Scholarly Research Journal for Interdisciplinary Studies,
Online ISSN 2278-8808, SJIF 2016 = 6.17, www.srjis.com
UGC Approved Sr. No.49366, NOV-DEC 2017, VOL- 4/37
https://doi.org/10.21922/srjis.v4i37.10675

CHANGING PATTERN OF LAND USE AND ITS IMPACT ON AGRICULTURE: A CASE STUDY OF MYSORE DISTRICT

Mangalagowri B[1]& H Nagaraj[2], Ph. D.

[1]*UGC Junior Research Fellow, DOS in Geography, Manasagangotri, University of Mysore Mysuru -570006 Email: mangalagowri.9945@gmail.com*

[2]*Professor and Chairman, DOS in Geography, Manasagangotri, University of Mysore Mysuru-570006. Email: nagarajh66@yahoo.com*

Abstract

Land is a scarce resource, whose supply is fixed for all practical purposes at the same time. The demand for land for various competing purposes is continuously increasing with the increase in human population and economic growth. Land use pattern at any given time is determined by several factors including size of human and livestock population, the demand pattern, the technology in use, the cultural traditions, the location and capability of land, institutional factors like ownership pattern and rights and state regulation. The land use pattern besides having economic implications has also important ecological dimensions, which if ignored can have disastrous consequence. The land is the sole resources of sustenance mankind supporting the planed, animal and human life for providing the food, and shelter. Man utilizes land for various purposes like agriculture of urban development, settlement industrial activities etc.. The growing pressure population coupled increasing varieties of demands being made on the land resource have brought extra pressure on the land resource all over the country. In this paper shows that non agriculture land increase from 8.9% to 11%, and current fallow land increase from 3.2% to 6 % of total area, and also cultivable waste land decrease from 4 % to 3% ,

***Keywords**: Ecological Dimensions, Urban Development, Economic Implications*

Introduction

Mysore district is located between latitude 11°45' to 12°40' N and longitude 75°57' to 77°15' E. and it is an administrative district located in the southern part of the state of karnataka, India. The district is bounded by Mandya district to the east and northeast, Chamrajanagara district to the southeast, Kerala state to the south, Kodagu district to the west, and Hassan district to the north. . It has an area of 6,854 km² (ranked 12th in the state).

The district lies on the undulating table land of the southern Deccan plateau, within the watershed of the kaveri river, which flows through the northwestern and eastern parts of the district. The Krishna raja sagara reservoir, which was formed by building a dam across

theKaveri, lies on the northern edge of the district. Nagarahole national park lies partly in Mysore district and partly in adjacent kodagu District.

Climate

The temperature in the district varies from 15 deg. C in winters to 35 deg. C in summers. Mysore district receives an average rainfall of 785 mm.[8]

Geology

The types of soil found in this district are red soils (red gravelly loam soil, red loam soil, red gravelly clay soil, red clay soil), lateritic soil, deep black soil, saline alluvo-colluvial soil and brown forest soil.[9] Some of the minerals found in this district

are kyanite, sillimanite, quartz, magnesite, chromite, soapstone, felsite, corundum, graphite, li mestone, dolomite, siliconite and dunite[10]

Reviews

"Study on the change of Land use and landscape pattern in Anhui

Province"

- Liu, Wan-ging

"Asian Agricultural Research" :2012, Vol.4. issue-1, Information Available on :

http:/econpapers.repec.org/Repec.ags.

This paper conduct comprehensive analysis on change of land use structure. Change of land use degree and landscape pattern change of land use in Anhui province from 1995 to 2005 using statistical analysis and mathematical model. The results show that the land use structure has changed significantly the rater of land use change in quick, the land use degree is not high; the spatial pattern of land use tends to be reasonable and gradually develops towards the equilibrium state.

"Valuation framing and attribute reope variation in choice

experiment to asses the impact of changing land use from

agriculture"

- Widle, Jill & Rolfe, John (2014)

  This information available on : https:/ideas.repee.org/p/ags/aare/

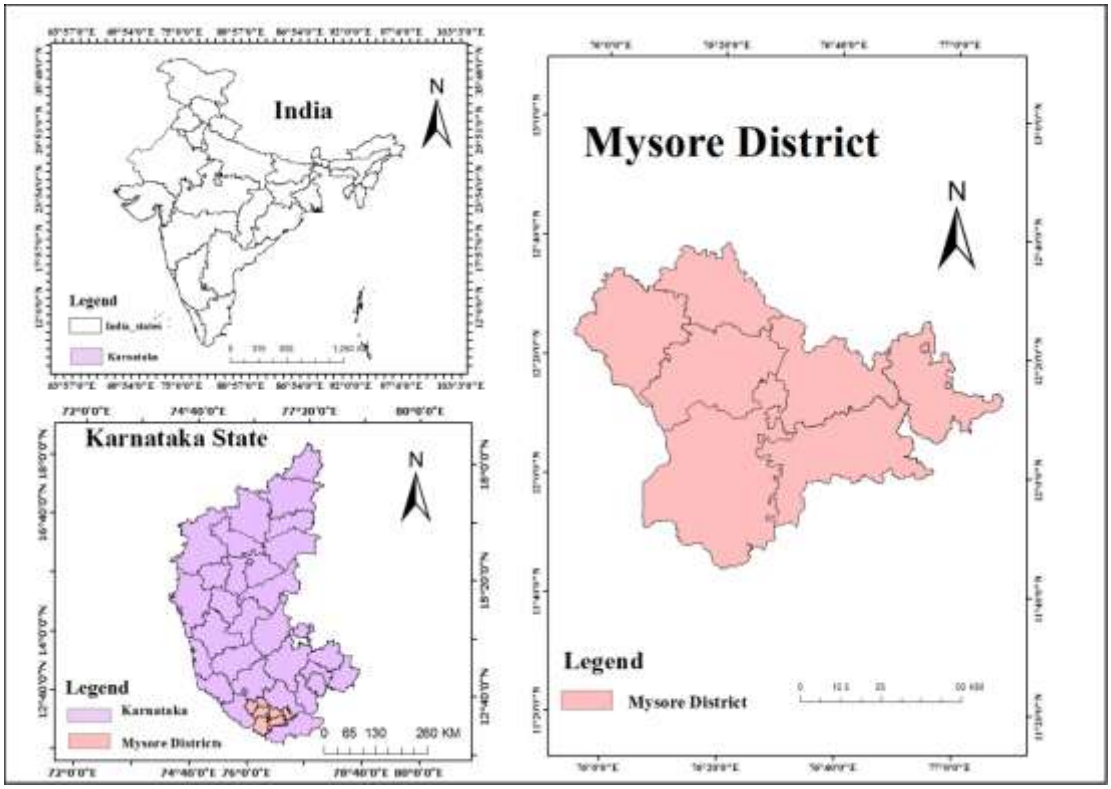
  This paper was examined the influence of varying the valuation scope and combination of attributes in a split sample choice experiment focused on assessing the impacts of increased mining activity in the rural Basin in Southern Queensland, Australia. The region had traditionally been dominated by the agricultural sector.

"Cyclicality in Industrial Growth in India" : An Exploratory Analysis

- R. Anandraj (2010)

Review of the literature on industrial growth in India. Bows that barring a few studies, Industrial growth has been interpreted by merely fitting statistical models like exponential function, dummy variable regression, kinked exponential function and quadratic function to the observed time series data without any exploratory analysis.

Study area



Land utilization in India	**Area (mil hec)**
1. Area under non agricultural uses	23.57
2. Barren and uncultibale land	19.26
3. Net sown area	141.10
4. Forest lands under good tree cover	69.41
5. Miscellaneous tree crops and groves	3.37
6. Cultibale wastelands	13.66
7. Current fallow	14.80
8. Old fallow	

9.	10.19 Permanent 10.90	pasture	ans	grassing	grounds

The pattern of land utilization in india is indicated in the above table. The available land is classified into two parts on the basis of its use. They are

a) **Agricultural land** denotes the land suitable for agricultural production. Both crops and livestock it includes net sown area, current fallows and land under miscellaneous trees crops and groves. Agricultural land in india totals a little over 50% of the total geographical area in the country. This is the highest among the large and medium sized countries of the world.

This indicates

i. The influence of faourable physical factors (like size, extent of plaines and plateaus etc) &

ii. The extension of cultivation to Large proportion of cultivable land.

B) **Non-agricultural land**

This includes

i. Land under forest and permanent pastures.

ii. Land under other non-agricultural uses {towns, villages, roads, railway, etc}

iii. Land classified as cultivable waste as well as barren and uncultivated land of mountain and desert areas.

Land using pattern in mysore

1. Agriculture

Agriculture is the main occupation of rural people in mysore district. There is 2,44,595 too small farmers and they acquired 1,04,373 hectares of land and there is small land and there is 85,021 small farmers and they are having 1,17,879 hectares of land and there is 41,426 big farmers and they acquired 1,38,573 hectares of land. Mysore district gets 600-1000 M.M rain fall in each year.

2. Horticulture

Mango, banana, coconut and vegetables are main horticulture crops in mysore district. The coconut got 19404 hectares of land, banana got 1570 hectares of land and vegetables got 4431 hectares of land in mysore .

Horticulture also got much importance in inclusive growth of mysore district. The physical requirement was about 44701 lakhs in 2007-08 and it is increased about 1,38,310

lakhs in 2011-12. Like that the financial requirement for the development of horticulture was about 0.45 lakhs and its increased by 335.03 lakhs in 2011-12.

3. Sericulture

There is 2049.69 hectares of land is under utilization of sericulture in mysore district. Sericulture got less importance than other activities but still its importance increasing slowly. The physical requirement was about 89 lakhs in 2007-08 and it is increased by 141 lakhs in 2011-12 like that the financial requirements for sericulture development was about 0.09 lakhs in

2007-08 and it has increased about 0.74 lakhs in 2011-12.

4. Animal husbandry

Animal husbandry is one of the main occupation of the farmers of rural areas in mysore district. There is 18 hospitals, 64 medical centres, 74 primary veterinary health centres 7 mobile medical centres and 629 milk producers co-operatives in district.

Animal husbandry also got a huge importance in mysore district. The physical requirement was about 17195 lakhs and financial requirement about 0.17 lakhs in 2007-08 and these standings increased about 25714 lakhs and 153.35 lakhs respectively in 2011-12.

5. Watershed development

Proper utilization and protection of land, water, animals and human resources which are in watershed lands it is called watershed development. This watershed development also got some importance in mysore district. The physical requirement and financial requirement was about 2440 and 0.02 lakhs respectively in 2011-12 for the watershed development in mysore district.

The land use land cover within an area is varied with the knowledge of the present land use pattern the issue of solid waste management would be successfully studied. Every land use type produces different kind of solid waste. The category and quantity of solid waste of that area is caused by the resultant of the change in land use and land cover.

6. Urban and built-up land

An urban area, built-up area urbanized area or urban cluster is a simultaneously built up land mass of urban development that is within a labour market. All land in the world is either urban or rural.

Urban or built-up land enclosed by construction this category consist of metropolises Municipalities, townships, conveyance, electricity and communications amenities and regions such as those engaged by mortars, supermarket run centres, manufacturing and commercial

complexes and establishments that might. In some occurences be secluded from built up areas as growth advancements land consuming less concentrated or different use might be situated in the centre of urban or builtup areas and will usually be encompassed in this group. Cultivated land wetland, forest or waterzone on the peripheral of town or urbanized area will never be incorporated apart from where they are enclosed and controlled by urban development at what time the conditions for further class are to be met the urban or built-up category takes precedence over others. Urban areas restricted to a single nation. Residential zones that ensure adequate tree concealment to come across the criteria for forest community type will be placed in this category.

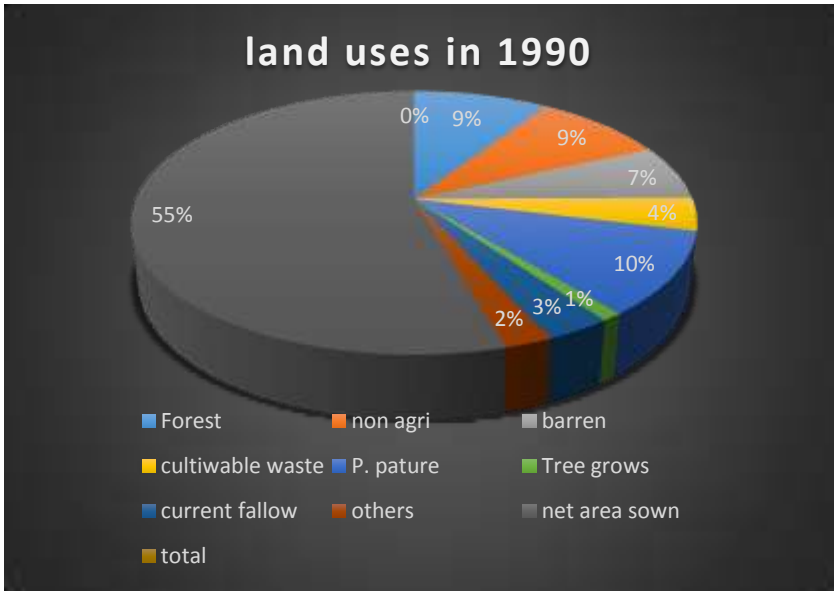
The urban built-up land in the local planning area of mysore city covers for 82.05 Sq. kms. Which accounts to 46.10% of the total land area. The major built-up land includes residential, commercial, recreational and industrial classes.

Agricultural land

Agricultural land may be expressed broadly as land used principally for production of food stuff and fiber. The principal signs of agricultural commotion will be idiosyncratical area and road outline on the background and the patches formed by livestock or mechanized equipment nevertheless. Meadow and other properties where such apparatus are used un commonly might not display as well distinct figures as other areas these distinctive symmetrical shapes are also representative of urban or built-up lands because of street plan and enlargement by blocks. Differentiating amongst cultivated and urban or built up lands generally would be potential on the foundation of urban-activity pointers and the associated absorption of population. The biggest difference that can be observed between the agricultural land and the other urban or built- up land is that the number of institutional complexes including the road and highway network are less in the former compare to the latter. The parks and the large open area allocated for cemeteries in the urban areas may be mistaken for agricultural land usually when they are built in the fringe of the urban areas.

The agricultural land in the PLA of Mysore city is 14.45 square kms accounting to 8.12% of the total study area. The major agricultural land found in the study area includes crop land and plantation.

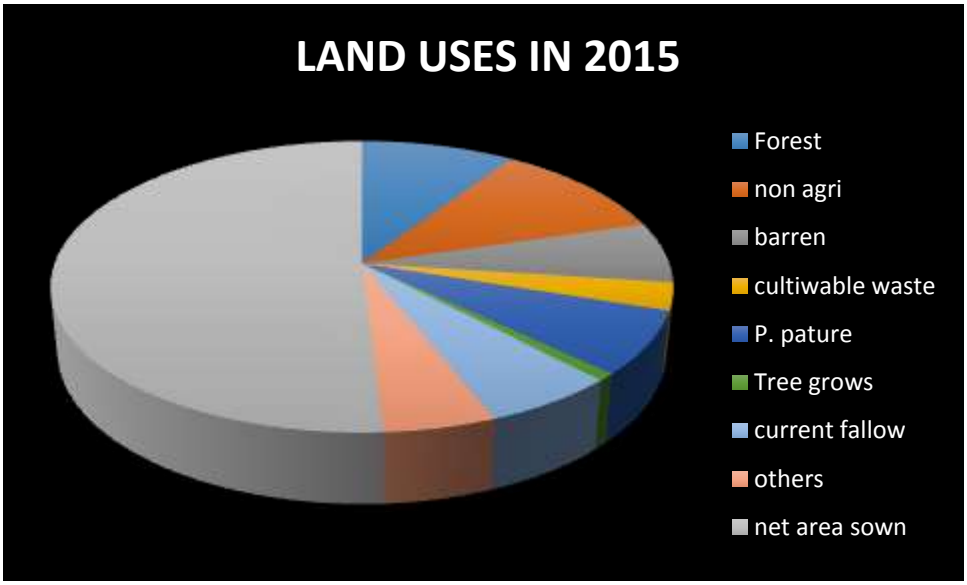
Land uses in 1990



In the year of 1990 land uses are forest land 9.2%, non agriculture land is 8.9%, barren land is 6.7%, cultivable waste is 4%, p. pasture land 10.2% , tree grows is 1%, and current falow is 3.2%, others land 2.3%, and also net area sown is 54.3%

These are the utilisation of land in mysore district in 1990

Land uses in 2015



In this year we can see the lot of differnce in the utilisation of land mainly in non agriculture land increase from 8.9% to 11% and cultivable waste is decrease from 4% to 3%, current fallow land is increases from 3.2% to 6%.

Conclusion

Differentiating amongst cultivated and urban or built up lands generally would be potential on the foundation of urban-activity pointers and the associated absorption of population. The biggest difference that can be observed between the agricultural land and the other urban or built- up land is that the number of institutional complexes including the road and highway network are less in the former compare to the latter. The parks and the large open area allocated for cemeteries in the urban areas may be mistaken for agricultural land usually when they are built in the fringe of the urban areas.

REFERENCES

Abani, k. Bhagabatti. (1993): 'agricultural development in Assam', annals of the national association of geographers, India. Vol, XIII, No.2. 19-28

Allan , Corey & kers , Suzi (2013): "Examining patterns in and drivers of rural land values

Amani,.K.Z. (1976): Agricultural land use in Aligarh district, Kumar publication, Aligarh.

Aswathnarayana, v. s. (1993): An analysis of land use systems for agricultural developoment in Raichur district: A case study of manavi taluk, PhD thesis, unpublished, university of Mysore, Mysore 570006.

Dr. premakumara, Seema (2013): "Land use pattern in India and Karnataka: A comparative analysis", IJSR- international journal of scientific research, Vol:2/ issue:10/otcober-2013.

E.Abdul azeez and K.K Subramanian (2000): "Industrial growth in Kerala: Trends and explanations".

Golub, alle and W.Hertel, Thomas (2008): "Global economic integration and land use change", journal of economic integration 23(3), sept 2008.

Kuldip Kaur and Seema Saini (2011): "Impact of urbanization on environment and socio-economic variables in Punjab", Indian journal of regional science, Vol-XXXXIII, NO-2.

Kewalramani Gita (2002): "Land use change in the pre-urban interface of Mumbai": A case study of the Varai virar lowlands.