CHAPTER-II
STATUS OF THE REGION

CHAPTER II

Status of development in Kalyana Karnataka Region with reference to key performance indicators

The Kalyana Karnataka Region continued to remain backward in terms of various development indictors such as NITI Aayog indices, Multidimensional Poverty indices etc., and socio-economic indicators remained lower compared to rest of the State even after the establishment of the Board under Article 371-J of the Constitution. The data points specified in the sustainable development goals indicator framework, NITI Aayog aspirational district indicator framework, Human Development Index, Nanjundappa Committee Report etc., were not available with the Board which was essential in measuring the status of development, planning and programme implementation. Though Board was required to ascertain the relative levels of development in different sectors with reference to appropriate indicators, it did not collect the required data for analysis. In the absence of any data with the Board, evaluation of the outcome of its activities towards minimising the regional disparity was not feasible and the Board was not able to demonstrate the effectiveness of its operations in measurable terms.

The backwardness of a region with reference to other regions are determined using a set of socio-economic indicators. Multiple studies[2] highlighted backwardness of the Kalyana Karnataka Region using different development indicators. These study reports were taken cognizance by the Parliamentary Standing Committee which considered the Article 371-J of the constitution while proposing the special status to the Kalyana Karnataka Region.

The importance of indicators in planning and measuring progress towards achieving the planned objectives is well recognized globally. Governments across the globe give increased attention to the indicator framework and associated monitoring systems for achieving the Millennium Development Goals and its successor Sustainable Development Goals. Assessment of the levels of socio-economic development of the region from time to time with reference against a defined set of indicators is considered a pre-requisite to developing and implementing a development strategy towards reducing regional imbalances. A comprehensive indicator framework linked with goals and targets of regional development would act as a management tool to develop implementation strategies and allocation of resources.

According to Clause 12 of the Board Order 2013, the Board shall from time to time ascertain the relative levels of development in different sectors in relation to the Region on the basis of appropriate indicators, having regard to the levels of development in the State as a whole. Clause 19 of the Board Order 2013 enables the Board to collect necessary information for monitoring the socio-economic indicators from various departments of the State Government and Local Bodies and Authorities.

[2] Report of the High Power Committee on Regional Imbalances (Nanjundappa Committee Report), The Book on Inclusive Growth co-authored by Smt.Shalini Rajneesh, IAS *etc.*

The Board was yet to formally finalise an indicator framework suitable to the region. Though the Board generally refers to the Nanjundappa Committee Report for all the parameters, it was yet to define the goals and targets for regional development in measurable terms along with specified timelines. In the absence of defined goals, targets and timelines, it was challenging for the Audit to assess the outcomes of the Board's activities in terms of the indicators.

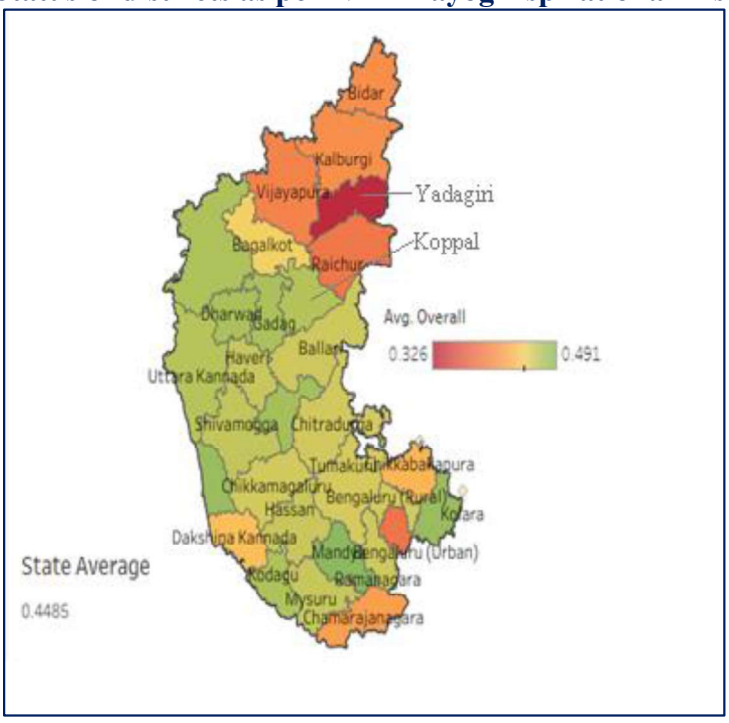
Audit attempted to collect the data from different departments of the Government to ascertain the status of development in the region in comparison to other parts of the State. Based on the data gathered, the status of development in the districts of KK Region was assessed. An assessment of the socio-development indicators at the taluk level could not be undertaken due to non-availability of granular data at the taluk level. The status of the Region with reference to various indicators are discussed in the succeeding paragraphs.

2.1 Status of Kalyana Karnataka Region based on indicators of NITI Aayog Aspirational District Programme

The NITI Aayog uses an indicator framework consisting of 49 indicators across five themes - Health and Nutrition, Education, Agriculture and Water Resources, Financial Inclusion & Skill Development and Basic Infrastructure for assessing and monitoring the status of development of various districts under its Aspirational District Programme.

Audit analysed the status of development in the region in terms of this indicator framework and observed that the districts of Kalyana Karnataka Region lags behind the rest of the State as depicted in the **Chart 2.1** below.

Chart2.1: Status of districts as per NITI Aayog Aspirational Districts Index



The colour represents the Aspirational Index of a district. The colour moves from red, through orange, yellow to green as the score increases. Green represents areas with the highest index while red represents areas with the lowest index.

Source: Avalakona database of Planning Department

As per the NITI Aayog indicator framework, the State average was 44.85 basis points. Audit observed that out of the six districts in the Kalyana Karnataka Region, four districts *viz.,* Yadagiri, Raichur, Bidar and Kalaburagi stand lower in comparison to the State average.

Analysis of taluk-wise data also showed high prevalence of disparities as out of the low performing 75 taluks with average score of less than 44.85 basis points in the State, 29 taluks were from Kalyana Karnataka Region. Of this, audit observed that all the taluks in Kalaburagi and Yadagiri and seven[3] out of eight taluks in Bidar district were performing below State average. The region wise performance of taluks is shown in **Table 2.1** below.

Table 2.1: Region wise status of taluks with below State average score as per NITI Aayog Aspirational Districts Index

Region	Number of Taluks	Percentage
Belagavi	19	25.33
Bengaluru	17	22.67
KK Region	29	38.67
Mysuru	10	13.33
Grand Total	**75**	**100**

Source: Avalokana database of Planning Department

The two districts in the region *viz*., Raichur and Yadagiri were identified under the Aspirational District Programme of NITI Aayog. However, the Board was not collecting and analysing the data related to implementation of the Aspirational Districts Programme in these two districts under its jurisdiction.

2.2 Status of Kalyana Karnataka Region based on Multidimensional Poverty Index

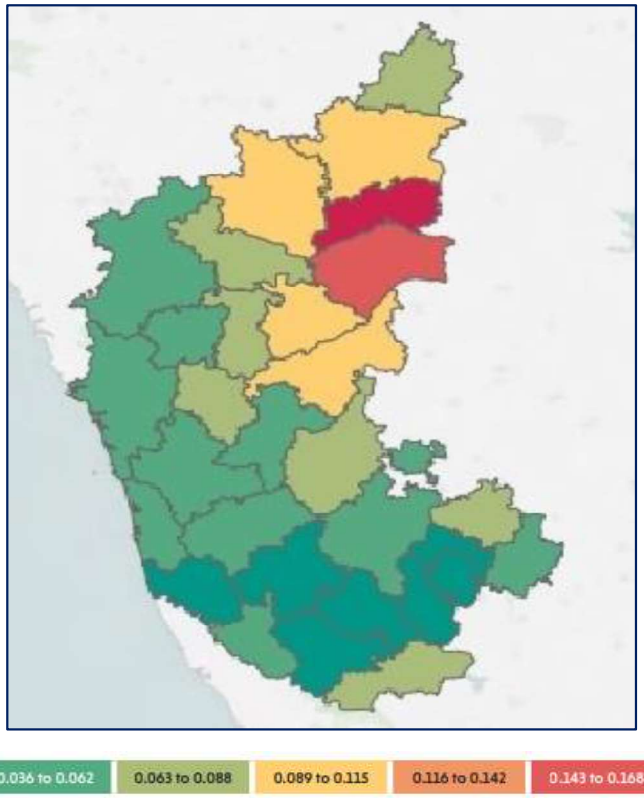
The Multidimensional Poverty Index (MDPI) is used by the United Nations Development Programme in its flagship Human Development Report since 2010 and is the most widely employed non-monetary poverty index in the world. It captures overlapping deprivations in health, education and living standards. It complements income poverty measurements as it measures and compares deprivations directly. Similarly, the National Multidimensional Poverty Index uses twelve indicators for assessing the poverty levels in more than 700 districts in the country.

The MDPI data was to be used for formulation of sectorial policies and targeted interventions which contribute towards ensuring that "no one is left behind".The district-wise estimation of the national MDPI was to facilitate reaching out to the farthest behind first through focused efforts on specific indicators and dimensions. The Board however, did not collect any MDPI data during 2013-14 to 2020-21. The MDP index prepared by NITI Aayog in 2020-21 showed that the least performing four districts in the State were from Kalyana Karnataka Region. The remaining two districts were also sixth and ninth least performing.

[3] Humnabad, Bhalki, Aurad, Hulasur, Chitgoppa, Kamalanagar and Basavakalyan taluks.

This indicated that the region is significantly poorer with respect to the other parts of the State as shown in **Chart 2.2** below:

Chart 2.2: Status of districts as per MDP index



The colour represents the Multidimensional Poverty Index (MPI) score of a district. The colour moves from green, through yellow, to red as the MPI score increases. Green represents areas with the lowest MPI scores while red represents areas with the highest MPI scores. The legend provides the range of MPI scores represented by a colour.

Source: NITI Aayog MDP Report 2021

2.3 Status of Kalyana Karnataka Region based on Human Development Index

Human Development Index (HDI) is a multidimensional indicator used to gauge the degree of development; it was born out of discontent with per-capita income serving as the standard measure of development, it is argued that human development is used to distinguish between good and bad growth. It focuses on three basic capabilities–Inequalities in health, education and income across regions and groups.

It was observed that the Board had not devised any mechanism for monitoring the statistics related to HDI in the KK Region from time to time.

2.3.1 Per Capita Income

Per Capita Income (PCI) is one of the three indicators of the Human Development Index developed by UNDP. Audit analysed the divergence between the PCI of the districts and the State for the years 2013-14 and 2019-20 and the results are shown below:

The Per Capita Income (PCI) of the 6 districts in the Kalyana Karnataka (KK) Region for from 2013-14 to 2019-20 is given in **Table 2.2** below:

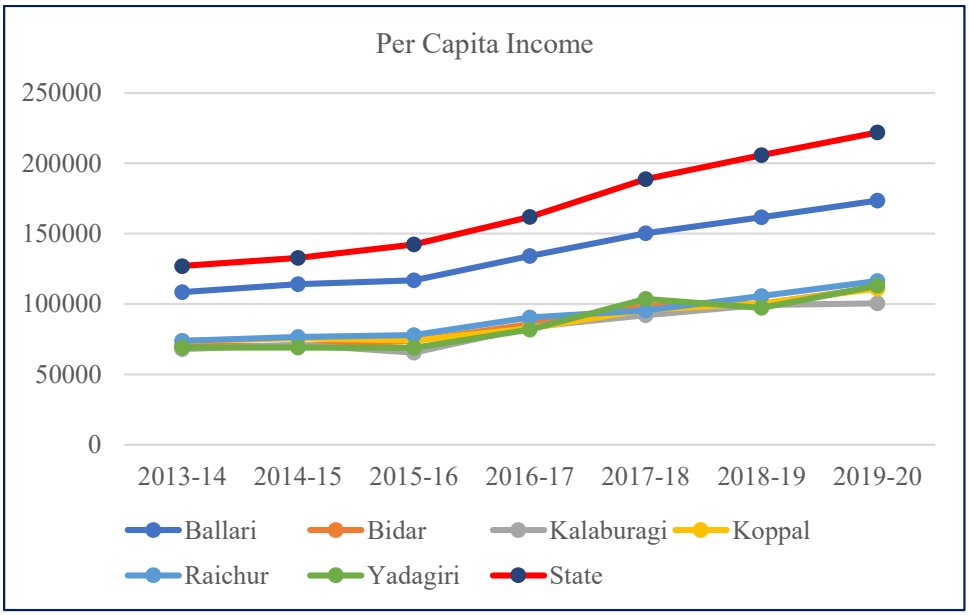
Table 2.2: Per Capita Income (PCI)

	Financial Year							
Districts	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**PCI Growth (in *per cent*)**
Ballari	1,08,454	1,14,138	1,16,897	1,34,150	1,50,319	1,61,715	1,73,529	60.00
Bidar	70,543	70,339	73,892	85,713	98,754	1,00,234	1,11,750	58.41
Kalaburagi	67,886	71,085	65,493	83,619	92,098	99,322	1,00,446	47.96
Koppal	73,916	75,598	74,134	82,787	96,036	1,00,497	1,10,886	50.02
Raichur	73,851	76,498	78,057	90,530	95,451	1,05,654	1,16,389	57.60
Yadagiri	69,014	69,177	68,928	81,845	1,03,677	97,353	1,12,937	63.64
State	1,26,976	1,32,880	1,42,267	1,61,912	1,88,765	2,05,697	2,22,002	74.84

(Source: Economic Survey of Karnataka)

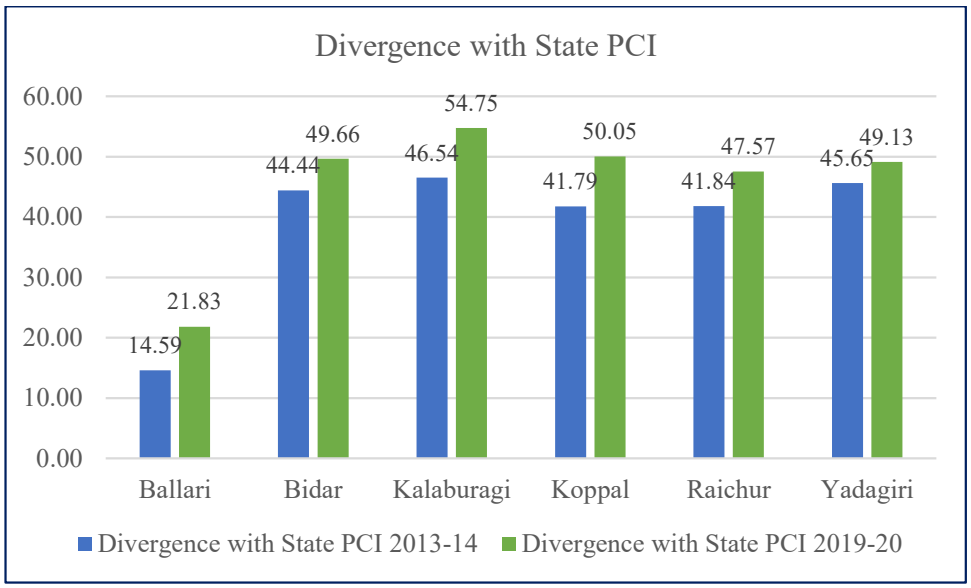
The growth in PCI of the six Districts of KK Region during this period was significantly lower than the State wide growth. A comparison of PCI growth of six districts of KK Region with that of State is presented in **Chart 2.3** below:

Chart 2.3: Comparison of Per Capita Income



The slower growth in PCI of the six districts in the KK Region resulted in increase in divergence with State PCI as shown in **Chart 2.4** below:

Chart 2.4: PCI Divergence of KK Districts with the State PCI



Source: Economic Survey of Karnataka

The Board did not make any studies in this regard and no interventions were taken up during this period.

2.4 Status of Kalyana Karnataka Region based on Nanjundappa Committee indicators framework

The Nanjundappa Committee Report identified the indicators and sectors of development and quantified the regional disparities across 175 taluks existed during 2002. The backwardness of the regions was assessed according to a Comprehensive Composite Development Index (CCDI) developed based on 35 identified socio-economic indicators. The Committee identified 114 taluks in the State as backward. They are further classified into Backward (35), More Backward (40) and Most Backward (39). Out of these 39 most backward taluks in the State during 2002, 21 taluks were from Hyderabad Karnataka Region indicating the backwardness of the Hyderabad Karnataka Region.

Audit collected the data for 35 socio-economic indicators of Nanjundappa Committee for the year 2019-20 from Department of Planning, Government of Karnataka. Based on this, Audit calculated the index for the year 2019-20 on the lines of methodology adopted by Nanjundappa Committee. The calculated index showed 53 taluks in the State as backward, 56 taluks as more backward and 38 taluks as most backward. Out of the 38 most backward taluks, 21 were from Kalyana Karnataka Region indicating the continued prevalence of backwardness in the region.

The classification of the taluks in the State as of 2002 and 2020 on the basis of Nanjundappa Committee indices are shown in **Table 2.3** below:

Table 2.3: Status of Taluks as per Nanjundappa Committee Report

Classification	(Based on CCDI Index 2002)		(Based on CCDI Index 2019-20)	
	No of Taluks in the State	No. of Taluks in the KK Region	No of Taluks in the State	No. of Taluks in the KK Region
Relatively Developed	61	3	80	7
Backward	35	2	53	7
More Backward	40	5	56	15
Most Backward	39	21	38	21
Total	**175**	**31**	**227**	**50**

Source: Nanjundappa Committee Report (2002) and Data provided by Department of Statistics

2.5 Status of Kalyana Karnataka Region based on Night Light Data Luminosity

Night-time luminosity provides a representation of the expansion of electricity supply, the geographical distribution of population and economic activity, urban expansion as well as growth of ribbon developments between urban hubs. Geospatial techniques help in assessing the extent of physical as well as financial infrastructure development in the Country *viz*., expansion of national highways, airports, road network, metros, *etc.* The Economic Survey of 2021-22 used geo-spatial data techniques to track, compare and represent long-term developments in the country.

Audit analysed the regional growth in Kalyana Karnataka Region utilising the services of the Regional Remote Sensing Centre (RRSC) at Indian Space Research Organisation (ISRO) by studying the geospatial distribution of night light using the Night Light Luminosity during the years 2015 and 2020. RRSC at ISRO conducted the study through geo spatial data using a new global view and animation of earth's city lights to compare urban growth of Kalyana Karnataka districts with other districts of the State. The data was acquired over 2015 and 2020 from Google Earth engine. The results of the study clearly indicated that Kalaburagi region showed low growth compared to other regions for the periods 2015-2020. The results showed that overall increase in illumination value is low for Kalyana Karnataka Region compared to other regions. The increase in illumination in the State from 2015 to 2020 was 19 *per cent* whereas the increase in illumination in the Kalyana Karnataka Region was only 14.20 *per cent*.

The region wise growth in illumination in the State is provided in the **Table 2.4** below:

Table 2.4: Region wise growth in Illumination

Region	Growth in Illumination (*Per cent*)
Mysuru	17.75
Bengaluru	21.95
Belagavi	21.63
Kalyana Karnataka	14.20
Total State	**19**

The status of the region in 2015 and 2020 with respect to other regions is shown in charts below.

Chart 2.5: Growth of illumination of the State.

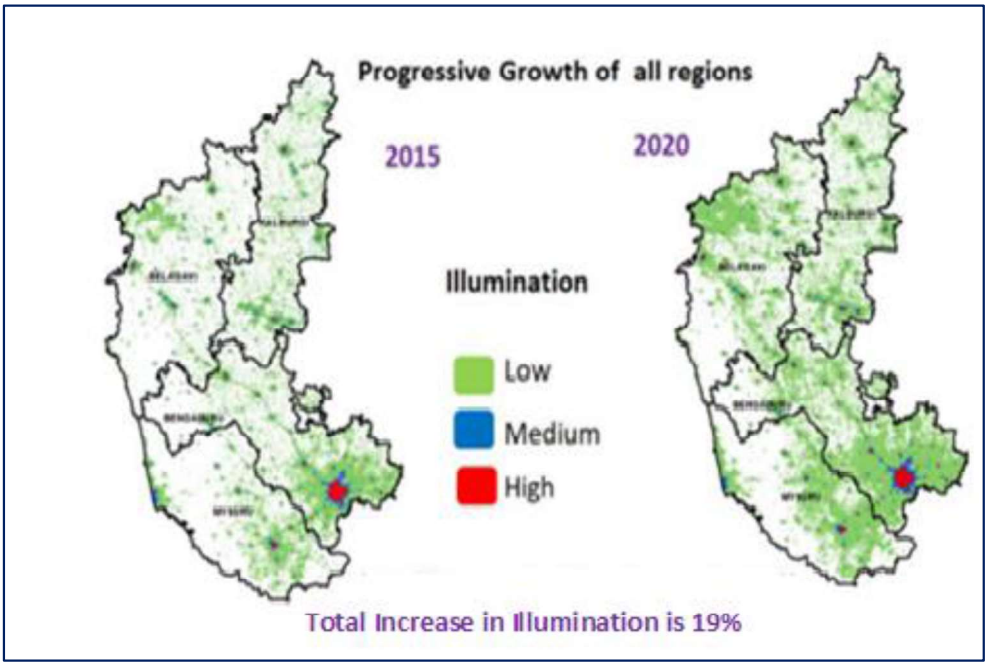


Chart 2.6: Growth of the illumination of the Kalyana Karnataka Region

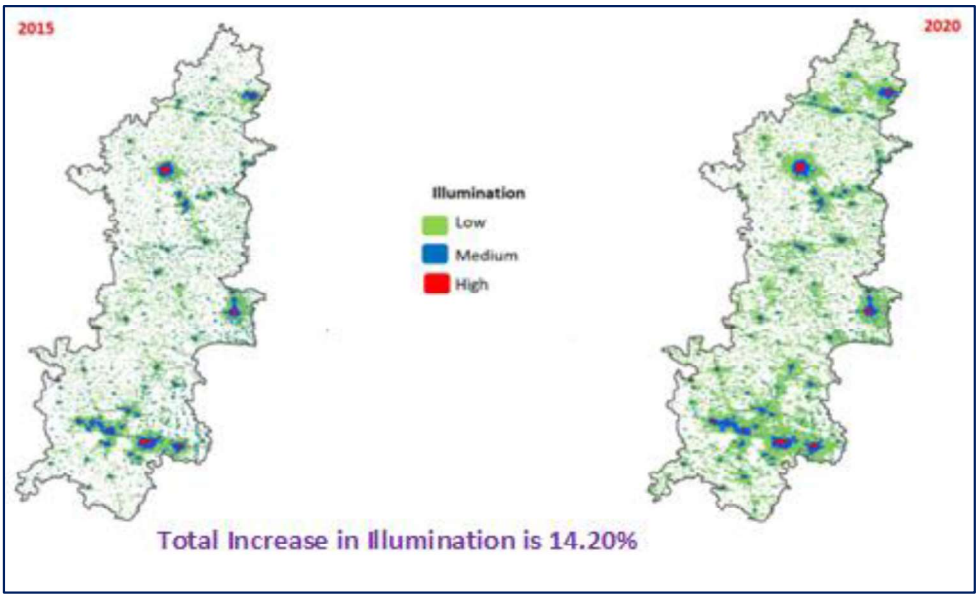
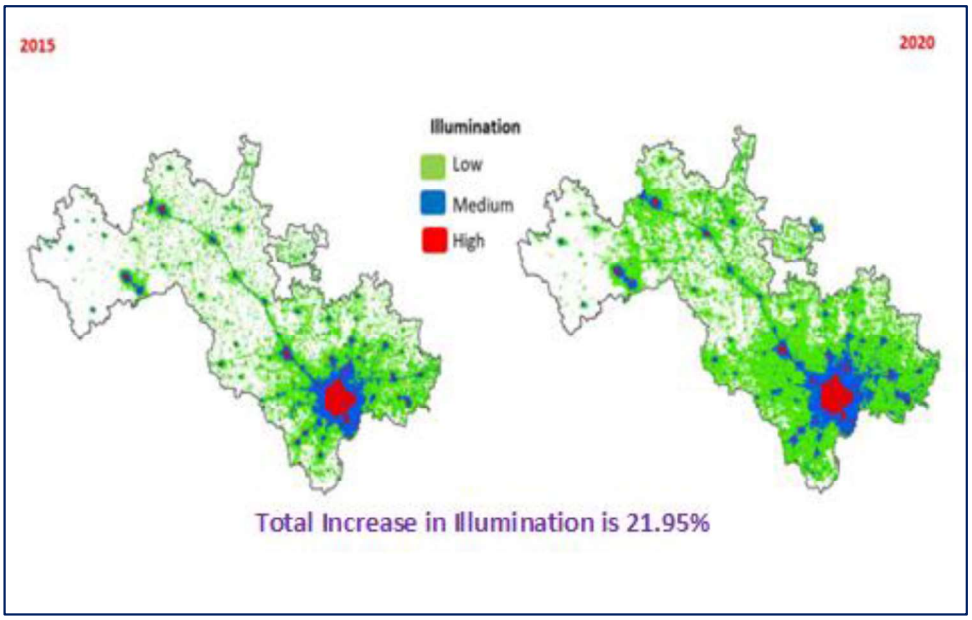


Chart 2.7: Growth of the illumination of the Bengaluru Region



2.6 Sustainable Development Goals Indicator Framework

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. SDGs break down the social, economic and environmental themes into 17 goals and 169 targets, thereby enabling policymakers and implementers around the world to design effective and timely policies and initiatives. At the district (sub-state) and local levels, elected representatives of Panchayati Raj Institutions and Urban Local Bodies, district administration and frontline functionaries are vital for action on SDGs. Raising awareness of all the stakeholders on SDGs is critical to reach the targets set in agenda 2030. It not only ensures effective localisation and better ownership, but also aids in behavioural change which is essential for inclusive and sustainable development.

The Board is mandated under the Article 371-J to deliver on most of the socio-economic sectors that constitute the SDGs to achieve regional development. It is therefore imperative to align the policy and strategy architecture of the Board to SDGs. The Board were to map existing Government schemes with SDGs to identify gaps and supplement the gaps with the efforts of the Board.

It was, however, observed that the State Government/Board had not developed any strategy for achievement of SDGs in the KK Region. The Board also did not periodically collect and analyse data on various backwardness indicators either along Nanjundappa committee indicators or SDG indicators.

The Government of India developed the National SDG Indicator Framework (NIF) and identified data-sources for collection of the data. The Board had not used this National SDG indicator framework for collection of data and monitoring of the progress of achievement of the Sustainable Development Goals in the region.

Further, to drive the spirit of competition among sub-regions such as districts and taluks, a composite SDG index to measure progress achieved disaggregated by districts and taluks, in individual Goals as well as a composite measure of all dimensions of development was required to be prepared.

The Board had not attempted to adopt any composite index for monitoring the progress of the Districts/Taluks on SDG indicators from time to time.

The environmental SDGs offer opportunities in the economic and social sectors for exploring eco-friendly economic activities such as wind power generation, eco-tourism *etc*. The Board, however, had not explored the interventions in the areas of achieving the environmental SDGs.

2.7 Natural Resource Accounting (NRA)

Natural Resource Accounting (NRA), an accounting framework to compile data relating to natural resources, is a way to prepare India to achieve Sustainable Development Goals (SDG) 2030. NRA would help in taking decisions not only about further usage of natural resources but also for ascertaining sustainability of these resources for future generation

One of the most crucial element of Sustainable Development is that it provides an outline of resource bases, pace of usage with an eye on their sustainability and embeds environmental aspects into the economic indices. Four of 17 goals directly relate to natural resource accounting and sustainability of these resources.

The KK Region has been gifted with affluent mineral resources such as lime Stone, Gypsum, Quartz, Bauxite, Kaolin, Red ochre, White Quartz, Iron Ore, Manganese, *etc*.

The Board did not conduct any studies on the sustainable utilisation of natural resources of the region and studies on the impact of its development works on the environment. Audit observed that contractors engaged by the implementing agencies, did not submit the required mineral dispatch permits (MDP) in respect of natural minerals used in the construction works. These are indicators to the unauthorized extraction of natural resources in the region by the contractors pointing to need for reinforcing the accounting and monitoring of the utilisation of natural resources.

2.8 District Level Gross Domestic Product

The information/statistics/indicators on economic activities in areas smaller than a State are often required by the Regional and State authorities for planning and policy purposes to know the development as well as standard of living of the people and their well-being at that level.

Finance Commissions and erstwhile Planning Commission and the present NITI Aayog recognised district as an independent geographical unit requiring attention in public policy formulation and implementation. Estimates of income of a district *i.e.,* District Domestic Product (DDP) is considered to be one of the most important indicator/barometer to measure the economic growth/ development of a district and the estimates of per capita income of the district to measure the standard of living of the inhabitants of the district. Preparation

of DDP estimates has gained added importance, as it is one of the three indicators to construct a composite Human Development Index (HDI) (other two being the life expectancy and the educational attainment) for inclusion in the Human Development Report being prepared by the State.

The Board, however, did not have data on the District Domestic Product statistics in respect of any of the six districts. Thus the Action plans of the Board was prepared without the considering the relative developmental levels of the districts.

The status of the region in terms of some of the commonly used indicators in the fields of Health, Nutrition, Literacy, Education, Sanitation, Skill Development, Tourism, Water supply, Forest cover, Air transportation *etc*., are discussed in detail in the succeeding paragraphs.

2.9 Health Indices

Health and development are closely linked to each other and can affect interchangeably. Regional health inequalities are mainly a result of differences in the level of economic development and differences in access to quality health care facilities. Aspirational Districts Programme (NITI Aayog) identified 13 indicators in the Health and Nutrition theme. Performance of some of the indicators of the KK Region compared to the rest of the State are discussed below:

2.9.1. Quality of care for pregnant women

The World Health Organization (WHO) has identified quality of care for women and children as a priority in addressing preventable maternal and child mortality and states a vision that 'every woman, child and adolescent should receive quality care throughout the continuum of their life course and care. It is recognised that for mothers and new-borns, the period around childbirth is the most critical.

❖ Ante Natal Care

Audit analysed the data of women receiving Ante Natal Care (ANC) during 2014-15 and 2020-21. During the 2014-15, the *percentage* of Pregnant women received 3 Ante Natal Checkups in the KK Region was significantly below the state average. Similarly, even during 2020-21, the *percentage* of pregnant women received four or more Ante Natal Checkups in the KK Region was below the State and rest of the State average as shown in **Table 2.5** below:

Table 2.5: Ante Natal Care for pregnant women in KK Region during 2014-15 and 2020-21

(in per cent)

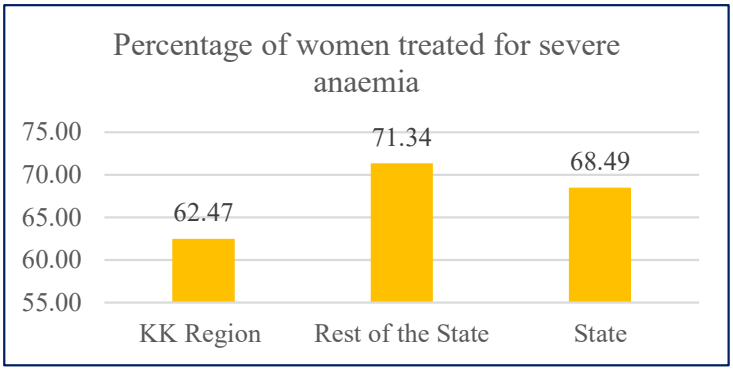
Region	2015-16 (3 Ante Natal Check-ups)	2020-21 (4 or more Ante natal Check-ups)
KK Region	86.27	87.31
Rest of the State	97.99	90.32
State Average	95.23	89.60

Source: Data obtained from Health and Family Welfare Department

❖ Women treated for severe anaemia

Audit observed that the percentage of women treated for severe anaemia was least in the KK Region with 62.47 *per cent* compared to rest of the State average (71.34 *per cent*) as shown in **Chart 2.8** below:

Chart 2.8 Analysis of women treated with severe Anaemia in KK Region



Source: Data obtained from Health and Family Welfare Department

❖ Institutional Births

Analysis of the family health survey data for the year 2015-16 and 2019-20 showed that though the *percentages* of institutional deliveries to total estimated deliveries in the six districts were improved, five out of six districts of KK Region were still having below State average *percentage* of institutional deliveries which was attributable to non-availability of adequate PHCs, FRU facilities, doctors *etc*., as discussed in succeeding paragraphs.

It was also observed that, though the Kalaburagi district receiving more share of funds from the Board as discussed in chapter III, the *per cent* of institutional births in the district had decreased by 2.4 *per cent* and Kalaburagi is the least performing district in the state during NFHS-5.

Though the *percentage* of Institutional births improved in Raichur and Koppal, they were second and third least performing districts in the State during NFHS-5 period.

A comparison of institutional births in the districts under KK Region with State is given in **Table 2.6** below:

Table 2.6: Percentage of Institutional births in KK Region

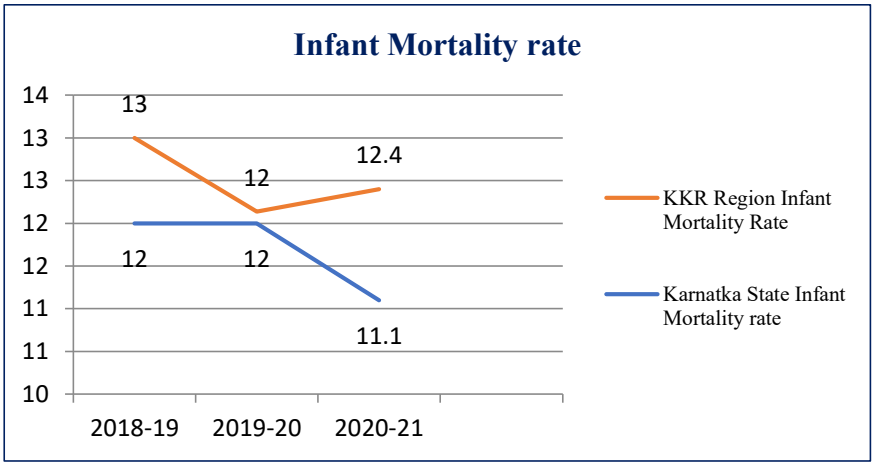
(in per cent)

Districts	NFHS-4 (15-16)	NFHS-5 (19-20)	Increase
Kalaburagi	91.1	88.7	-2.4
Raichur	79.7	88.9	9.2
Koppal	84.8	90.7	5.9
Yadagiri	90.5	93.3	2.8
Ballari	86.0	95.7	9.7
Bidar	98.0	99.0	1.0
State Average	94.0	97.0	3.0

2.9.2 Infant mortality rate

Nanjundappa Committee considered the infant mortality rate (IMR) as one of the most sensitive indicators of socio-economic development of the society. Audit analysis of the IMR in the State showed that though variations were noticed in IMR throughout the State it was higher in KK Region as compared to other parts of the State as depicted in **Chart 2.9.**

Chart 2.9: Comparison of Infant mortality rate during 2018 to 2021



Source: Health and family welfare Department

Thus the IMR of the region was more than the rest of the State and the divergence increased further during 2020-21.

❖ ***Under 5 mortality rate***

Audit analysis of the Under 5 Mortality Rate (U5MR) in the State showed that the U5MR in five out of six districts of KK Region is significantly higher than the State average in 2020-21 as shown in **Table 2.7** below:

Table 2.7: Under 5 mortality rate during 2014-15 and 2020-21

(in per cent)

District	2014-15	2020-21	Change
Ballari	13.03	17.48	4.45
Bidar	9.92	7.26	-2.66
Kalaburagi	11.67	9.2	-2.47
Koppal	6.98	10.6	3.62
Raichur	20.49	15.5	-4.99
Yadagiri	3.25	7.68	4.43
State	8.04	8.48	0.44

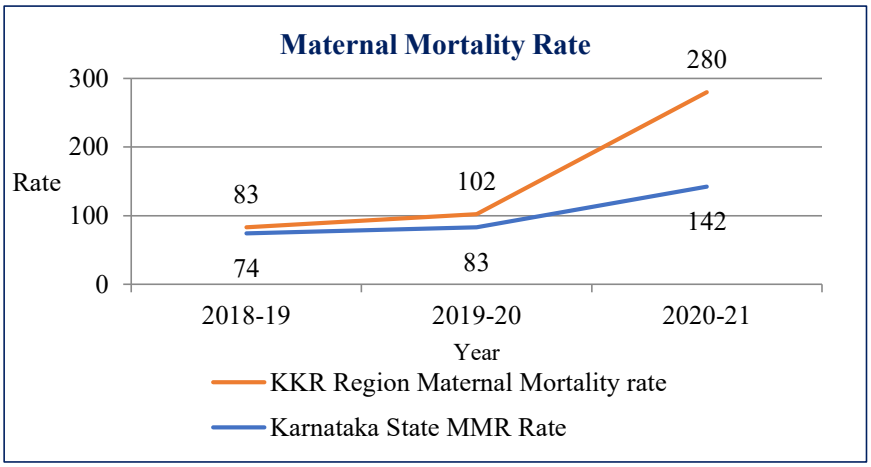
It was also observed that three out of the six districts of KK Region witnessed significantly higher increase than State from 2014-15 to 2020-21.

2.9.3 Maternal mortality rate

The persistence of high mortality among women particularly during critical period of pregnancy and delivery is attributed to the social and cultural practices which are deep rooted in the society. Analysis of data revealed that KK Region

had higher maternal mortality rate (MMR) than the rest of the State during the period 2018-19 to 2020-21, as shown in **Chart 2.10** below:

Chart 2.10: Comparison of maternal mortality rate during 2018 to 2021



Source: Health and family welfare Department

Thus, the MMR of the KK Region was more than the rest of the State and the divergence was further increased in 2020-21.

2.9.4 Status of Health Infrastructure in the region.

Government of India promotes quality certification process for health care institutions for enhancing patient satisfaction and improving quality standards across the hospitals of the country. The initiative was aimed to help the hospitals to get fast-track certification while enhancing healthcare services. There are three levels of quality certification: Gold, Silver and Bronze with Gold being the highest level under this initiative. The Board, however, did not have any data for analysing the health infrastructure in the region.

The Board stated (July 2022) that such studies were being facilitated and analysed at the State level including that for KK Region.

The reply is not acceptable as the Board was established for ensuring overall development of the KK Region. However, the Board had not collected the data for assessing the status of development of the Health indicators such as underweight in children, anaemia in women and children, reasons for low rates of institutional births in the region which are essential for redressing the regional imbalances.

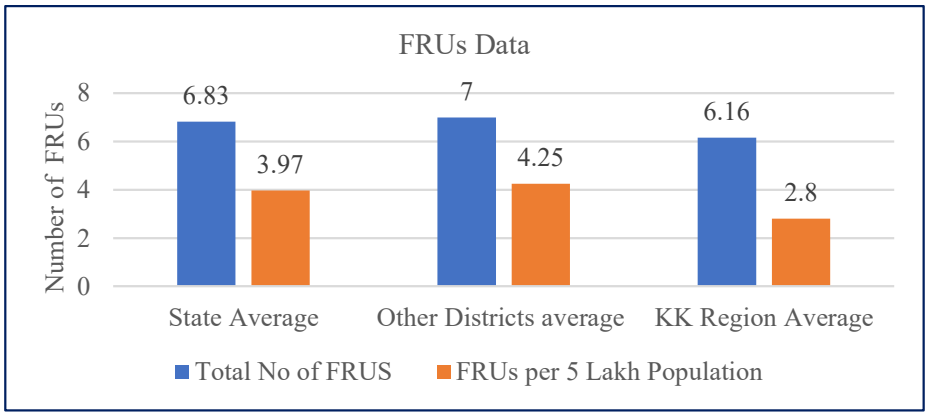
2.9.5 Number of First Referral Units per five lakh population

The NITI Aayog considered First Referral Units (FRUs)[4] per five lakh population as an indicator for improving the health services of women in addition to all emergencies. Analysis of data revealed that the KK Region had the lowest number of FRUs compared to the rest of the State due to which institutional births were least in the region as shown in **Chart 2.11**. During joint

[4] First Referral Units (FRU) provides comprehensive obstetric care services including like cesarean section, newborn care, emergency care of sick children, full range of family planning services, safe abortion services treatment of STI/RTI availability of blood storage unit and referral transport services.

physical verification, audit observed incomplete or non-functional hospital buildings.

Chart 2.11: Availability of FRUs per five lakh population



Source: Karnataka at a Glance 2019, Department of Economics and Statistics

2.9.6 Health Infrastructure Index

The Health Infrastructure Index (HII), comprising three indicators - doctors, beds in Government hospitals, and drinking water - is used to assess regional imbalances in health facilities. Health of the people, among other things, depends upon the number of doctors available.

➢ Number of doctors

The Nanjundappa Committee considered number of doctors per 10,000 population as an indicator of health. Analysis of the number of doctors per 10,000 population during 2013-14 and 2020-21 showed that there were wide variations in the availability of doctors in KK Region in comparison to the rest of the regions of the State, as shown in the **Table 2.8** below:

Table 2.8 Comparison of Doctors per 10,000 population

*(*in *per cent)*

Doctors			
District	**2013-14**	**2020-21**	**Change**
Ballari	0.44	0.41	-0.03
Bidar	0.52	0.54	0.02
Kalaburagi	0.52	0.67	0.14
Yadagiri	0.47	0.68	0.21
Raichur	0.32	0.69	0.38
Koppal	0.55	0.59	0.04

Source: Health and family welfare Department

It was observed that change in availability of doctors per 10,000 population was reduced in one district from 2013-14 levels. In the other five districts the increase in availability of doctors per 10,000 population was very nominal.

➢ Number of hospital beds

Beds in Government hospitals are of special significance particularly to the poor and the marginalized who cannot afford treatment in private hospitals/nursing homes. Number of hospital beds is an indicator in reflecting the level of health facilities in a society and hence, the Nanjundappa Committee used the number of beds in Government hospitals per 10,000 population as an indicator of health facility.

Analysis of the number of hospital beds per 10,000 population in the districts of KK Region is given in **Table 2.9** below:

Table 2.9 Comparison of Hospital Beds per 10,000 population

(in per cent)

Availability of beds			
District	**2013-14**	**2020-21**	**Change**
Ballari	10.56	12.32	1.76
Bidar	11.45	9.78	-1.67
Kalaburagi	9.13	8.43	-0.70
Yadagiri	4.98	5.85	0.87
Raichur	10.75	8.81	-1.94
Koppal	9.25	8.95	-0.30

Source: Health and family welfare Department

It was observed that in four out of six districts, the Government beds available for 10,000 population was reduced in 2020-21 from the 2013-14 levels.

The Board stated (July 2022) that such studies were being facilitated and analysed at the State level including that for KK Region. The Government endorsed the Reply of the Board.

The reply was not acceptable as the Board was established for ensuring overall development of the KK Region. However, the Board had not collected the data for assessing the status of development of the Health indicators such as IMR, MMR, and availability of FRUS, PHCs, Doctors, and Beds in hospitals in the region which are essential for redressing the regional imbalances.

2.10 Nutrition indices

Nutrition is a fundamental pillar of human life, health and development across the entire life span. Malnutrition in every form, presents significant threats to human health. According to Economic Survey of Karnataka 2020-21, Kalyana Karnataka Region has high incidence of malnutrition. The Board, however, had not devised any mechanism for collecting the indicators specific to the malnutrition in the region.

Analysis of the family health survey data for the year 2019-21 in respect of the NITI Aayog indicators showed that the percentage of women and children having anaemia was high in KK Region among the high percentage districts throughout the State.

2.10.1 Anemia in women

Analysis of the family health survey data for the year 2015-16 and 2019-20 showed that, Anaemia in women in the age group of 15-19 years in four out of six districts and five out of six districts in the age group of 15-49 years had increased more in the Districts of KK Region compared to the increase in State as shown in **Table 2.10** and **Table 2.11** below:

Table 2.10: Percentage of Anaemic women (15-19 years) in the KK Region and State

(In *per cent*)

District	NFHS -4 (15-16)	NFHS-5 (19-20)	Increase (*per cent*)
Raichur	62.2	64.8	2.6
Yadagiri	46.4	61.8	15.4
Kalaburagi	46.6	61.4	14.8
Ballari	49.7	58.5	8.8
Koppal	49.1	55.3	6.2
Bidar	49.4	51.7	2.3
Karnataka State	45.3	49.4	4.1

Source: National Family Health Survey

Table 2.11: Percentage of Anaemic women (15-49 years) in the KK Region and State

(In *per cent*)

District	NFHS -4 (15-16)	NFHS-5 (19-20)	Increase in (*per cent*)
Raichur	62.2	64.8	2.6
Yadagiri	46.4	61.8	15.4
Kalaburagi	46.6	61.4	14.8
Ballari	49.7	58.5	8.8
Koppal	49.1	55.3	6.2
Bidar	49.4	51.7	2.3

Source: National Family Health Survey

2.10.2 Child Nutrition

NITI Aayog considered children with Severe Acute Malnutrition (SAM) and Children with Moderate Acute Malnutrition (MAM) for assessing the regional disparity. The National Family Health Survey (2019-21) reported that 15.90 *per cent* of children are anaemic in Karnataka, particularly the children under five years of age, owing to malnourishment which is an important human deprivation. Status of KK Region in some of the indicators of child nutrition are discussed below:

- **Anaemia in children aged 6-59 months**

The percentage of children in age group of 6-59 months who are anaemic was high in all the districts of Karnataka compared to the State average during NFHS-4 and NFHS -5 period. Though the KK Region witnessed less increase in child anaemia during this period compared to the state, the three districts of

Yadagiri, Kalaburagi, and Raichur are in top three position of high anaemia in the State with Koppal and Bidar occupying fifth and eighth place in NFHS-5 data as detailed in **Table 2.12 below:**

Table 2.12: Anaemia in Children in the age 6-59 months (*in per cent*)

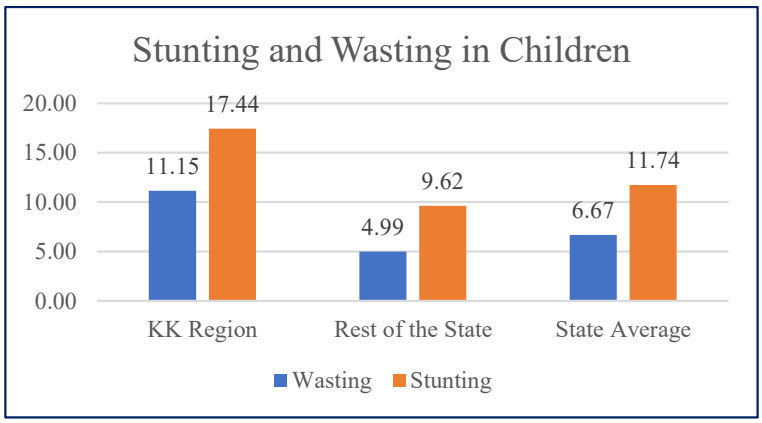
District	NFHS -4 (15-16)	NFHS-5 (19-20)	Change
Yadagiri	74	76	2
Kalaburagi	72.4	75.1	2.7
Raichur	70.6	73.6	3
Koppal	68.1	70.7	2.6
Bidar	69.1	69.3	0.2
Ballari	72.3	67.5	-4.8

Source: National Family Health Survey

➢ Stunting and wasting in Children

The KK Region has high prevalence of child stunting and wasting compared to the rest of the State as shown in **Chart 2.12** below:

Chart 2.12: Comparison of the Percentage of stunting and wasting in the Children in KK Districts



Source: Department of Women and Child Development

The Board had not collected data on the percentage of malnourished children in KK Region or undertaken any nutritional programmes to redress the imbalances of undernourished children. Rather, funds were released only towards construction of buildings. The reasons for malnourishment in children was not assessed so as to adopt measures for improving nutrition and reduce diseases in children particularly in early childhood which would lead to improved cognitive development and enhance the learning ability of children thereby ensuring economic growth.

2.11 Education Indices

2.11.1 Quality of higher educational infrastructure

The Quality of the higher educational institutions is also an important factor influencing the higher education and regional development. The key factors influencing the quality of higher education is the quality of faculty, curriculum standards, technological infrastructure available, research environment, accreditation regime, administrative policies, financing, evaluation and good

governance. The National Board of Accreditation (NBA) and National Assessment and Accreditation Council (NAAC) are the two major bodies responsible for accreditation of higher education institutions in India.

Analysis of the number of accredited institutions showed that KK Region lags behind the rest of the region in terms of the number of accredited higher educational institutions.

2.11.2 Student Transition Rate

The proportion of students enrolled to primary and continued education upto upper primary and from upper primary to secondary was one of the indicators to measure Sustainable Development Goals (SDG) of universalisation of education, as also a Key Performance Indicators of NITI Aayog.

Audit analysed the transition rate of students enrolled in Primary (I to V) to Upper Primary (VI to VIII) and from upper Primary to Secondary level (IX-X) for the years 2014-15 and 2020-21.

Table 2.13: Transition rate of students in the districts of KK Region

(In *per cent*)

District	Primary to Upper Primary		Upper Primary to Secondary	
	2014-15	2020-21	2014-15	2020-21
Bidar	84.64	96.67	86.79	94.76
Raichur	93.85	97.47	84.20	95.43
Yadagiri	96.05	97.42	85.81	92.17
Kalaburagi	96.00	96.24	87.52	93.30
Koppal	98.74	98.16	93.51	95.60
Ballari	102.06	100.25	85.21	95.28
State Average	**96.95**	**98.95**	**95.55**	**97.84**

Source: Education Department (DPI)

It was observed from the above table that, though the transition rate of students from Primary to Upper Primary schools and Upper Primary to Secondary schools has largely increased within the region, the districts are still lagging behind the State as follows:

Transition Rate- Primary to Upper Primary: Four districts of the KK Region were lagging behind the state average in the 2014-15 whereas in 2020-21, five districts of the KK Region were lagging behind the State average.

Transition Rate -Upper Primary to Secondary: All districts of the KK Region were lagging behind the State average in 2014-15 as well as in 2020-21.

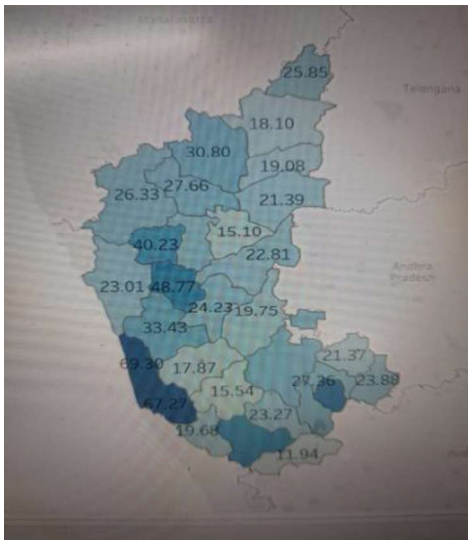
2.11.3 Gross Enrolment Ratio in higher education

Karnataka Higher Education Vision estimated an increase of Gross Enrolment Ratio[5] (GER) from 18 *per cent* in 2012-13 to 35 *per cent* during the year 2019-20. According to the reports, the GER as of 2020 in the higher education sector in the State was 32 *per cent*. It was, however, observed that the GER of all the

[5] GER is a statistical measure used to determine the percentage of students enrolled in different levels of education from the total population of the corresponding age group.

Kalyana Karnataka Districts were below the State average. The position of GER between 2013-14 and 2019-20 is depicted in the **Chart 2.13** below:

Chart 2.13: Gross Enrolment Ratio of the State during 2013-20 in higher education



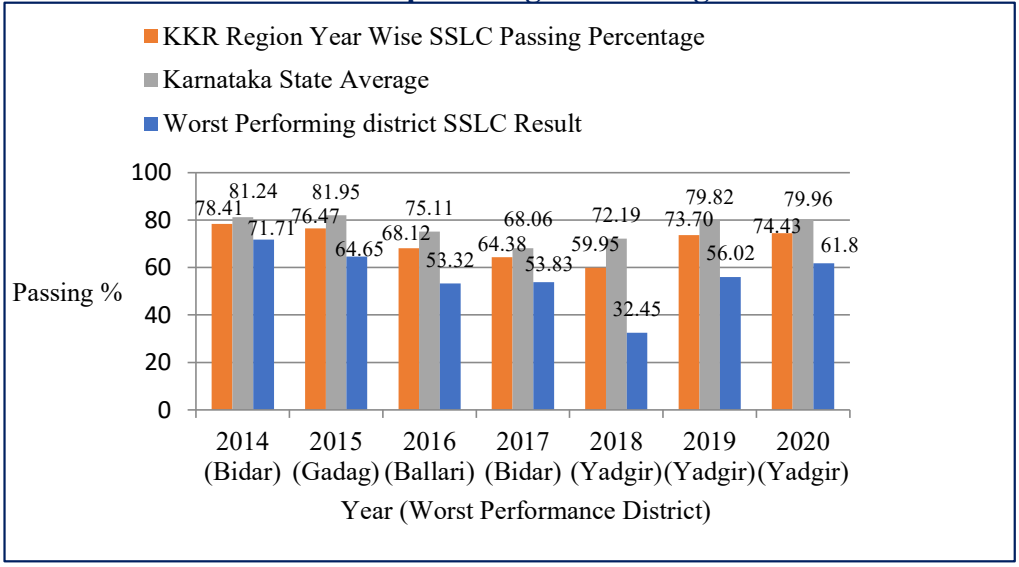
2013-14 | **2019-20**

2.11.4 Learning outcomes at Secondary level in students

The Continuous Comprehensive Evaluation (CCE) system introduced in schools were to ensure grade appropriate learning outcomes in schools. The NITI Aayog adopted this sub-indicator to evaluate the performances of children during their time in schools, so that gaps could be identified and worked on well in time. The first priority would be to ensure teachers' accountability to improve learning outcomes and to fill teacher vacancies. Better learning outcomes enable schools to retain children in their classes.

The Department of Public Instruction had not maintained data to evaluate the learning outcomes of students adopted by NITI Aayog indicators. Audit analysed the district-wise data on the learning outcomes of students of class 10 maintained by Karnataka State Secondary Examination Board (KSSEB) which revealed that pass percentage of students in districts of KK Region declined from 2014-15 to 2020-21 with Yadagiri district being the least performing district in consecutive years as shown in **Chart 2.14** below:

Chart 2.14: Analysis of Secondary School Leaving Certificate (SSLC) level Pass percentage in KK Region



Source: Karnataka State Secondary Examination Board

However, the Board was to collect data and analyse the status of the region in education sector and adopt measures for improving the learning ability of the students in coordination with the concerned Department.

2.11.5 Gaps in facilities in educational institutions in the Region

The Nanjundappa Committee considered number of institutions, accessibility and affordability as important variables in the dynamics of region. The Board was expected to analyse the infrastructure gaps in various sectors and undertake measures for bridging the gaps. It was observed that no such gap analysis was undertaken by the Board.

During the field visits Audit observed deficient infrastructure in educational institutions in the Region as shown in **Exhibit-2.1** below:

Non-availability of adequate class rooms and infrastructure
Having adequate number of instructional rooms with proper infrastructure is an essential requirement for every school. Despite substantial investments, audit during JPV observed lacunae in infrastructure in the schools of the region, as shown in Exhibit 2.1 below.
Exhibit-2.1

	
Duppalli in Yadagiri	*Hattikuni in Yadagiri*

Source: Photos taken during Joint Physical verification

The Government agreed (June 2022) during the exit meeting to analyse the gaps in co-ordination with the departments concerned.

2.12 Literacy Rate

Literacy Rate is the common indicator used for educational development. The Department related Parliamentary Standing Committee on Home Affairs Report on Constitution (one hundred eighteenth amendment) Bill, 2012 had considered the gaps in literacy levels in the KK Region. The Committee noted that after the introduction of Article 371D, Telangana region was able to enjoy better position in literacy and employment, on account of special provision in education and jobs.

The committee also considered the following:

- As against national average of 65.37 *per cent* and State average of 67 *per cent* as per 2001 Census, the literacy rate of Kalyana Karnataka Region was only 54.24 *per cent*.
- The gender gap in literacy rate was 25 *per cent vis-a-vis* 20 *per cent* in the State

The literacy rate of the population in the age group of seven years and above increased from 56.04 *per cent* in 1991 to 67 *per cent* in 2001 census to that of 75.60 *per cent* in 2011, with an improvement of 19.56 *per cent*. The improvement in the literacy levels since the introduction of the Article 371-J were not ascertained by the Board for effective implementation of the interventions in this domain.

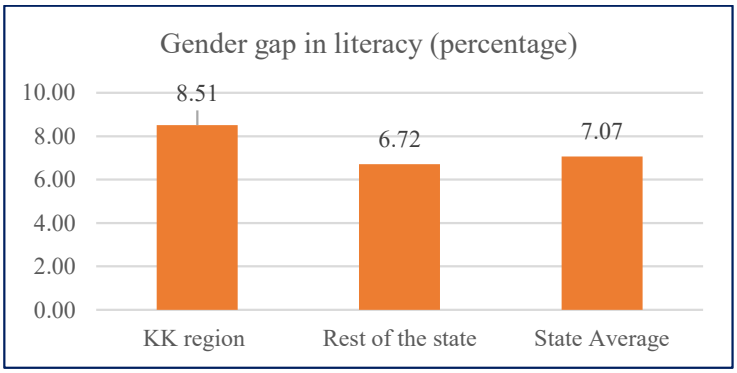
Audit observed that the Board, without obtaining the realistic data, had provided a sum of ₹1.49 crore to the Directorate of Mass Education for implementing the literacy programmes in the six districts. Of this, ₹93.50 lakh had only been utilised and balance was lying unspent with the Directorate.

❖ *Gender gaps in literacy*

Literacy is one of the foremost indicators of development in a society and forms an important input for overall development of individuals. Gender gap in literacy prevent women participation in the workforce hindering the society's development.

Analysis of the data on literacy rates up to 2021 available with the Department of Mass Education revealed that despite increase in female literacy, gender gaps in literacy persisted in every district throughout the State and it was more pronounced in the districts in KK Region, as shown in **Chart 2.15** below:

Chart 2.15: Gender gap in literacy in KK Region and the State



Source: Department of Mass Education

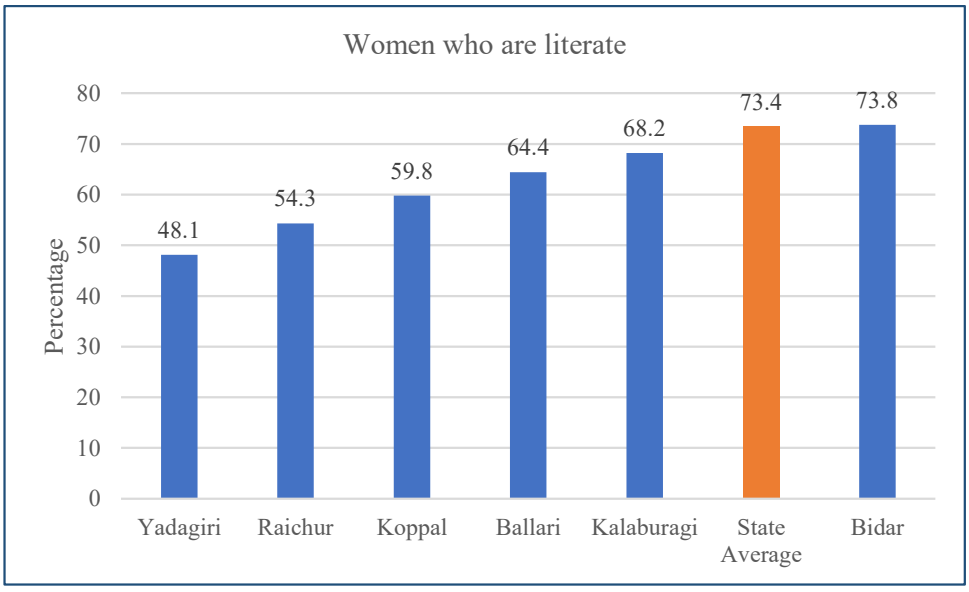
❖ ***Literacy rates***

The literacy level data either district-wise, taluk-wise, gender-wise or social community-wise was not collected by the Board or the Department of Mass Education during 2011 to 2021. Thus, the Board could not take up any community specific interventions with regard to improving literacy rate.

❖ ***Literacy rates in Women***

Audit further observed that the percentage of literate women was poor in five districts of KK Region and the least three districts had more than 10 *per cent* difference with the State average of 73.4 *per cent*. A comparison of women literacy rate in KK Region districts with the State is as shown in the **Chart 2.16** below:

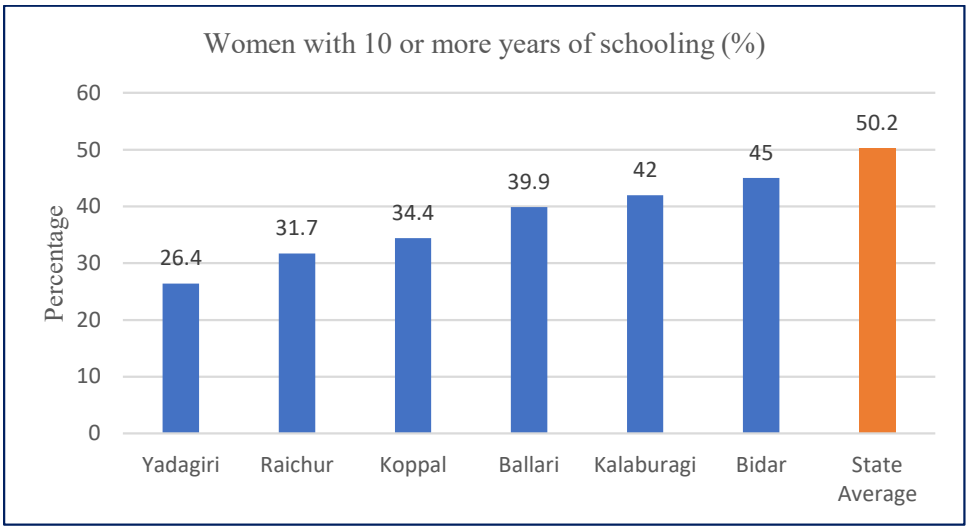
Chart 2.16: Comparison of women literacy rate in KK Region with the State



Source: National Family Health Survey 2019-21

Audit further observed that the percentage of women having 10 or more years of schooling was least in all the district of KK Region which ranged between 26.40 to 45 *per cent* as against the State average of 50.20 *per cent* as shown in **Chart 2.17.**

Chart 2.17: Comparison of KK Region districts with the State



Source: National Family Health Survey 2019-21

However, the Board had not collected data to analyse the status of literacy among women, social groups *etc*., nor undertaken literacy programmes in co-ordination with the Department of Mass Education which was one of the most important indicator for economic growth.

2.13 Skill Development Indices

2.13.1 Grading of Industrial Training Institutes

India is targeting to equip 400 million youth (by 2022) with industry relevant skills training in multiple trades/sectors through various skill programs/ schemes implemented at skilling institutions such as Skill Development Centres (SDCs), Vocational Training Providers (VTPs), Industrial Training Institutes (ITIs), and Polytechnics/Engineering Colleges, *etc*.

Directorate General of Training (DGT) under the Ministry of Skill Development and Entrepreneurship (MSDE) had brought about a scheme to grade all the ITIs across the nation on the basis of defined key parameters and to provide a "benchmark for comparison" amongst the institutes. The objective of conducting grading exercise for ITIs is to identify the good performing institutes and on the basis of their best practices provide an opportunity to the institutes lagging behind in some of the parameters, to improve upon. Grading would enable various stakeholders like ITIs, State Directorates and DGT to find out the key areas where they can improve further for overall strengthening of Vocational Education and Training Ecosystem.

The Board had not collected and analysed the data regarding the grading of ITIs in the region. Thus, the Board was not in a position to undertake the development works related to the infrastructure in the ITIs of the region as evident from its action plans.

2.13.2 Absence of data on status of employment in the region

Skills and knowledge are the driving forces of economic growth and social development of any region. The economy becomes more productive, innovative and competitive through the existence of more skilled human potential. The level of employment, its composition and the growth in employment opportunities are the critical indicator of the process of development in any economy including regional economy.

However, the Board had not collected and analysed the data regarding the total employment and unemployment in the region. The details of schemes/projects for skill development in the region was also not available with the Board.

2.13.3 Engineering research and development

The engineering research & development landscape across the country as well as in Karnataka has been witnessing an accelerated momentum over the last decade. Engineering research and development services include services involved in creation of new products (hardware or software) across the entire product life cycle (product conceptualization, design, development, testing, manufacturing, and maintenance).

Government of Karnataka brought out an Engineering Research and Development Policy (ER&D) with an aim of attracting a higher number of leading ER&D Multinational Companies (MNCs), Global Capability Centres (GCCs) and Engineering Service Providers (ESPs) to the State and provided them with a robust and well-connected ecosystem, including an easy access to a skilled talent base.

However, the Board had neither analysed the new Engineering Research and Development Policy launched by the State Government and nor proposed any activities and interventions in line with this Policy, with a view to adopt and implement the same in KK Region which can contribute to the development of the region.

2.13.4 Encouraging start-ups

Entrepreneurship is recognised as a critical factor for regional industrial development and a key tool for job creation, economic growth and innovation. The prevalence of start-ups is systematically and strongly related to local employment growth across and within regions.

However, the Board neither specified any indicator framework for monitoring the entrepreneurial activities nor was in possession of such activities in the region Board thus, failed to provide a stage for enthusiastic entrepreneurs with innovative ideas.

2.14 Tourism Potential

The tourism sector has been identified as one of the key sectors propelling the country's economic growth. Karnataka State has been ranked as the fourth

preferred destination among domestic tourists and third preferred destination for investments in the tourism sector.

Government of Karnataka brought out the Karnataka Tourism Policy 2015-20 with an aim to increase the contribution of tourism sector to the State GDP. The policy envisaged an integrated approach for developing a sustainable tourism industry in the State, backed by relevant infrastructure, effective institutional mechanisms and enhanced capacities to deliver on these targets. The policy also emphasised development of tourism in Kalyana Karnataka Region.

The Board, however, had not undertaken any assessment of potential tourism destinations and the infrastructure facilities, *etc*., related to the region. The Board also did not have any data related to the entities under the Kalyana Karnataka Region which have availed investment subsidies under the State Tourism Policy.

2.15 Water Supply Indices

Access to adequate quantity of safe drinking water is a basic requirement for human existence and has a very significant bearing on matters pertaining to livelihood including health and food security. Nanjundappa Committee indicator framework considered percentage of habitations having drinking water facility of 40 LPCD or more as an indicator for determining the regional backwardness.

The Board, however, had not collected habitation level data for the region to assess the progress in implementation of these interventions. Hence, audit could not ascertain the status of water supply and any improvement in this sector.

2.16 Sanitation- Swachh Sarvekshan

Swachh Sarvekshan[6] is an annual survey of cleanliness, hygiene and sanitation in cities and towns across India which was launched as part of the Swachh Bharat Abhiyan, aiming to make India clean and free of open defecation. The first survey, which was undertaken in 2016, covered 73 cities; by 2021, in its sixth edition, the survey was grown to cover 4320 cities in a bid to scale up the coverage of the ranking exercise and encourage towns and cities to actively implement mission initiatives in a timely and innovative manner.

The information with regard to the participation of the urban cities under Kalyana Karnataka Region in the Swachh Sarvekshan was not available with the Board.

2.17 Forest coverage and afforestation works

As per the information of land use statistics of Ministry of Agriculture, Government of India for the year 2017-18, in Karnataka, the total forest cover

[6] Conducted by Ministry of Housing and Urban Affairs (MoHUA) to rank all cities under Swachh Bharat Mission-Urban (SBM-U) with Quality Council of India (QCI) as its implementation partner.

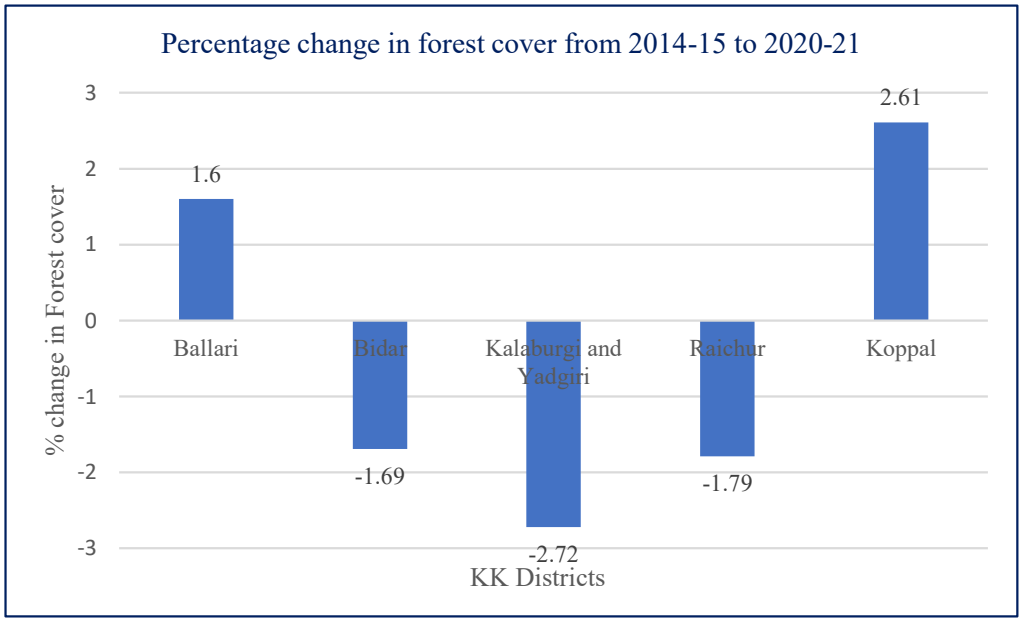
is 30.73 lakh hectares which constitutes 16.13 *per cent* of the total land area of the State.

As per the 2021 Assessment of Forest Report the percentage of forest cover to total geographical area of the district was less than one *per cent* in Koppal and Raichur, it was less than two *per cent* under Bidar and Kalaburagi districts.

Audit further observed that out of 28,038 works the Board had included in the AAPs for the period 2015-16 to 2020-21, only 10 works (just below 1 *per cent* of total works) related to forest with a meagre allocation of ₹3.18 crore.

The percentage change in forest cover between the years 2014-15 and 2020-21 is depicted in **Chart 2.18** indicated that while there was a marginal increase in three districts, the other three districts showed a reduction in forest cover.

Chart 2.18: Change in forest cover between 2014 and 2021 in districts under KK Region



Source: Date provided by Forest Department

2.18 Air transportation

Civil Aviation sector has significant potential to create jobs and business opportunities besides providing faster transportation to meet personal and social needs. The UDAN scheme envisaged under the National Civil Aviation Policy 2016 (NCAP 2016) of the Government of India, has focused on achieving greater regional connectivity through developing airports in regional urban centres across the country and bring air transportation facilities closer to regional population centres.

Audit observed that the work for airport sanctioned for Raichur was not yet commenced. The proposal for an airstrip for Ballari, which caters to World Heritage Centre at Hampi, Thungabhadra Dam, Sandur Mines and industrial areas around Ballari was still under consideration.

Thus, the Board did not collect, analyse and utilise the data on development indicators for policy formulation, planning and monitoring purposes. The Board stated (July 2022) that such studies were being facilitated and analysed at State level.

The reply is not acceptable as the Board was established for ensuring overall development of the KK Region and redressing the regional disparities. Analysis of data on health, education, agriculture, nutrition, skill development *etc*., were important for policy formulation, planning and programme implementation.