

# A Geographical Study of the Land Use Pattern in Haveri District, Byadgi Taluk of Karnataka

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#### Abstract

The geographic area of the Byadagi taluk is 43,656 hectares. A total of 1,41,024 people live in 63 settlements as of 2011. The taluk comprises sixty-three villages, distributed over the Byadgi and Kagenelli administrative circles.

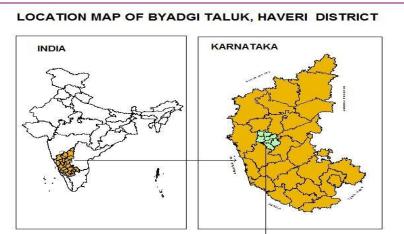
The forest land has been maintained in 2009–2010 at 4889 hectares, or 11.20 percent, in accordance with the 1999–2000 era. From 83 hectares to 6,065 hectares, or 9.43 percent, is now fallow land. 2540 hectares, or 5.81 percent, of the land was unsuitable for cultivation, a fairly steady rate. The cultivable waste is still separated into pieces. transformed 1583 hectares 3.84 percent to 1588 hectares, or 3.64 percent. 28,583 hectares less of net planted area were there. decreased by -11.74 percent.

#### Introduction

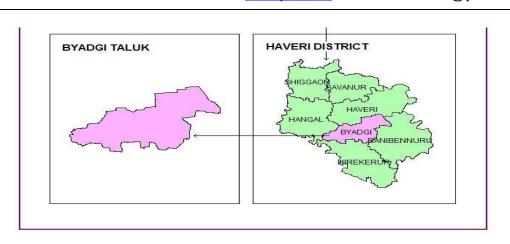
Land is one of the most precious natural resources which plays a decisive role in determining socioeconomic and cultural progress of man, it is evident from the socio-economic history of different nations of the worlds.

#### Study Area

Byadgi taluk is situated in the middle region of the southwest section of Haveri district, with latitudes between  $14^{\circ}-15'$  and  $14^{\circ}-46'$  north and longitudes between  $75^{\circ}-15'$  and  $75^{\circ}-35'$  east. By road, Byadgi is located approximately 18 kilometers from Haveri City and 323 km from Bangalore. The Haveri taluk to the north, the Hangal taluk to the west, the Hirekerur taluk to the south, and the Ranibennur taluk to the east encircle the taluk. The total area of the Byadgi taluk is 43,656 hectares. There are 63 settlements and 1,41,024 people living there as of 2011.(Fig.1)







#### Objectives

To conduct a critical analysis of the overall land use pattern in Byadgi Taluk during the years 1994-1995, 2004-2005, and 2014-2015.

To recognize different kinds of land usage.

To find out the altered land use.

#### Methodology

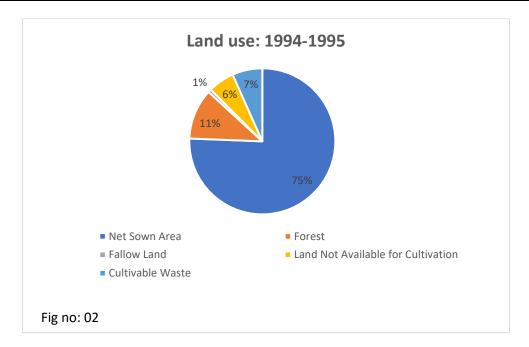
Primary and secondary data are the foundation of the current inquiry. District-level secondary data is gathered briefly. Information on land use collected by the Byadgi taluk's agriculture office and thasildar. by the application of the change of percentage approach and the Location Quotient Index (LQI). For land usage and the 2011 census, data from 1994-1995, 2004-2005, and 2014-2015 are utilized.

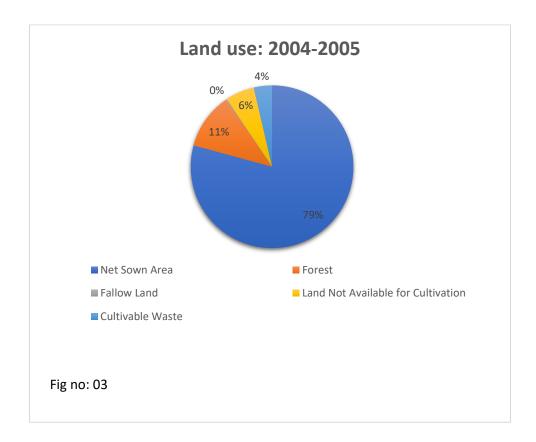
Table: 01	The Byadgi	Taluk's Land	<b>Use Pattern</b>
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S1.	LandUse	1994-95(in	Percent to the		Percent to the	2014-15(in	Percent to the
No.		hectares)	Totalarea	2004-2005	Totalarea	hectares)	Totalarea
				(in			
				hectares)			
1	NetSown	33013	75.62	34584	79.21	30521	69.91
	Area						
2	Forest	4889	11.20	4889	11.20	4889	11.20
3	FallowLand	316	0.72	83	0.20	4118	9.43
4	Land Not	2517	5.76	2517	5.76	2540	5.82
	Available For						
	Cultivation						
5	Cultivable	2921	6.70	1583	3.63	1588	3.64
	Waste						
	Total	43656	100.00	43656	100.00	43656	100.00

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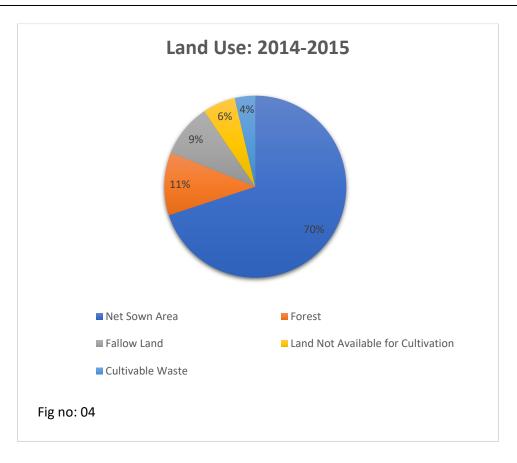
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#### Land Use Pattern

**Net Sown Area:** In the years 1994-1995, 34,584 hectares, or 79.21 percent, of the taluk's entire geographical area-33,013 hectareswas a net sown area, accounting for 75.62 percent of the total. Table-1 In 2014-2015, it decreased to 30521 hects, representing 69.91 percent. (fig 2,3 and 4)

**Forest:** The area covered by forests remained unchanged between 1994-1995 to 2014-2015. It covers 4,889 hectares, or 11.20 percent, of the total area. While the district's 9.93 percent forest cover is somewhat more than the state's 15.85 percent, the taluk's forest area is very little. It goes without saying that additional land should be converted to forests, particularly from waste land, in order to preserve the region's ecosystem and environment. If social forestry is developed further, Byadgi taluk stands to gain greatly.

**Fallow Land:** In 1994-1995, the Byadgi taluk had 316 hectares of fallow land, or 0.72 percent of the entire geographical area; in 2004-2005, that number dropped to approximately 83 hectares, or 0.20 percent. Consequently, a net reduction of 233 hectares has occurred. The area under cultivation increased to 4118 hectares in 2014-2015. The dryness causes the land to become fallow because there is not enough moisture for crops to sprout and grow. In contrast, the poor, illiterate farmers in the wet tract use incorrect irrigation techniques, which cause water to seep into the soil and cause conditions that are too salinized and alkaline for cultivation. The area under cultivation increased to 4118 hectares (9.43%) in 2014-2015. Consequently, there is a net gain of 4035 hectares.

Land not Available for Cultivation: This category includes all land used for non-agricultural purposes, including roads, railroads, embankments, playgrounds, burial sites, and settlements. In 1994-1995,2,517 hectares, or 5.76 percent of the total land area, were designated as uncultivated in the taluk; this number remained unchanged in 2004-2005. In 2014-15, it covered 2540 hectares. The taluk's share of land



classified as "not available for cultivation" has increased due to the necessity for it for socio-cultural developmental activities.

**Cultivable Waste:** Grazing areas, little trees, and permanent pastures are all included in this kind of property. In 1994-1995, the taluka's cultivable waste land accounted for 6.70 percent of the entire geographical area, with 2,921 hectares; in 2004-2005, that amount dropped to 1,583 hectares, or 3.63 percent. Consequently, there was a 3.64 % increase in net area of 1,588 hectares.

Sl.	Land Use	1994-95	Percent	2004-	Percent	1994-	2014-	Percent	2004-
No		(in	to the	2005 (in	to the	95 to	2015 (in	to the	2005 to
		hectares)	total	hectares)	Total	2004-	hectares)	Total	2014-
		,	area	,	area	2005	,	area	2015
						Change			Change
						of %			of %
1	Net sown	33013	75.62	34584	79.21	+4.74	30521	69.91	-11.74
	area								
2	Forest	4889	11.20	4889	11.20	0.00	4889	11.20	0.00
3	Fallow	316	0.72	83	0.20	-72.32	4118	9.43	+4615.00
	Land								
4	LandNot	2517	5.76	2517	5.76	0.00	2540	5.82	+1.04
	Available								
	for								
	Cultivation								
5	Cultivable	2921	6.70	1583	3.63	-45.82	1588	3.64	+0.27
	Waste								

#### Table 2: Change of Land use in Percentage

**Change in Land use:** The revenue department of Byadgi taluk performed a village-wise survey in 2014-15, and the results showed that the taluk's total geographical area is 43,650 hectares (Table 2). There was no difference between 1994-1995 and 2014-2015 (69.91 percent). The taluk's net sown area for 2014-2015. The primary reason for the lower percentage of sown land in the taluk is the first cover in the eastern portion and the undulating topography in the southern part. However, by 2004-2005, the taluk's proportion of net sown area had improved by +4.79 percentage points due to socioeconomic and technological changes. Because of the following land, the net sow area decreased by -11.74 percentage in 2014-2015. (Fig: 05)

Forestry occupies 11.20 percent of the land in Byadgi Taluk, making it the second-largest usage. Since reserve forests cover a sizable portion of the taluk's eastern and southern hilly regions, the amount of forest land has not decreased significantly.

The data analysis reveals that the primary cause of the increase in net sown area between 2004-2005 was a decrease in follow land, accounting for -72.22 percentage of the total area. However, from 2014-2015, the main cause of the decrease in net sown area was an increase in fallow land, amounting to +4615 %, due to geographical factors.



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The percentage of land used for non-agricultural purposes has not changed from 1994-1995 to 2004-2005, with a 1.04 percentage increase in 2014-2015. The majority of land used for non-agricultural purposes is used for roads, railroads, and settlements. The primary cause of the increase in this category is the growth of the Byadgi urban region, which has expanded more than any other settlement.

The growth in net sown area from 2014-2015 was +0.27 percentage points, resulting in an uncultivable waste of -45.82 in 2004-2005. This area is mostly unusable for farming due to rocky outcrops. The most that might be done with this land is scrub farming, and the stones could be utilized to build roads or other structures.

Agriculture is the primary use of the land, according to an examination of the landuse pattern in the Byadgi taluks. because of variations in the climate.

#### **Conclusion:**

The region of Byadgi Taluk, situated in the southwest of Haveri District, is susceptible to drought. With a population of 1,27,944 in 2001, it is an underdeveloped taluk with 63 villages and a level topography with a few isolated hills. The taluk experiences roughly 849 millimeters of yearly precipitation. Important soil types in the taluk are the red, red loamy, and black soils. The taluk is divided administratively into two revenue circles, Byadgi circle and Kaginelli circle, which comprise 26 and 37 villages, respectively. As of 2014-2015, 69.91 percent of the taluk's land is used for agriculture. Thirteen.63 percent of the 4,556 hectares of poorly irrigated land are supplied by tanks and wells.

Agriculture is the primary use of the land, according to a study of the landuse pattern in the Byadgi taluk. Many types of crops are grown in the taluk because to variations in the climate, physiography, and soils. However, historically, the taluk has been used to raise Jowar, Maize, Cotton, and Chilly. A minor amount of other crops, including peas, Bengal gram, green beans, vegetables, etc., are also grown there.

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