	Crops	1980-1981		1990-1991		2000-2001		2010-2011	
		Area in Hectares	Area in %	Area in Hectares	Area in %	Area in Hectares	Area in %	Area in Hectares	Area in %
1	cereals	19650	39.78	13376	62.32	13414	52.02	33	0.24
2	pulses	21506	43.54	1160	5.40	331	1.40	1407	10.46
3	Oil seeds	658	1.33	81	0.37	364	1.54	984	7.31
4	Fruits & vegetables	313	0.63	2275	10.60	7053	29.98	10467	77.83
5	spices	41	0.08	18	0.08	03	0.01	17	0.12
6	Fodder crops	7223	14.62	4552	21.22	2358	10.02	535	3.97
Total area		49391	100%	21462	100%	23523	100%	13443	100%

Source : Sindhudurg District Handbook Sindhudurg 1981, 1991, 2001 Socio-Economic Review and Statistical Abstract 2010-11.

Table 4
Kankavli Tahsil - Agricultural Land use pattern change (1980-81 to 2010-11)

Sr. No.	crops	Change in %	Change in %	Change in %	Change in %
		1981-91	1991-2001	1981 to 2001	1981 to 2011
1	Cereals	+22.54	-5.3	+17.24	-39.54
2	Pulses	-38.14	-4.0	-42.14	-33.08
3	Oil seeds	-0.96	+1.17	+0.21	+5.98
4	Fruits & vegetables	+9.97	+19.38	+28.95	+77.2
5	Spices	0.00	-0.07	-0.07	+0.04
6	Fodder crops	+6.6	-11.02	-4.6	-10.65

Source : Sindhudurg District Handbook Sindhudurg 1981, 1991, 2001 Socio-Economic Review and Statistical Abstract 2010-11.

In 1981 the cereals crop area was 19650 hectares. Accounting 39.78 % of the geographical area. After 20 years in 2001. It was recorded 13414 hectares which was 57.02% in the first decade (1991). It was increased by 62.32% and in next decade (2001). It was increased by 17.24%. In the study period from 1981-2011. It was decreased by 39.54%. it was less than the Maharashtra state.

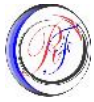
The pulses crops are decreased in 1981 by 38.14% as well as oil seeds are increased by 5.98 from 1981-2011. Fruit and vegetables are also increased 77.2%spices crops from 1981 to2011 are increased 0.04%. And fodder crops are decreased 10.65% from 1981 to 2011.

SUMMARY

The net sown area refers the actual area of Kankavli Tahsil covers 24800 hectares in 1980. In 1990 it was 21900 hectares that it shows the net sown was decreased up to 3.67% but in 2001 it was increased up to 8.64%. that is very high percentage of net sown area was observed from 1991 to 2011 as compare to other Land use types.

The land use type observed that, area under land not available for cultivation is decreased up to 1.41%. Area under cultivable waste land and follow land is increased from 1990 to 2011. up to 24.66% and 0.86% respectively. But the area under forest is increased in 1981-2011 up to 1.04%.

The cereals crops are cover 19650 hectares accounting 39.78% of geographical area. After 30 years in2011 it was recorded as 33 hectares only which was 0.24% it shows that the cereals crops area



is very decreased. The pulses crops area also decreases up to 33.08%. the oil seeds, vegetables and spices crops area increased and the area of fodder crops is decreased up to 10.65%.

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