

# SECTORIAL INEQUALITIES IN ACCESS OF BARE NECESSITIES IN KOLHAPUR DISTRICT: A COMPARATIVE ANALYSIS

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## ABSTRACT

The present study is focusing on the sectorial inequalities in access of bare necessities through the Bare Necessities Index (BNI) in the Kolhapur district at the each tehsil level. This study is pioneer for the study area and it covered all twelve tehsils along with sectorial i.e., rural and urban analysis of BNI. The estimation of BNI of Kolhapur district is based on Census 2011 data. It is observed that BNI of Radhanagari total and rural as well as Panhala urban people has recorded highest, it all indicates that the better access of bare necessities to the people of corresponding region, but very low access to Kagal total and rural, and Shahuwadi urban people, which indicates very low access to the people of related region. Overall estimation of BNI in the Kolhapur district has revealed the better access of bare necessities to total, urban and rural people. It treated as equalities between total, rural and urban people for access of bare necessities. The main aim of BNI estimation of Kolhapur district is to evaluate access and sectorial inequalities of bare necessities in Kolhapur district across twelve tehsils.

**KEYWORDS:** Bare Necessities Index, Water Index, Sanitation Index, Housing Index, Micro-Environment Index, Other Facilities Index.

## 1. INTRODUCTION

The Kolhapur district is very rich in flora & fauna in different zones, the district comprises of 12 tehsils. The total size of population of the Kolhapur is 3.87 crores. The male population is 1.98 crores and female 1.89 crores constituting a male/female ratio of 1000: 957. The urban population is 1.23 crores. The literacy rate is 72.9% and population density is 504 per sq. km. Kolhapur district is situated in the sub- mountain zone. It mainly comprises of the basins of river Panchaganga, Krishna, Warana, Vedganga, Dudhaganga, Ghatprabha. The District is bounded in the north by district Sangli, and west by sahyadri mountain, in the south by Belgoan district of the Karnataka state. Kolhapur district is situated between 15° N to 17° Latitudes and 73° E to 74° Longitude, with a height of 390 to 600 mt. from mean sea level.

The Bare Necessities Index is a recently propounded by the Ministry of Finance and Statistics, Government of India, to examine the access of bare necessities to people. It is firstly presented in the Economic Survey of India report, 2020-21. Bare Necessities Index is composite statistics of various bare necessities i.e., clean water, sanitation, housing, micro-environment and other facilities, etc. which needed for everyone to sustain their life. The main aim of Bare Necessities Index is that to examines access to the bare necessities like housing, water, sanitation, electricity and clean cooking fuel which is essential to live a decent life. This research study examines the progress made in providing access to bare necessities by constructing Bare Necessities Index (BNI) at the rural, urban and each tehsils level in Kolhapur district. The BNI estimation summarizes 21 sub- indicators includes 16 positive and 5 negative sub-indicators of 5 main dimensions i.e., water, sanitation, housing, micro-environment, and other facilities. The BNI has been created for all tehsils at total, rural and urban base as well as overall Kolhapur district using Census data of Kolhapur district 2011 data.

The Bare Necessities Index exercise of Kolhapur district has examined tehsils and sectorial i.e., rural-urban-based overall access of bare necessities to the people and their inequalities.

## 2. OBJECTIVES

The major objectives of this study are

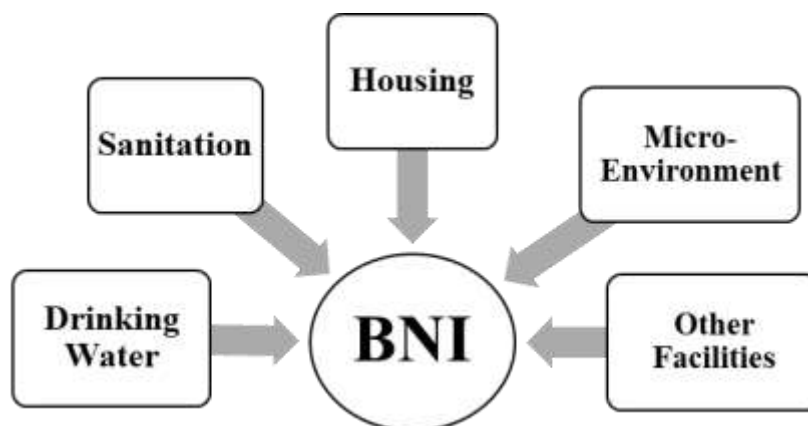
- (i) To estimate sectorial Bare Necessities Index of Kolhapur district
- (ii) To evaluate sectorial i.e., rural and urban inequalities in Bare Necessities Index of Kolhapur district.
- (iii) To suggest measures for improvement if necessary, for the study area.

## 3. RESEARCH METHODOLOGY AND DATA BASE

The present study is analytical in nature and is based on purely secondary data and some ethical observation of the researcher. Bare Necessities Index (BNI) is comprehensive and new approach. It mainly focuses on elementary necessities of people which have each individual to sustain their life. The secondary data with respect to Bare Necessities dimensions, sub-indicators have been collected from the Census of India 2011. The methodology of estimating Bare Necessities Index has adopted from Union Budget, socio-economic review Government of India, which was published in January, 2021. Detailed methodology, dimensions and indicators of Bare Necessities Index estimation of the present study area are as follows.

### • About Indicators of Bare Necessities Index (BNI):

Bare Necessities Index is composite statistic of five dimensions and its 21 sub-indicators which are related to basic necessities it needed to each people. There are 5 main dimensions and its 21 sub-indicators of BNI have been finalized like, clean water, sanitation, housing, micro-environment and other facilities. And which is divided into two categories as positive and negative indicators. Following diagram indicates that Bare Necessities Index (BNI's) main dimensions and its sub-indicator are as follows-



**Bare Necessities Index (BNI): Dimension, Indicators, Types and Weightage**

Dimension	Indicator	Types	Weightage
Water (5) 1/5	Tap-Treated	+ve	1/5
	Tube/Borewell	+ve	1/5
	Well -Covered	+ve	1/5
	Within dwelling	+ve	1/5
	Outside dwelling	-ve	1/5
Sanitation (5) 1/5	Access of Latrine	+ve	1/5
	Latrine: Piped sewer system	+ve	1/5
	Latrine: Septic tank	+ve	1/5
	Latrine: Twin leach pit	+ve	1/5
	Latrine: Single pit	+ve	1/5
Housing (3) 1/5	Condition of structure: Good	+ve	1/3
	Type of the dwelling: Owned	+ve	1/3

	Pucca dwelling	+ve	1/3
<b>Micro-environment (3)</b> 1/5	No drainage	-ve	1/3
	Open drainage	-ve	1/3
	Use of Dirt Fuel for Cooking i.e., firewood, etc.	-ve	1/3
<b>Other Facilities (5)</b> 1/5	Access of separate kitchen	+ve	1/5
	No bathroom	-ve	1/5
	Access of Bathroom	+ve	1/5
	Access of electricity	+ve	1/5
	Use of modern fuel for cooking: LPG	+ve	1/5

Source: Economic Survey of India, 2020-21/ Bare Necessities Index

#### • Statistical Analysis and BNI Calculation

The Bare Necessity Index is constructed by tow step, first step is aggregating the sub-indicators and calculate each sub-indicator index for each dimension. The second step is that each dimension is aggregated using their scores calculated in step first for the Bare Necessities Index of the particular tehsils and whole district. There is the arithmetic mean is used for aggregation to each indicator and dimension. The goalpost values of each sub-indicator have fixed at minimum value is set 0 (Zero) and maximum values set is 100 (Hundred). The value of the index ranges between 0 and 1, Higher the value of the index indicates better access to the bare necessities and lower is low. While, the Bare Necessities Index (BNI) providing access to bare necessities to the people, there are three categories of BNI i.e., above 0.700 indicates 'High' level, 0.500 to 0.700 indicates 'Medium' level and below 0.500 indicates very 'Low' level of access. The Bare Necessities Index is calculated using the formulae are as below:

$$A) \text{ Indicators Index} = \frac{(\text{Actual Value} - \text{Minimum Value})}{(\text{Maximum Value} - \text{Minimum Value})} \quad \text{--- (1)}$$

B) Bare Necessities Index (BNI) =

$$\frac{(I_{\text{Water}} + I_{\text{Sanitation}} + I_{\text{Housing}} + I_{\text{Micro-Environment}} + I_{\text{Other Facilities}})}{1/5} \quad \text{--- (2)}$$

Whereas;

$I_{\text{Water}}$  = Water Index

$I_{\text{Micro-Environment}}$  = Micro-Environment Index

$I_{\text{Sanitation}}$  = Sanitation Index

$I_{\text{Other Facilities}}$  = Other Facilities Index

$I_{\text{Housing}}$  = Housing Index

#### 4. DATA ANALYSIS AND RESULT

The current section of this study examines the access of various bare necessities to the people at tehsils as well as sectorial i.e., rural and urban in twelve tehsils of Kolhapur district. Important observation at each sub-indicator and dimension of each tehsils has been made. Analysis of Bare Necessities Index and its sub-indicators of each tehsil and its inequalities in access to bare necessities i.e., clean water, sanitation facilities, clean and safe cooking fuel, electricity access, and other bare necessities in Kolhapur district is as follows-

Table – 01  
Sector-wise Access of Water Sources and Location in Kolhapur District (Values in %)

Sr. No.	Tehsil/ Sector	Water Sources									Location of Water					
		Tap - Treated			Tube/Borewell			Well - Covered			Within dwelling			Outside dwelling		
		T	R	U	T	R	U	T	R	U	T	R	U	T	R	U
1	Shahuwadi	33.7	34.1	20.8	3.9	4.0	0.4	0.8	0.7	3.7	57.4	56.3	95.8	33.8	34.6	3.9
2	Panhala	57.6	56.6	89.0	5.6	5.7	0.8	0.8	0.8	0.6	74.6	74.3	84.6	19.0	19.2	15.0
3	Hatkanangle	71.0	56.8	85.2	7.8	11.4	4.3	1.0	1.8	0.2	73.4	67.9	78.8	21.7	25.0	18.4
4	Shirol	57.6	49.1	93.8	12.8	15.3	2.2	0.7	0.8	0.2	69.5	67.2	79.6	23.4	25.1	16.2
5	Karvir	83.9	67.3	92.8	3.8	5.1	3.1	0.2	0.3	0.1	85.7	79.4	89.1	11.0	14.9	8.9
6	Bavda	22.9	22.9	-	0.6	0.6	-	2.4	2.4	-	59.4	59.4	-	33.4	33.4	-
7	Radhanagari	53.3	53.3	-	0.2	0.2	-	0.1	0.1	-	80.6	80.6	-	14.9	14.9	-
8	Kagal	44.1	34.7	92.7	2.6	2.9	1.2	0.5	0.5	0.5	70.4	67.2	86.8	18.6	20.3	10.2
9	Bhudargad	23.0	23.0	-	1.0	1.0	-	0.4	0.4	-	76.1	76.1	-	19.3	19.3	-
10	Ajra	23.4	19.2	53.8	2.6	2.7	1.4	1.6	0.5	10.0	65.4	65.8	62.0	27.2	27.5	25.1
11	Gadhinglaj	44.4	37.7	95.6	7.3	8.2	0.2	0.9	1.0	0.1	65.5	62.1	92.2	25.2	27.6	6.7
12	Chandgad	30.3	30.3	-	3.2	3.2	-	3.6	3.6	-	63.3	63.3	-	27.9	27.9	-
<b>Kolhapur District</b>		<b>60.1</b>	<b>46.0</b>	<b>89.6</b>	<b>5.4</b>	<b>6.4</b>	<b>3.3</b>	<b>0.8</b>	<b>1.0</b>	<b>0.3</b>	<b>74.5</b>	<b>69.6</b>	<b>84.9</b>	<b>19.5</b>	<b>22.9</b>	<b>12.6</b>

Source: Census 2011/Kolhapur District (Note: T- Total, R- Rural, U-Urban)

Table-01 shows sector-wise population covered by the access of water sources and location of water sources used by people in Kolhapur district. Talking about use of Tap-Treated water sources, Gadhinglaj urban area has about 95.6% of population and rural area of Ajra have only 19.2% of population. Considering use of Tap-Treated water in Kolhapur district has about 60.1%, 46% and 89.6% of population is covered by total, rural and urban area respectively. The use of tube/Borewell sources in Shirol rural area has about 15.3% of population, Radhanagari total and rural area, Gadhinglaj urban area has only 0.2% of population individually.

The use of tube/Borewell water in Kolhapur district 5.4%, 6.4% and 3.3% of population is covered by total, rural and urban areas respectively. The well-covered water source in Chandgad total and rural area has about 3.6%, Radhanagari rural and urban, Karvir urban and Gadhinglaj urban areas have only 0.1% population individually. The use of well covered water in Kolhapur district is 0.8%, 1.0% and 0.3% of population is covered by total, rural and urban areas respectively. Talking about the Location of water sources, Shahuwadi urban area has 95.8% of population within dwelling and rural area of the Shahuwadi has 56.3% of population. Kolhapur district has about 74.5%, 69.6% and 84.9% of population is covered by total, rural and urban areas respectively. Seeing about the Location of water outside dwelling, Shahuwadi rural area has 34.6% of population and urban area of the Shahuwadi has 3.9% of population. Considering the Kolhapur district about 19.5%, 22.9% and 12.6% of population is covered by total, rural and urban areas respectively.

Table - 02  
Sector-wise Access of Sanitation Facilities with Condition of Kolhapur District (Values in %)

Sr. No.	Tehsil/Sector	Access of Sanitation Facilities with Condition of Kolhapur District (Values in %)														
		Access of Latrine			Latrine types											
		T	R	U	Piped sewer system			Septic tank			Twin leach pit			Single pit		
1	Shahuwadi	74.1	74.1	69.8	2.5	2.5	13.2	39.0	39.0	56.3	26.3	26.3	0.0	0.2	0.2	0.1
2	Panhala	81.9	81.9	55.7	5.2	5.2	1.9	52.3	52.3	53.1	9.3	9.3	0.2	0.1	0.1	0.0
3	Hatkanangle	68.3	68.3	65.1	3.5	3.5	12.2	56.9	56.9	50.2	4.1	4.1	0.9	0.3	0.3	0.1
4	Shirol	61.1	61.1	67.7	3.8	3.8	5.8	52.3	52.3	57.4	3.4	3.4	3.8	0.2	0.2	0.1
5	Karvir	84.8	84.8	81.6	3.8	3.8	27.6	64.5	64.5	48.5	5.4	5.4	3.1	0.1	0.1	0.0
6	Bavda	75.1	75.1	-	4.9	4.9	-	30.3	30.3	-	33.0	33.0	-	0.1	0.1	-
7	Radhanagari	84.9	84.9	-	3.6	3.6	-	51.2	51.2	-	19.8	19.8	-	0.0	0.0	-
8	Kagal	64.9	64.9	63.7	2.5	2.5	4.1	45.9	45.9	56.1	4.0	4.0	1.9	0.1	0.1	0.1
9	Bhudargad	79.5	79.5	-	2.3	2.3	-	57.5	57.5	-	9.3	9.3	-	0.1	0.1	-
10	Ajra	82.0	82.0	91.6	2.5	2.5	3.1	41.8	41.8	83.8	25.0	25.0	1.3	0.3	0.3	0.1
11	Gadhinglaj	71.6	71.6	77.2	3.4	3.4	9.7	51.1	51.1	66.6	6.0	6.0	0.6	0.2	0.2	0.0
12	Chandgad	74.6	74.6	-	2.8	2.8	-	31.3	31.3	-	21.9	21.9	-	0.3	0.3	-
<b>Kolhapur District</b>		<b>74.4</b>	<b>74.4</b>	<b>74.7</b>	<b>3.4</b>	<b>3.4</b>	<b>19.7</b>	<b>51.1</b>	<b>51.1</b>	<b>50.8</b>	<b>10.4</b>	<b>10.4</b>	<b>2.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.1</b>

Source: Census 2011/Kolhapur District (Note: T- Total, R- Rural, U-Urban)

Table-02 reveals that sector-wise population covered by sanitation facilities such as the access of Latrine and various types of Latrine used by household in Kolhapur district. Talking about access of Latrine, Ajra urban area has about 91.6% of population and urban area of Panhala has only 55.7% of population. The access of Latrine in Kolhapur district has 74.4%, 74.4% and 74.7% of population is covered by total, rural and urban area respectively. Considering the various types of Latrine used by people have different as Piped sewer system, Septic tank, Twin leach pit, single pit etc. The piped sewer system used by Karvir urban has about 27.6% and Panhala urban has only 1.9% of Population. The piped sewer system used by Kolhapur district has 3.4%, 3.4% and 19.7% of population is covered by total, rural and urban area respectively. The Septic tank used by Ajra urban has about 83.8% and Bavda total as well as rural has 30.3% of Population. The Septic tank used by Kolhapur district has 51.1%, 51.1 and 50.8% of population is covered by total, rural and urban area respectively.

The twin leach pit used by Bavda total and rural has about 33% and Shahuwadi urban has null Population. The twin leach pit used by Kolhapur district has 10.4%, 10.4% and 2.3% of population is covered by total, rural and urban area respectively. The single pit used by Kolhapur district has 0.2%, 0.2% and 0.1% of population is covered by total, rural and urban area respectively.

**Table – 03**  
**Sector-wise Access of Housing Facilities with Structure of Kolhapur District** (Values in %)

Sr. No.	Tehsil/ Sector	Condition of Structure:			Type of the dwelling:			Pucca dwelling		
		Good			Owned					
		T	R	U	T	R	U	T	R	U
1	Shahuwadi	80.5	76.6	80.5	80.0	96.0	80.0	95.0	92.8	95.0
2	Panhala	77.8	76.7	77.8	83.8	93.9	83.8	97.3	93.9	97.3
3	Hatkanangle	72.8	74.5	72.8	65.5	85.3	65.5	91.5	88.1	91.5
4	Shirol	67.6	71.7	67.6	75.8	87.3	75.8	86.8	84.8	86.8
5	Karvir	79.1	78.1	79.1	74.4	90.6	74.4	92.3	90.9	92.3
6	Bavda	-	71.8	-	-	97.0	-	-	97.5	-
7	Radhanagari	-	75.5	-	-	96.5	-	-	93.4	-
8	Kagal	82.4	71.7	82.4	77.1	94.8	77.1	83.5	81.8	83.5
9	Bhudargad	-	70.8	-	-	94.4	-	-	86.7	-
10	Ajra	74.9	73.2	74.9	76.0	93.5	76.0	88.2	83.1	88.2
11	Gadhinglaj	84.9	69.0	84.9	62.6	91.5	62.6	79.3	77.5	79.3
12	Chandgad	-	69.7	-	-	93.9	-	-	82.7	-
<b>Kolhapur District</b>		<b>76.6</b>	<b>73.7</b>	<b>76.6</b>	<b>71.6</b>	<b>91.6</b>	<b>71.6</b>	<b>91.0</b>	<b>87.3</b>	<b>91.0</b>

Source: Census 2011/Kolhapur District (Note: T- Total, R- Rural, U-Urban)

Table – 03, shows that tehsils and sector-wise access and situation of housing facilities which is essential to each human and also safe place for everyone, it also third key dimension of Bare Necessities Index. Speaking about good structure of housing, Gadhinglaj total and urban has about 84.9%, Karvir rural has 78.1%, it all higher as compared to twelve tehsils. Observing overall good structure of house of Kolhapur district total, rural and urban has 76.6%, 73.7% and 76.6% respectively. The status of owned dwelling, Panhala total and urban has 83.8%, and Bavda rural has 97.0%, it also all higher as compared to twelve tehsils. Talking about the condition of 'Pucca' dwelling or house, Panhala total and urban has 97.3% and Bavda rural has 97.5% which higher as compared to twelve tehsils. The lowest share of 'Pucca' dwelling or house in Gadhinglaj total and urban has 62.6%, Hatkanangle total and rural has 65.5%, and Shirol total and urban has 67.5% in Kolhapur district.

**Table – 04**  
Sector- wise Access of Micro-Environment Facilities of Kolhapur District (Values in %)

Sr. No.	Tehsil/ Sector	No drainage			Open drainage			Use of Dirt Fuel for Cooking		
		T	R	U	T	R	U	T	R	U
1	Shahuwadi	53.5	54.9	5.0	42.3	41.0	86.7	86.2	87.7	34.1
2	Panhala	35.5	36.0	17.5	54.0	53.5	70.7	64.3	65.3	30.1
3	Hatkanangle	24.4	37.9	10.9	66.4	54.4	78.3	32.8	47.3	18.4
4	Shirol	34.7	40.5	9.8	57.5	52.9	77.1	44.3	49.8	20.1
5	Karvir	16.0	31.3	7.8	59.3	57.8	60.1	26.9	54.2	12.3
6	Bavda	50.8	50.8	-	43.2	43.2	-	83.7	83.7	-
7	Radhanagari	26.4	26.4	-	65.2	65.2	-	72.9	72.9	-
8	Kagal	34.6	39.1	11.1	55.6	54.3	62.5	63.4	68.3	38.0
9	Bhudargad	36.1	36.1	-	58.7	58.7	-	73.8	73.8	-
10	Ajra	37.7	40.9	14.4	52.8	53.0	51.1	72.5	76.0	47.9
11	Gadhinglaj	41.2	45.3	9.6	49.5	46.2	75.1	61.7	67.3	17.2
12	Chandgad	48.3	48.3	-	44.5	44.5	-	78.1	78.1	-
<b>Kolhapur District</b>		<b>29.4</b>	<b>39.1</b>	<b>9.2</b>	<b>57.8</b>	<b>53.2</b>	<b>67.4</b>	<b>48.6</b>	<b>64.0</b>	<b>16.3</b>

Source: Census 2011/Kolhapur District (Note: T- Total, R- Rural, U-Urban)

Table -04, shows that tehsils and sector-wise access of sanitation facilities to the people, which is essential to each human and it is fourth important dimension of Bare Necessities Index. Speaking about the No-connectivity of drainage facility, Shahuwadi total, rural and urban has 53.5%, 54.9%, and 17.5% respectively, it all higher as compared twelve tehsils. On the other hand, Karvir total, Radhanagari rural and Karvir urban has 16.0%, 24.4% and 7.8% respectively, which very lower as compared to twelve tehsils. Connectivity of Open-drainage in, Panhala total, Radhanagari rural and Shahuwadi urban have nearly 66.4%, 65.2% and 87.3% respectively, which is higher vis-versa Shahuwadi total and rural, Ajra urban has 42.3%, 41.0% and 51.1% respectively it all lower as compared to twelve tehsils. Use of dirt fuel i.e., firewood, kerosene, charcoal, etc, the Shahuwadi total and rural, Radhanagari urban has 86.2%, 87.7% and 38.0%, respectively which is recorded higher. While Hatkanangle total has 32.8%, Karvir rural and urban has 54.2% and 12.3% Respectively, it all lower as compared to twelve tehsils in Kolhapur district. Observing No- connectivity of facility and connectivity of Open drainage, Kolhapur district total has 29.4% and 57.8% respectively. the Use of dirt fuel in the Kolhapur district total has noted 48.6%, have using dirt fuel in Kolhapur district.

**Table – 05**  
Sector-wise Access of Other Facilities of Kolhapur District (Values in %)

Sr. No.	Tehsil/ Sector	Access of separate kitchen			Bathing Facility						Access of electricity			Use of modern fuel for cooking: LPG		
					No bathroom			Access of Bathroom								
		T	R	U	T	R	U	T	R	U	T	R	U	T	R	U
1	Shahuwadi	84.0	84.0	85.5	7.6	7.8	1.1	79.4	79.1	91.5	89.6	89.4	97.7	7.9	6.3	65.3
2	Panhala	88.2	88.0	95.3	6.3	6.4	2.3	83.8	83.4	95.2	94.4	94.3	96.9	17	15.4	68.3
3	Hatkanangle	88.3	88.1	88.5	5.6	8.1	3.1	82.6	79.6	85.5	94.4	92.9	95.9	63.1	46.5	79.6
4	Shirol	85.7	86.5	81.9	10.2	11	6.9	76.4	74.9	82.9	91.4	90.5	95.6	53.6	47.8	78.8
5	Karvir	89.1	88.1	89.6	3.8	7	2.1	89.6	85.7	91.6	97.2	95.6	98	64.6	23.9	86.4
6	Bavda	78.3	78.3	-	7.2	7.2	-	79.8	79.8	-	91	91	-	3.7	3.7	-
7	Radhanagari	88.2	88.2	-	6	6	-	84.4	84.4	-	94.7	94.7	-	5.5	5.5	-
8	Kagal	83.6	81.9	92.3	10.4	11.7	3.6	76	73.6	88.6	91.2	90.1	96.7	18.8	11.1	58.9
9	Bhudargad	93.8	93.8	-	6.2	6.2	-	85.9	85.9	-	91.9	91.9	-	9.4	9.4	-
10	Ajra	90.9	90.1	96.9	4.3	4.8	0.7	86.8	85.2	98.2	93.1	92.4	97.9	11.6	6.2	50.4
11	Gadhinglaj	92.3	91.9	95.4	6.1	6.8	1.2	86.1	85.2	93.4	89.7	88.7	96.9	25.9	18.8	81.1
12	Chandgad	90.4	90.4	-	4.9	4.9	-	90.6	90.6	-	90.2	90.2	-	7.2	7.2	-
<b>Kolhapur District</b>		<b>88.3</b>	<b>87.9</b>	<b>89.2</b>	<b>6.1</b>	<b>7.7</b>	<b>2.7</b>	<b>84.3</b>	<b>81.9</b>	<b>89.2</b>	<b>93.7</b>	<b>92.1</b>	<b>97.1</b>	<b>41.4</b>	<b>22.1</b>	<b>82.0</b>

Source: Census 2011/Kolhapur District (Note: T- Total, R- Rural, U-Urban)

Table -05, indicates that tehsils and sector-wise access of Other facilities, i.e., separate kitchen, bathrooms, electricity access, and clean cooking fuel in Kolhapur district across twelve tehsils. Other facilities which explained above which is the fifth key dimension of the Bare Necessities Index. Speaking about the access to separate kitchen, Bhudargad total and rural has 93.8% and Ajra urban has 96.9%, which all higher as compared to twelve tehsils. Access to bathroom facility, Kagal total and rural has 90.6%, and Bhudargad urban has 98.2%. which noted higher in Kolhapur district. Considering access of electricity Karvir total, rural and urban recorded 97.2%, 95.6% and 98% which is highest. The use of clean modern cooking fuel, Karvir total and rural, Shirol rural has 64.6%, 86.4% and 47.8% respectively, which recorded higher as compared to twelve tehsils. Observing overall access of separate kitchen Kolhapur district total, rural and urban has 88.3%, 87.9%, and 89.2% respectively. Talking about No-bathroom facility of Kolhapur district total, rural and urban has 6.1%, 7.7% and 2.7% respectively. Access of bathroom facility of Kolhapur district total, rural and urban has 84.3%, 81.9% and 89.2% individually. Seeing with respect to access of electricity of whole Kolhapur district total, rural and urban has 93.7%, 92.1% and 97.1% respectively. Use of clean modern cooking fuel i.e. LPG Kolhapur district total, rural and urban has 41.4, 22.1% and 82% respectively.

**Table – 06**  
Sector-wise Water Index & its Indices of Kolhapur District

Sr. No.	Tehsil/ Sector	Water Sources									Location						Water Index (WI)		
		Tap - Treated			Tube/ Borewell			Well - Covered			Within dwelling			Outside dwelling			T	R	U
		T	R	U	T	R	U	T	R	U	T	R	U	T	R	U			
1	Shahuwadi	0.34	0.34	0.21	0.04	0.04	0.00	0.01	0.01	0.04	0.57	0.56	0.96	0.34	0.35	0.04	0.26	0.29	0.25
2	Panhala	0.58	0.57	0.89	0.06	0.06	0.01	0.01	0.01	0.01	0.75	0.74	0.85	0.19	0.19	0.15	0.32	0.26	0.38
3	Hatkanangle	0.71	0.57	0.85	0.08	0.11	0.04	0.01	0.02	0.00	0.73	0.68	0.79	0.22	0.25	0.18	0.35	0.31	0.37
4	Shirol	0.58	0.49	0.94	0.13	0.15	0.02	0.01	0.01	0.00	0.70	0.67	0.80	0.23	0.25	0.16	0.33	0.33	0.38
5	Karvir	0.84	0.67	0.93	0.04	0.05	0.03	0.00	0.00	0.00	0.86	0.79	0.89	0.11	0.15	0.09	0.37	0.32	0.39
6	Bavda	0.23	0.23	-	0.01	0.01	-	0.02	0.02	-	0.59	0.59	-	0.33	0.33	-	0.24	0.33	-
7	Radhanagari	0.53	0.53	-	0.00	0.00	-	0.00	0.00	-	0.81	0.81	-	0.15	0.15	-	0.30	0.24	-
8	Kagal	0.44	0.35	0.93	0.03	0.03	0.01	0.01	0.01	0.01	0.70	0.67	0.87	0.19	0.20	0.10	0.27	0.30	0.38
9	Bhudargad	0.23	0.23	-	0.01	0.01	-	0.00	0.00	-	0.76	0.76	-	0.19	0.19	-	0.24	0.25	-
10	Ajra	0.23	0.19	0.54	0.03	0.03	0.01	0.02	0.01	0.10	0.65	0.66	0.62	0.27	0.28	0.25	0.24	0.24	0.31
11	Gadhinglaj	0.44	0.38	0.96	0.07	0.08	0.00	0.01	0.01	0.00	0.66	0.62	0.92	0.25	0.28	0.07	0.29	0.23	0.39
12	Chandgad	0.30	0.30	-	0.03	0.03	-	0.04	0.04	-	0.63	0.63	-	0.28	0.28	-	0.26	0.27	-
<b>Kolhapur District</b>		<b>0.60</b>	<b>0.46</b>	<b>0.90</b>	<b>0.05</b>	<b>0.06</b>	<b>0.03</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>0.75</b>	<b>0.70</b>	<b>0.85</b>	<b>0.20</b>	<b>0.23</b>	<b>0.13</b>	<b>0.32</b>	<b>0.26</b>	<b>0.38</b>

Source : Authors Calculation from table-01 (Note: T- Total, R- Rural, U-Urban)

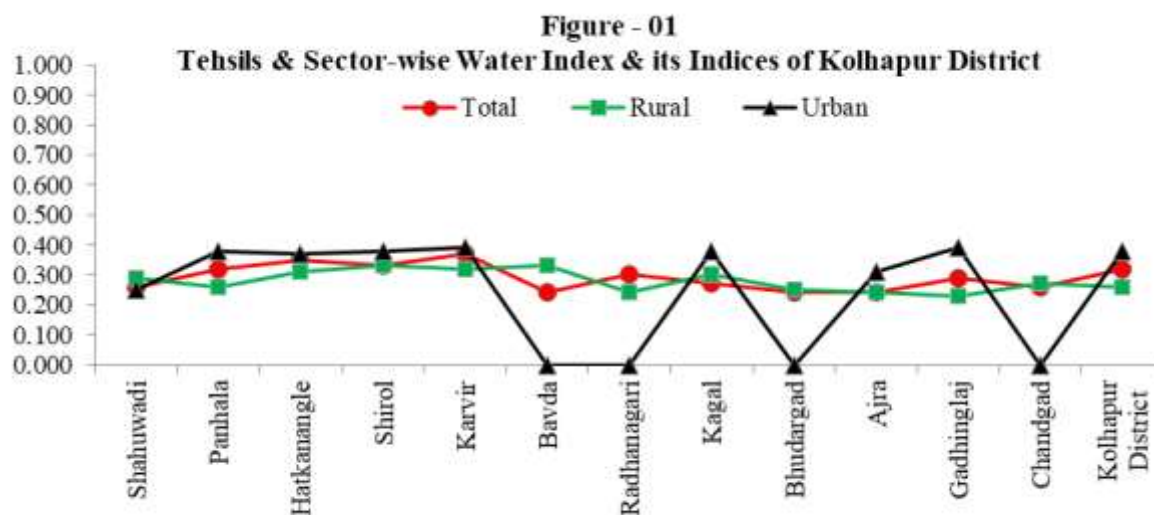


Table – 06 & Fig. 01 shows the tehsil and sector-wise the Water Index and its sub-indicator indices of Kolhapur district. The high-water index indicates high access of water sources, medium index has medium and very low index has very low access of water sources to the people respectively. The Water Index of the Karvir total, Shirol and Bavda urban and Karvir as well as Gadhinglaj has 0.37, 0.33 and 0.39, it is higher as compared to 12Tehsil and it also reveals all the tahasils comes under very low category. Gadhinglaj rural has noted lowest

that is 0.23 as compared 12 tehsils, and it also lies in the very low category. Shahuwadi urban Water Index has reported 0.25 it comes under the very low category in Kolhapur district. Considering achievement in Water Index of as whole Kolhapur district total, rural and urban noted 0.32, 0.26 and 0.38 respectively, it all comes under the category of very low development. Shortly, the Water Index of Kolhapur district indicates that most of the population has struggling to get clean water and the inadequate to access water sources in Kolhapur district.

**Table – 07**  
Sector-wise Sanitation Index & its Indices of Kolhapur District

Sr. No.	Tehsil/Sector	Access of Latrine			Latrine types												Sanitation Index (SI)					
					Piped sewer system			Septic tank			Twin leach pit			Single pit								
		T	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T	R	U			
1	Shahuwadi	0.74	0.74	0.70	0.03	0.03	0.13	0.40	0.39	0.56	0.26	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.28	0.28
2	Panhala	0.81	0.82	0.56	0.05	0.05	0.02	0.52	0.52	0.53	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.28	0.22
3	Hatkanangle	0.67	0.68	0.65	0.08	0.04	0.12	0.54	0.57	0.50	0.03	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.30	0.26
4	Shirol	0.62	0.61	0.68	0.04	0.04	0.06	0.53	0.52	0.57	0.04	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.27	0.27
5	Karvir	0.83	0.85	0.82	0.19	0.04	0.28	0.54	0.65	0.49	0.04	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.24	0.32
6	Bavda	0.75	0.75	-	0.05	0.05	-	0.30	0.30	-	0.33	0.33	-	0.00	0.00	-	0.29	0.32	-	0.29	0.32	-
7	Radhanagari	0.85	0.85	-	0.04	0.04	-	0.51	0.51	-	0.20	0.20	-	0.00	0.00	-	0.32	0.29	-	0.32	0.29	-
8	Kagal	0.65	0.65	0.64	0.03	0.03	0.04	0.48	0.46	0.56	0.04	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.32	0.25
9	Bhudargad	0.80	0.80	-	0.02	0.02	-	0.58	0.58	-	0.09	0.09	-	0.00	0.00	-	0.30	0.24	-	0.30	0.24	-
10	Ajra	0.83	0.82	0.92	0.03	0.03	0.03	0.47	0.42	0.84	0.22	0.25	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.30	0.36
11	Gadhinglaj	0.72	0.72	0.77	0.04	0.03	0.10	0.53	0.51	0.67	0.05	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.30	0.31
12	Chandgad	0.75	0.75	-	0.03	0.03	-	0.31	0.31	-	0.22	0.22	-	0.00	0.00	-	0.26	0.27	-	0.26	0.27	-
<b>Kolhapur District</b>		<b>0.75</b>	<b>0.74</b>	<b>0.75</b>	<b>0.09</b>	<b>0.03</b>	<b>0.20</b>	<b>0.51</b>	<b>0.51</b>	<b>0.51</b>	<b>0.08</b>	<b>0.10</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.28</b>	<b>0.26</b>	<b>0.30</b>			

Source: Authors Calculation/ from table-02 (Note: T- Total, R-Rural, U-Urban)

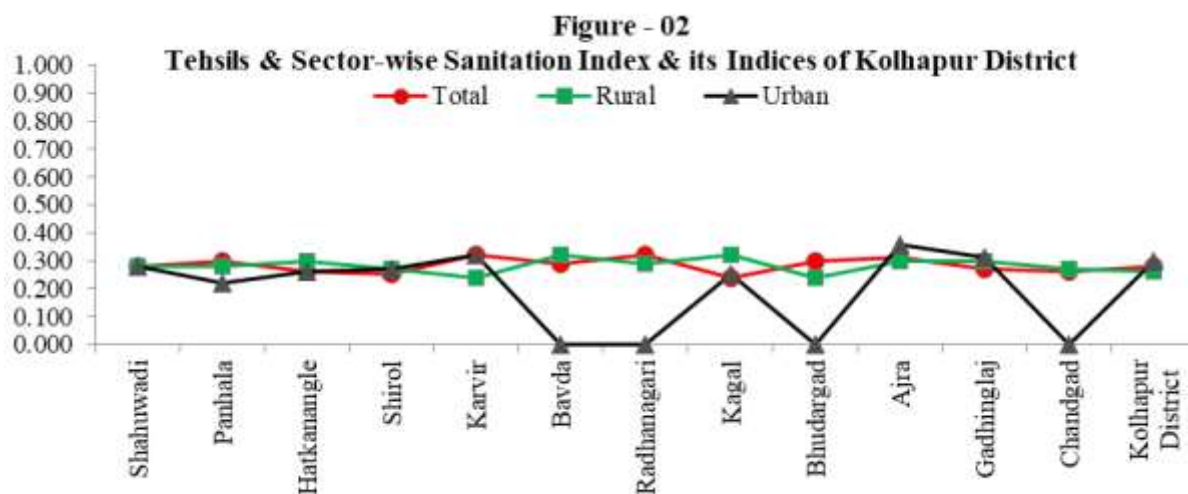


Table – 07 & Fig. 02 indicates that the tehsil and sector-wise sanitation index and its sub-indicator indices of Kolhapur district. Standard of Sanitation Index is the high-sanitation index indicates high access of sanitation facilities, medium index has medium and very low index has very low access of sanitation facilities to the people respectively. Looking at the tehsil-wise and sectorial Sanitation Index, Karvir and Radhanagari total, Bavda and Kagal urban, and Ajra urban has 0.32, 0.32 and 0.36 respectively, it all noted higher as compared to twelve tehsils but it all indicated very low category. Sanitation Index of Kagal total, Karvir and Bhudargad rural and Panhala urban has noted lowest 0.24, 0.24 and 0.22 respectively as compared 11 tehsils, and also all are noted under the very low category. Seeing overall Sanitation index of Kolhapur district total, rural, and urban has calculated 0.28, 0.26 and 0.30 respectively, it all treated under very low category. In brief, the Sanitation Index of entire tehsils with sector as well as whole Kolhapur district denoted the very low category; hence it reveals that access of bare sanitation facilities is inadequate to the people in Kolhapur district.



**Table – 08**  
**Sector-wise Housing Index & its Indices of Kolhapur District**

Sr. No.	Tehsil/ Sector	Condition of Structure: Good			Type of the dwelling: Owned			Pucca dwelling			Housing Index (HI)		
		T	R	U	T	R	U	T	R	U	T	R	U
1	Shahuwadi	0.77	0.77	0.81	0.96	0.96	0.80	0.93	0.93	0.95	<b>0.88</b>	<b>0.84</b>	<b>0.85</b>
2	Panhala	0.77	0.77	0.78	0.94	0.94	0.84	0.94	0.94	0.97	<b>0.88</b>	<b>0.89</b>	<b>0.86</b>
3	Hatkanangle	0.74	0.75	0.73	0.75	0.85	0.66	0.90	0.88	0.92	<b>0.80</b>	<b>0.88</b>	<b>0.77</b>
4	Shirol	0.71	0.72	0.68	0.85	0.87	0.76	0.85	0.85	0.87	<b>0.80</b>	<b>0.83</b>	<b>0.77</b>
5	Karvir	0.79	0.78	0.79	0.80	0.91	0.74	0.92	0.91	0.92	<b>0.84</b>	<b>0.81</b>	<b>0.82</b>
6	Bavda	0.72	0.72	-	0.97	0.97	-	0.98	0.98	-	<b>0.89</b>	<b>0.87</b>	-
7	Radhanagari	0.76	0.76	-	0.97	0.97	-	0.93	0.93	-	<b>0.89</b>	<b>0.89</b>	-
8	Kagal	0.74	0.72	0.82	0.92	0.95	0.77	0.82	0.82	0.84	<b>0.83</b>	<b>0.89</b>	<b>0.81</b>
9	Bhudargad	0.71	0.71	-	0.94	0.94	-	0.87	0.87	-	<b>0.84</b>	<b>0.83</b>	-
10	Ajra	0.73	0.73	0.75	0.91	0.94	0.76	0.84	0.83	0.88	<b>0.83</b>	<b>0.84</b>	<b>0.80</b>
11	Gadhinglaj	0.71	0.69	0.85	0.88	0.92	0.63	0.78	0.78	0.79	<b>0.79</b>	<b>0.83</b>	<b>0.76</b>
12	Chandgad	0.70	0.70	-	0.94	0.94	-	0.83	0.83	-	<b>0.82</b>	<b>0.79</b>	-
<b>Kolhapur District</b>		<b>0.75</b>	<b>0.74</b>	<b>0.77</b>	<b>0.85</b>	<b>0.92</b>	<b>0.72</b>	<b>0.89</b>	<b>0.87</b>	<b>0.91</b>	<b>0.83</b>	<b>0.82</b>	<b>0.80</b>

Source: Authors Calculation/ from table-03 (Note: T- Total, R- Rural, U-Urban)

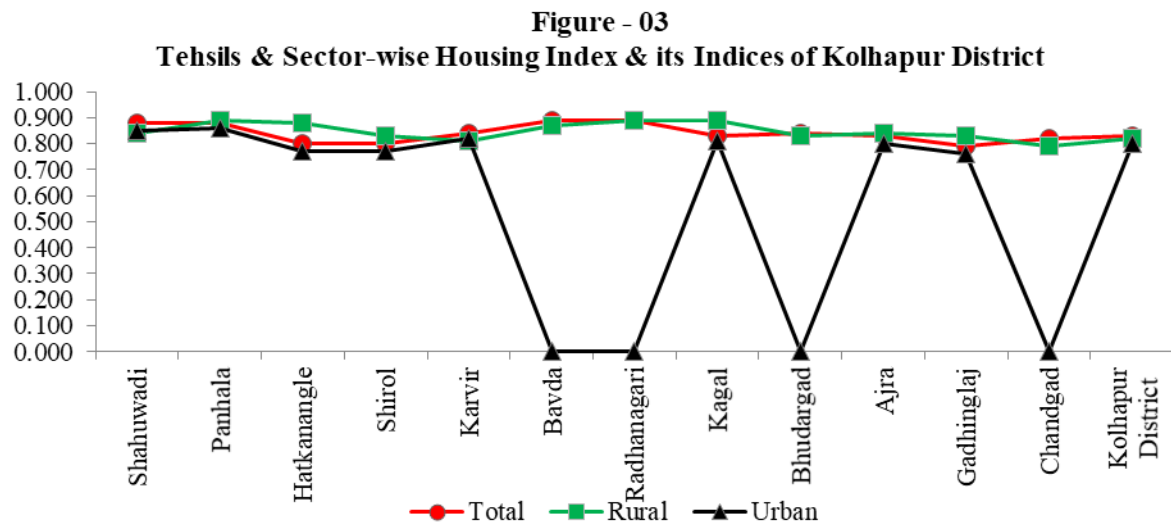


Table – 08 & Fig. 03 indicates that the tehsil and sector-wise Housing Index and its sub-indicator indices of Kolhapur district. There the measures of Housing Index as, the high-housing index reveals high access of satisfactory and good condition housing facilities, medium index has medium and very low index has very low to the people respectively. Observing the tehsil-wise and sectorial Housing Index, Bavda and Radhanagari total, Panhala and Radhanagari as well as Kagal rural has 0.89 for each sector, all these have higher than as compared to 12 tehsils and also it all treated under the high category. Gadhinglaj urban has recorded 0.76; it has lower as compared twelve tehsils and come under the high category. The overall progress of Housing index of Kolhapur district total, rural, and urban has counted nearly 0.83, 0.82 and 0.80 respectively, it all comes under high category. In brief, the overall progress of Housing Index of entire tehsils with sector and also whole Kolhapur district denoted in high category, hence it reveals that the decent access of satisfactory and good condition housing facilities to the people in Kolhapur district.

Table – 09  
Sector-wise Micro-Environment Index & its Indices of Kolhapur District

Sr. No.	Tehsil/ Sector	No drainage			Open drainage			Use of Dirt Fuel for Cooking			Micro-Environment Index (MEI)		
		T	R	U	T	R	U	T	R	U	T	R	U
1	Shahuwadi	0.54	0.55	0.05	0.42	0.41	0.87	0.86	0.88	0.34	<b>0.61</b>	<b>0.52</b>	<b>0.42</b>
2	Panhala	0.36	0.36	0.18	0.54	0.54	0.71	0.64	0.65	0.30	<b>0.51</b>	<b>0.61</b>	<b>0.39</b>
3	Hatkanangle	0.24	0.38	0.11	0.66	0.54	0.78	0.33	0.47	0.18	<b>0.41</b>	<b>0.52</b>	<b>0.36</b>
4	Shirol	0.35	0.41	0.10	0.58	0.53	0.77	0.44	0.50	0.20	<b>0.46</b>	<b>0.47</b>	<b>0.36</b>
5	Karvir	0.16	0.31	0.08	0.59	0.58	0.60	0.27	0.54	0.12	<b>0.34</b>	<b>0.48</b>	<b>0.27</b>
6	Bavda	0.51	0.51	-	0.43	0.43	-	0.84	0.84	-	<b>0.59</b>	<b>0.48</b>	-
7	Radhanagari	0.26	0.26	-	0.65	0.65	-	0.73	0.73	-	<b>0.55</b>	<b>0.59</b>	-
8	Kagal	0.35	0.39	0.11	0.56	0.54	0.63	0.63	0.68	0.38	<b>0.51</b>	<b>0.55</b>	<b>0.37</b>
9	Bhudargad	0.36	0.36	-	0.59	0.59	-	0.74	0.74	-	<b>0.56</b>	<b>0.54</b>	-
10	Ajra	0.38	0.41	0.14	0.53	0.53	0.51	0.73	0.76	0.48	<b>0.54</b>	<b>0.56</b>	<b>0.38</b>
11	Gadhinglaj	0.41	0.45	0.10	0.50	0.46	0.75	0.62	0.67	0.17	<b>0.51</b>	<b>0.57</b>	<b>0.34</b>
12	Chandgad	0.48	0.48	-	0.45	0.45	-	0.78	0.78	-	<b>0.57</b>	<b>0.53</b>	-
<b>Kolhapur District</b>		<b>0.29</b>	<b>0.39</b>	<b>0.09</b>	<b>0.58</b>	<b>0.53</b>	<b>0.67</b>	<b>0.49</b>	<b>0.64</b>	<b>0.16</b>	<b>0.45</b>	<b>0.57</b>	<b>0.31</b>

Source: Authors Calculation/ from table-04 (Note: T- Total, R- Rural, U-Urban)

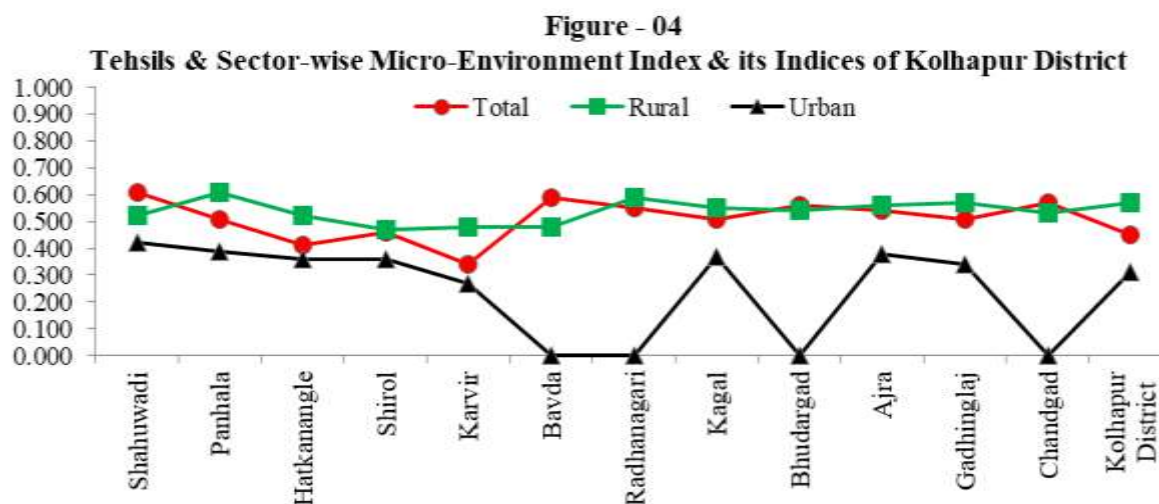


Table – 09 & Fig. 04 indicates that the tehsil and sector-wise Micro-Environment Index (MEI) and its sub-indicator indices of Kolhapur district. Measures of Micro-Environment Index is the high- Micro-Environment Index shows high access of satisfactory and good condition of micro-environment facilities i.e., drainage, cooking fuel, medium index has medium and very low index has very low to the people respectively. Observing the tehsil-wise and sectorial Micro-Environment Index, Shahuwadi total and Panhala rural has 0.61, Shahuwadi urban has 0.42, it all higher as compared to 12 tehsils and also Shahuwadi total as well as Panhala rural MEI treated under medium and Shahuwadi urban has very low category respectively. Karvir urban and total, Shirol rural MEIs has recorded 0.27, 0.34 and 0.47 respectively; it all has lower as compared to twelve tehsils, which all comes under very low category. Considering the overall progress of Micro-Environment Index of Kolhapur district total, and rural has reported nearly 0.45 and 0.31 respectively, both comes under very low category. The MEI of Kolhapur district rural has 0.57, which under medium category. In brief, the overall improvement of Micro-Environment Index of entire tehsils and also whole Kolhapur district reveals that very low access of micro-environmental facilities in total and urban areas people and medium access in rural areas people in Kolhapur district.

**Table – 10**  
Sector-wise Other Facilities Index & its Indices of Kolhapur District

Sr. No.	Tehsil/ Sector	Access of separate kitchen			Bathing Facility						Access of electricity			Use of Modern Fuel for Cooking: LPG			Other Facilities Index (OFI)		
					No bathroom			Access of Bathroom											
		T	R	U	T	R	U	T	R	U	T	R	U	T	R	U	T	R	U
1	Shahuwadi	0.84	0.84	0.86	0.08	0.08	0.01	0.79	0.79	0.92	0.90	0.89	0.98	0.08	0.06	0.65	0.54	0.58	0.68
2	Panhala	0.88	0.88	0.95	0.06	0.06	0.02	0.84	0.83	0.95	0.94	0.94	0.97	0.17	0.15	0.68	0.58	0.53	0.72
3	Hatkanangle	0.88	0.88	0.89	0.06	0.08	0.03	0.83	0.80	0.86	0.94	0.93	0.96	0.63	0.47	0.80	0.67	0.58	0.71
4	Shirol	0.86	0.87	0.82	0.10	0.11	0.07	0.76	0.75	0.83	0.91	0.91	0.96	0.54	0.48	0.79	0.64	0.63	0.69
5	Karvir	0.89	0.88	0.90	0.04	0.07	0.02	0.90	0.86	0.92	0.97	0.96	0.98	0.65	0.24	0.86	0.69	0.62	0.74
6	Bavda	0.78	0.78	-	0.07	0.07	-	0.80	0.80	-	0.91	0.91	-	0.04	0.04	-	0.52	0.60	-
7	Radhanagari	0.88	0.88	-	0.06	0.06	-	0.84	0.84	-	0.95	0.95	-	0.06	0.06	-	0.56	0.52	-
8	Kagal	0.84	0.82	0.92	0.10	0.12	0.04	0.76	0.74	0.89	0.91	0.90	0.97	0.19	0.11	0.59	0.56	0.56	0.68
9	Bhudargad	0.94	0.94	-	0.06	0.06	-	0.86	0.86	-	0.92	0.92	-	0.09	0.09	-	0.57	0.54	-
10	Ajra	0.91	0.90	0.97	0.04	0.05	0.01	0.87	0.85	0.98	0.93	0.92	0.98	0.12	0.06	0.50	0.57	0.57	0.69
11	Gadhinglaj	0.92	0.92	0.95	0.06	0.07	0.01	0.86	0.85	0.93	0.90	0.89	0.97	0.26	0.19	0.81	0.60	0.56	0.74
12	Chandgad	0.90	0.90	-	0.05	0.05	-	0.91	0.91	-	0.90	0.90	-	0.07	0.07	-	0.57	0.58	-
<b>Kolhapur District</b>		<b>0.88</b>	<b>0.88</b>	<b>0.89</b>	<b>0.06</b>	<b>0.08</b>	<b>0.03</b>	<b>0.84</b>	<b>0.82</b>	<b>0.89</b>	<b>0.94</b>	<b>0.92</b>	<b>0.97</b>	<b>0.41</b>	<b>0.22</b>	<b>0.82</b>	<b>0.63</b>	<b>0.57</b>	<b>0.72</b>

Source: Authors Calculation/ from table-05 (Note: T- Total, R-Rural, U-Urban)

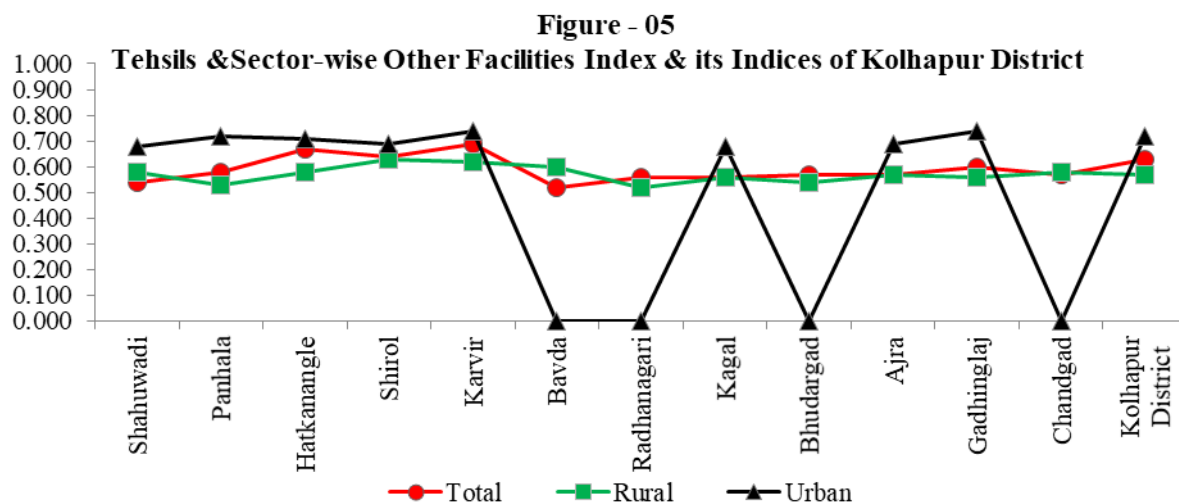


Table – 10 & Fig. 05 shows that the tehsil and sector-wise Other Facilities Index (OFI) and its sub-indicator indices of Kolhapur district. Measures of Other Facilities Index (OFI) is the high- Other Facilities Index (OFI) indicates high access of Other Facilities i.e., separate kitchen, bathing, electricity and modern cooking fuel etc., medium index has medium and very low index has very low to the people respectively. Speaking about tehsil-wise and sectorial Other Facilities Index, Karvir total, Shirol rural and Gadhinglaj and well as Karvir urban has noted 0.69, 0.63 and 0.74 respectively, it all has higher as compared to twelve tehsils and also total as well as rural OFI treated under medium and urban has higher category respectively. On the other hand, OFI of Bavda total and Radhanagari rural has 0.52 individually, Shahuwadi and Kagal has 0.68, which is lowest as compared twelve tehsils. Also, it all come under the medium category. Observing the overall improvement of Other Facilities Index as whole Kolhapur district total, urban and rural has calculated 0.63, 0.57 and 0.72 respectively, all comes under medium category. In shortly, the overall progress of Other Facilities Index of all tehsils and Kolhapur district indicates the medium access of other bare necessities i.e., separate kitchen, bathing, electricity and modern cooking fuel etc. to total, rural and urban people in Kolhapur district.

**Table – 11**  
**Tehsil & Sector-wise Bare Necessities Index (BNI) of Kolhapur District (Total/Rural/Urban)**

Sr. No.	Tehsil	Total	Rank	Rural	Rank	Urban	Rank
1	Shahuwadi	0.514	3	0.515	4	0.496	8
2	Panhala	0.517	2	0.517	3	0.515	1
3	Hatkanangle	0.497	8	0.503	6	0.492	7
4	Shirol	0.494	10	0.494	10	0.494	6
5	Karvir	0.511	4	0.519	2	0.506	2
6	Bavda	0.505	5	0.505	5	-	-
7	Radhanagari	0.522	1	0.522	1	-	-
8	Kagal	0.481	12	0.478	12	0.499	5
9	Bhudargad	0.503	6	0.503	7	-	-
10	Ajra	0.499	7	0.498	8	0.506	3
11	Gadhinglaj	0.491	11	0.489	11	0.506	4
12	Chandgad	0.495	9	0.495	9	-	-
<b>Kolhapur District</b>		<b>0.503</b>	<b>-</b>	<b>0.503</b>	<b>-</b>	<b>0.501</b>	<b>-</b>

Source: Authors Calculation/ From Table-6 to10

**Figure – 06**  
**Tehsil & Sector-wise Bare Necessities Index (BNI) of Kolhapur District (Total/Rural/Urban)**

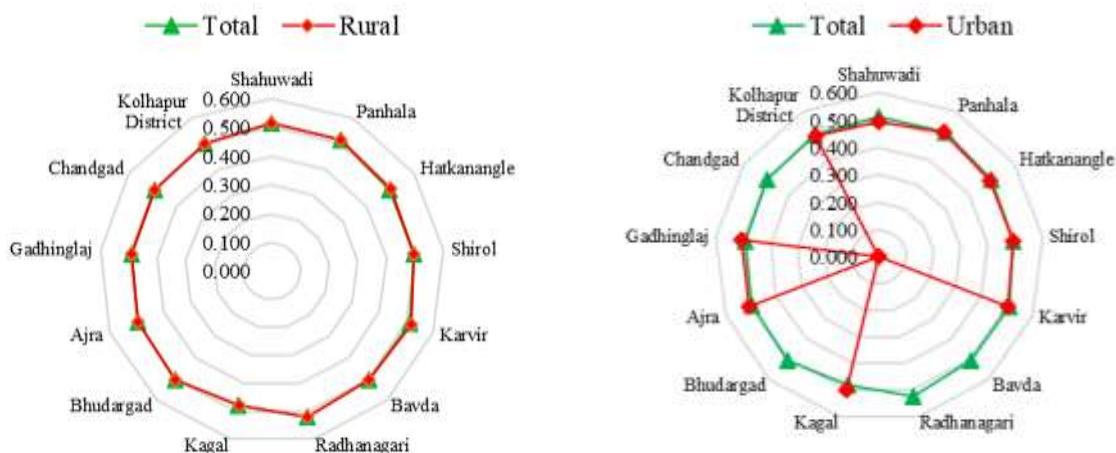


Table – 11 & 06 reveals that tehsil and sector-wise Bare Necessities Index (BNI) of Kolhapur district across twelve tehsils. This study of Bare Necessities Index (BNI) categorized into three categories which indicates that high Bare Necessities Index (BNI) has high access of bare necessities, medium has medium and very low has very low access to the people respectively. Speaking about tehsil-wise and sectorial Bare Necessities Index (BNI), Radhanagari total and rural has calculated 0.522, Panhala urban has calculated 0.515, it all higher and is ranked 1<sup>st</sup> as compared to 12 tehsils and also all total, rural as well as urban BNI treated under medium category.

Followed by Panhala total has 0.517 and Karvir rural and urban has 0.506, it all also treated as medium category and it ranked 2<sup>nd</sup> in the tehsils of Kolhapur district. Considering the BNI of Kagal total and urban has counted 0.481 and 0.478, which is lowest and is ranked 12<sup>th</sup>, Shahuwadi urban has counted 0.496 which is also lowest and is ranked 8<sup>th</sup>, all shows very low category as compared twelve tehsils of Kolhapur districts.

Observing the sectorial overall progress of Bare Necessities Index (BNI) of Kolhapur district total, urban and rural has reported 0.503, 0.503 and 0.501 respectively, it all comes under medium category. In shortly, based on overall progress of Bare Necessities Index (BNI) of all tehsils and also Kolhapur district all tehsils

along with Kolhapur district the access of bare necessities to people is medium in Kolhapur district. Also, sectorial evaluation indicates that the access of bare necessities to total, rural and urban has medium and near to medium but very low category in the Kolhapur district.

## 5. FINDINGS

Current section of this study, deals with the important findings and some observations of this study which is based on statistical results. According to Tehsils and Sectorial estimation of Bare Necessities Index (BNI) of Kolhapur district across twelve tehsils, the major findings and observations of this study are as follow-

1. Bare Necessities Index of Radhanagari and Panhala total indicates the highest access of bare necessities to total people, but very low access to total people in Kagal and Gadhinglaj tehsils.
2. Bare Necessities Index of Radhanagari and Karvir rural indicates the highest access of bare necessities to rural people, but very low access to rural people in Kagal and Gadhinglaj tehsils.
3. Bare Necessities Index of Panhala and Karvir urban indicates the highest access of bare necessities to urban people, but very low access to urban people in Shahuwadi and Hatkanangle tehsils.
4. Bare Necessities Index of overall Kolhapur district total, rural along with urban has medium category, hence it treated medium access of bare necessities or facilities to the whole district, rural as well as urban people.

## CONCLUSION

Every person's ability to access basic requisites like clean water, good condition of housing, sanitation, electricity, and clean cooking fuel, etc., has a vital phase for the fulfillment of basic wants of individuals, to boost their normal of living and promote economic development. Accordingly, the estimation of Bare Necessities Index, most of the tehsils includes rural-urban of Kolhapur district has recorded medium category. Overall Bare Necessities Index of Kolhapur district has recorded under the medium category including rural and urban. Hence, it reveals that in all tehsils along with the whole Kolhapur district the access of bare necessities to the people is medium. But according to the sectorial evaluation of BNI, it indicates that the access of bare necessities to rural people is higher than urban people, it indicates little equality between rural and urban people to access bare necessities.

## REFERENCES

1. *Census (2011), Census of India, 2011.*
2. *Census (2011), District Census Hand-Book/ Kolhapur District, 2011.*
3. *GOI (2021), Economic Survey of India- 2020-21, Department of Finance and Statistics, Government of India, Vol-1, New Delhi, 2021.*
4. *Nanaware D. R. and Kumbhar A. D. (2021), Sectorial Inequalities in Bare Necessities Index (BNI) of Solapur District: A Comparative Analysis, EPRA\_ International Journal of Indian Economic Light, (IJEL), Vol-9 & Issue-1, May 2021.*
5. *Nanaware D. R., (2020), 'Social Inequalities in Household Infrastructure Development: A Case Study of Solapur District in Maharashtra', EPRA\_ International Journal of Research and Development (IJRD), VOL-5, Issue-3, 2020.*
6. *UNDP (2018), 'Human Development Technical Notes – 2018, United Nations Development Programme (UNDP), New York, 2019.*

## Websites

1. <http://www.censusindia.gov.in>
2. <https://www.indiabudget.gov.in/economicsurvey/>
3. <http://hdr.undp.org/en>
4. [www.maharashtra.gov.in](http://www.maharashtra.gov.in)
5. <https://Kolhapur.gov.in/en/>