

HUMAN DEVELOPMENT REPORT





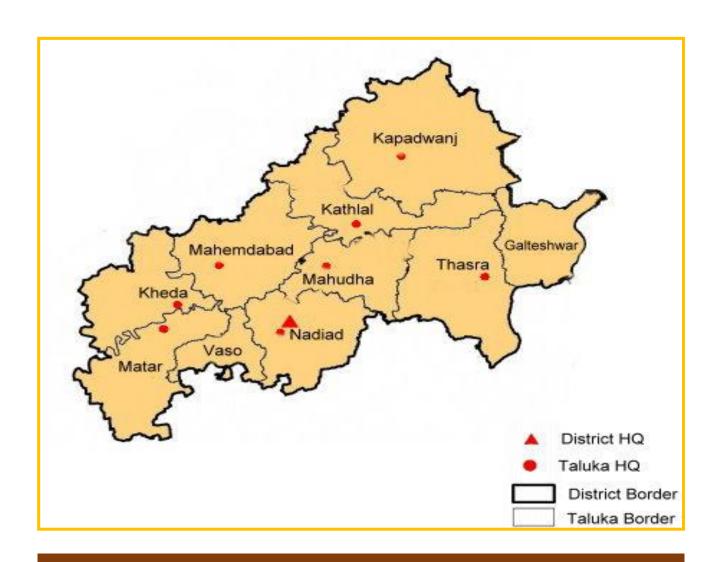
GUJARAT SOCIAL INFRASTRUCTURE DEVELOPMENT SOCIETY (GSIDS)

GENERAL ADMINISTRATION DEPARTMENT (PLANNING)

GOVERNMENT OF GUJARAT

DISTRICT HUMAN DEVELOPMENT REPORT

KHEDA



District Human Development Report : KHEDA

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Gujarat Social Infrastructure Development Society (GSIDS)

General Administration Department (Planning)

Government of Gujarat, Gandhinagar







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Message

Gujarat enjoys the reputation of being the most progressive and well administered state in the country. It's a matter of great pride that Gujarat state has come up with district Human Development reports to strengthen the process of grassroot level planning. The United Nations development programme under planning commission has collaborated with state government in the preparation of the district Human Development reports. The Government of Gujarat had initiated the process of integrating Human Development in planning and policy documents. The Kheda - DHDR is prepared under the aegis of Gujarat Social Infrastructure Development Society (GSIDS), General Administration Department (Planning).

The Kheda district Human Development report examines the development process of the district in the context of its relationship with Human Development. The district is well known as "Rice Bowl of Gujarat". The various dimensions of the Human Development like Health and Nutrition, Rural Development, Education, Employment and Women Development have been explored very well and shows that the district has shown good progress in all the dimensions of Human Development. The way forward also provides various challenges and recommendation for enhancing Human Development Index. I congratulate the core committee members of Kheda district, The District Collector Shri K.K Nirala (IAS), Praveena D.K (IAS) District Development officer, Shri Praveen Chaudhary (IAS) on probation, Miss Khushbu Jagatia who has studied and analysed this DHDR and all the officials related to the state who actively involved themselves in the preparation and finalization of DHDR-Kheda.

I compliment the General Administration Department (Planning), Collector Office, Kheda and Gujarat Social Infrastructure Development Society (GSIDS) for undertaking this project and I am sure that this report will be fruitful for policy makers to the concerned state and district level officials for overall planning and development of district.

Notatel
Nitinbhai Patel

MESSAGE

Human Development is a development paradigm which is beyond mere rise or fall of

national incomes. It is about creating an environment where people can develop their full potential

and lead productive, creative lives in accordance with their needs and interests. People are the real

wealth of nation. Development is thus about expanding the choices people have to lead lives that

they value.

The District Human Development Report is a Document which gives the present status of

Human Development in different talukas of the District. Human Development, requires focus on

the basic as well as crucial indicators of Human Development. Thus this report has highlighted

three important pillars which are: Education, Health and Livelihood.

I commend the efforts put in by stakeholders in preparing this publication and hope that it

will be useful to all the state & district level officials, policy makers and planners working towards

improving Human Development scenario of the District.

S. Aparna

Principal Secretary (Planning) and

Chairperson, GSIDS

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FOREWORD

In order to integrate Human Development into state planning in India the preparation of reports at state level has been started. Planning Commission-Government of India and UNDP had partnered Strengthening State Plan for Human Development (SSPHD) Programme, under which the Government of Gujarat had initiated the process of integrating Human Development in planning and policy documents.

This report provides significant analysis of Human Development Scenario and various aspects of human development are examined with respect to Health, Education, Employment and Women Empowerment in Kheda District. In Health Sector the district has made significant improvement in terms of sex ratio the most important indicator related to status of women, the district has also improved in terms of institutional deliveries, child immunization and nutrition and also the other major health disease have seen to be reducing. The District has made impressive gains in literacy rate for male and female and other important Education indicators and also the infrastructure related to education sector has improved, the district ranks at fifth position in the state in terms of literacy rate at rural level. Kheda district is well known as "Rice Bowl of the Gujarat state" and the cropping intensity tends to remain high. The way forward offers many recommendations and issues to improve upon the status of Human Development in Kheda District.

This report is an attempt to map the Human Development in Kheda district and it will be the guiding tool to determine the development strategy for Kheda district in future. I congratulate the core committee members of Kheda district, Miss Khushbu Jagatia who has studied and analysed this DHDR and especially to Mr. Praveen Chaudhary (IAS) on probation for his cooperation in preparing DHDR-Kheda. I would like to express my sincere thanks to all the line department and General Administration Department (Planning), and Gujarat Social Infrastructure Development Society (GSIDS) for providing all their support in completion of this report.

(K. K. Nirala)

Collector – Kheda Nadiad

PREFACE

The Human Development Index is a summary measure of average achievement in key dimensions of Human Development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. The HDI can also be used to question policy choices, asking how two countries with the same level of per capita end up with different Human Development outcomes. These contrasts can stimulate debate about government policy priorities.

Being a welfare state, Government is spending huge quantum of its budget on Human Development. Considering the amount spent on this sector and its importance, it is natural to get it documented there by the development process, progress and its path is compiled with reliable facts and figures. District Human Development Report is one such initiative taken by the Government of Gujarat through Gujarat Social Infrastructure Development Society (GSIDS). The report highlights the achievements made so far and identifies the gaps there by giving vision for the district administration as well as the Government.

The Kheda district consists of ten talukas. The Kheda district Human Development report has attempted to analyse the status of Human Development of all its talukas and district as a whole comprehensively. The report focuses on sectors like Health, Education, Nutrition, Rural housing and sanitation, Drinking water, gender issues, Agriculture and Animal husbandry. The report has done the gap analysis in true sense and is highlighted in The way forward. Report gives the roadmap for the future development. Kheda being an agriculture based district, a SWOT analysis has been done and projects the growth potential of agriculture in the district.

I congratulate the core committee members of Kheda district, specially to Shri Praveen Chaudhary for supporting in completion of this report, Miss Khushbu Jagatia who has studied and analysed this DHDR and all other officials who actively involved themselves in the preparation and finalization of DHDR – Kheda. I would like to express my sincere thanks to all the department members and General Administration Department (Planning), collector office, Kheda and Gujarat Social Infrastructure Development Society (GSIDS) for providing all their support in completion of this report.

PRAVEENA D.K. IAS

DISTRICT DEVELOPMENT OFFICER NADIAD - KHEDA

ACKNOWLEDGEMENTS

Kheda District Human Development Report has been an educative experience for GSIDS. We express our deep sense of gratitude to the Hon. Ms. S. Aparna (Principal Secretary and Chairperson GSIDS, General Administration Department (Planning), Government of Gujarat) for providing us an opportunity for such a challenging job to fulfil the vital project.

We would like to wholeheartedly thank the District Collector and District Development Officer, Kheda for providing support in required updated data. The cooperation of the officers of the line departments of Kheda district administration has been acknowledged. The support and guidance received during the preparation of this publication from Shri K.B.Shah, Joint Secretary (Planning) has played a vital role in adding to the quality of the document.

We are also thankful to the concern persons from the state level Departments (Education Department, Health & Family Welfare Department, WASMO and Census-Gujarat, who spared their time to provide us a clear picture about Kheda.

GSIDS had assigned the task of preparing Kheda DHDR to Sardar Patel Institute of Economic and Social Research (SPIESR). SPIESR has earlier submitted the draft report, but afterwards, it was completed jointly by a team of SPAC/SPA of collector Kheda & GSIDS. I appreciate efforts of Miss.Khushbu Jagatia, SPAC Kheda district and Miss. Mamta Mateda , SPA GSIDS who has studied and analysed this report .

We hope this endeavor will contribute towards perspective of "Human Development" in Kheda district and facilitate strategies for the future.

K. D.VashiDirector & Member Secretary
GSIDS

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EXECUTIVE SUMMARY

Human development cannot be achieved only by promoting health and nutrition or education and literacy or welfare of people through various schemes and other programmes, it requires effective development strategy that is conducive to the development of human capabilities and opportunities. The need for studying human development arises from the fact that there should be a close match between the rate of economic growth and the pace of human development. The focus should not only be on economic development but also on human development as economic growth and human development both are supplementary and complementary to each other. Human development is expansion of opportunities for human beings i.e. it is process of expansion of people's choices, as people want many things in life such as better health and nutrition, education, income and security in their life. The goal of human development is to provide these choices as the concept of human development includes five dimensions of:

- 1. Health
- 2. Education
- 3. Increasing income and reducing poverty
- 4. Gender equity
- 5. Social security.

This concept of human development based on five dimensions have been explored well in this report and this Kheda district human development report has been possible because of participation of large number of officials at district level and state level. The district human development report Kheda covers the several of aspects of human development pertaining to maternal and child health, burden of diseases, literacy attainment of people and infrastructure related to education, occupational structure, dynamics of industrial development and status of women emancipation. As the district is predominantly an agricultural district this report focuses more on agriculture, horticulture and animal husbandry as it acts as a major means of livelihood for people in Kheda district.

The introduction chapter of this report provides a brief introduction about Kheda district. Kheda district is bounded on the north by Sabarkantha district, on the east by Panchmahals district, on the west by Ahmedabad district and on the south by Anand district. The district has overall 10 talukas, 618 villages and 8 Nagar Palikas. There is an improvement observed in sex ratio, the district ranks 11th position in terms of sex ratio and sex ratio of the district is higher than that of state. There is an improvement observed in terms of housing condition, drinking water facilities, households with banking facilities and households by main source of lighting as per census 2011.

Health, Child Nutrition, and Food Security:

The district has improved on one of the most important indicators related to status of women i.e. "sex ratio", so the females per thousand males are about 940 in the district. The sex ratio has increased in all the talukas of the district between 2001-2011. It is a matter of great satisfaction that the district has been showing improvement in sex ratio, institutional deliveries, and maternal health – ANC & PNC registration and child immunization. The proportion of other health disease has also reduced in the district. The proportion of safe institutional deliveries also accounts to be more. The reported number of institutional deliveries is close to 100 percent. Proper nutrition management of new born however remains a matter of concern in the district. The district also needs to improve upon sanitation facilities like constructing more public toilets so that people can have access to latrines facilities nearby their homes. Kheda district being predominantly an agriculture district it is self sufficient in food production which ensures food security for people. The public distribution system is working efficiently in Kheda district through fair price shops.

Literacy and Education:

As per Census 2011, the literacy rate of Kheda district has improved substantially between the years 2001-2011. The literacy rate of male, female and other communities such as schedule caste and schedule tribe have also increased. As per census 2011 the literacy rate for male is 91.3 percent which has improved by 5.3 percent compared to previous census and the literacy rate for female is

73.5 percent which has improved by 16.6 percent compared to previous census. The literacy gap between men and women has also declined between the years 2001-2001. The basic amenities of schools has been worked with focus on drinking water facility, electricity, toilets and separate toilets for girls, library facilities etc and the data related to upper primary to higher secondary schools shows an improvement in whole district. However the focus should be on proper training of the teachers to improve upon the quality of education in the system and reducing the dropout rate for girls after standard 8th and 10th in the district.

Development of Agriculture and Animal Husbandry as a means of livelihood in Kheda District:

The Agro climatic condition, rainfall and soil type are extremely favorable for agriculture and horticulture production in the district. The cropping intensity of the district is 135 percent the district observes an average annual rainfall of about 857 mm, the district falls under agro climatic zone III. Kheda district is known to be "Rice Bowl of Gujarat" and it is major producer of tobacco too in the state. In order to boost agriculture in the district focus should be there on enhancing post harvest management techniques, value addition activities, improving over quality of seeds for the farmers. As maximum farmers are marginal farmers improving upon these activities will lead to increase in income and better standard of living for the farmers in the district.

Another major source of livelihood for people in Kheda district is animal husbandry. The district ranks 4th in terms of milk production in Gujarat, it is also 3rd largest contributor of buffalo population in the state. Kheda district's share is 7.30 percent in buffalo population to total buffalo population of the State. Kheda district has the highest contribution in terms of donkey population of about 17.21 percent. The percentage share of poultry is about 3.75 percent. Kheda district is covered under livestock insurance scheme in the state. The challenges related to animal husbandry faced by the district is shrinking of pasture lands for cattle feed in the district, The Kheda district farmers are facing feed and fodder shortage problems for their animals, it is extremely important to address this problem in order to increase milk yield and fertility. As better quality animals are not available locally, Intensive pure breeding (Selective Breeding) through artificial insemination programme may be undertaken so that better quality animals are available at the local level.

Poverty, Housing and Rural Development:

This chapter focuses on rural development and covers basic necessities such as housing, employment and sanitation. It is observed that houses have been constructed for rural poor under various schemes such as IAY and Sardar Awas Yojana. Evaluating sanitation facilities, the toilets for all concept in mission mode approach and toilets have been built based on baseline survey under Nirmal bharat abhiyan. A critical evaluation of IAY, NBA and MGNREGA has been done with reference to all the 10 talukas of the district. These schemes of housing, drinking water and sanitation have significant impact on human development. The status of below poverty line people by housing, land ownership and literacy has also improved.

Gender Equity: Evaluating status of Women in Kheda District

The status of women in Kheda district has been evaluated based on health, education, employment and crimes against women. The chapter also provides detailed evaluation of Mission Mangalam scheme which provides employment to women in Kheda district. The literacy rate for female, maternal health and employment of women has improved and incidences of crimes against women in the district have reduced. However the matter of concern for the district is the declining female worker participation rate which needs special focus. Maximum females are involved in animal husbandry so proper training related to livestock management techniques should be imparted. Though the analysis of status of women empowerment shows good picture yet there is still scope for improvement in their employment by imparting skills related to handicraft, cottage industries and gruh udhyog.

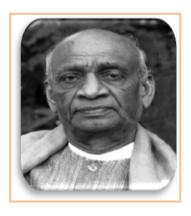
Chapter 1 Introduction

1.1 Kheda District: Brief History

The district has acquired its name from the town of Kheda also known as Kaira. It is a very ancient town situated near the confluence of the rivers of Vatrak and Shedhi. In Sanskrit, Kheda was called Khetak. Therefore it was known as Khetakpur also. Apart from this old name, it was also known as Charotar. It is said that the name Charotar is derived from Sanskrit word *Charu* which means beautiful. The specific references of the Kheda district are found in number of copper-plate grants issued by Maitraka Kings of Valabhi, who ruled over a large part of mainland Gujarat for a period of about three centuries (470-788 CE.). After the fall of Valabhi in 788 CE, the Rashtrakuta King Karka II extended his kingdom northward and shifted his capital to Khetaka. The Rashtrakuta king of Deccan had led a victorious expedition upto the Mahi River. The credit of extending Rashtrakuta power (788-950CE) goes to the kingKarka II. The period from 950 to 1300 CE is considered as Chalukya period.

It was ruled by the Babi dynasty during the medieval period which ended with the final defeat of the Mughal Viceroy Momin Khan II by the Marathas. In 1583 CE, three English merchants came to India with the intention to open a trade, with the letters from Queen Elizabeth to Akbar, the king of Cambay. Their efforts to trade were at first successful. But the Portuguese seized them and they were imprisoned. However, the English got permission to start a factory in 1613 and were strong enough to have the Portuguese dismissed from the Cambay town in 1616. The real connection of the British with Kheda district commenced from 1803. Part of Kheda district came into British possession in 1803 and the district served as a large military garrison for the British.

Mahatma Gandhi launched the Satyagraha Movement in Kheda against unjust taxation at the time of a famine in 1918 in which Sardar Vallabhbhai Patel along with Narhari Parikh, Mohanlal Pandya and Ravishankar Vyas mobilized a large number of peasants and organized an anti-tax peasant movement against the unjust British. Kheda Satyagraha forced the British to do away with the Salt tax and it marked the success of a non-violent peasant movement. Nadiad town in Kheda district is the birth place of Sardar Vallabhbhai Patel known as the "Iron Man of India" who played a leading role in the country's struggle for independence and who committed himself to the task of forging a united India through his diplomacy as well as an option to deploy military.



Mahatma Gandhi led a march from his ashram in Sabarmati to the coastal town of Dandi to protest against the British monopoly in salt and to mobilize the whole country against the unjust policies of the British. The first day's march ended in Aslali, a village in Kheda district where Gandhiji addressed a huge gathering. The march against Salt tax was symbolic which sparked a significant effect on the mass and caused large number of countrymen to join the fight against the British.





1.2 Administrative Set-up of Kheda District:

The District of Kheda existed since the very inception of Gujarat State. The division of Districts and Talukas in October 1997 – 1998 led to the formation of Anand District. Kheda was the main Headquarter of the district during the time of the division. After the division, Nadiad was made the new headquarter. The district is divided into 4 prants or sub-divisions – Kheda, Nadiad, Thasra and Kapadwanj. Previously the district had 10 Talukas with Nadiad as district headquarter which included Virpur and Balasinor talukas but now these talukas are merged with new district Mahisagar. The new talukas formed are *Vaso* and *Galteshwar* and other talukas being Mahemdabad, Kapadwanj, Kathlal, Mahuda, Thasra, Matar, Kheda and Nadiad.

There are total 10 talukas and 618 villages in the district. The Collector is the administrative head of the district, who is also the District Magistrate. Collector office is situated in Nadiad town which looks after the administration of the whole district. Each sub division is under the charge of a Sub Divisional Magistrate (SDM) whereas each taluka is looked after by a Mamlatdar. Besides, there are 10 Municipalities and total 573 village Panchayats including some group Panchayats which look after the administration. Moreover, there are 10 Tehsil Panchayats, 8 Nagar Palika, and 3 Municipal Bureau which help the district in the local administration.

Table 1.1 Number of Talukas and Administrative Setup of Kheda district					
Nagar Pakkas Taluka wi		Taluka wise Number of	a wise Number of Gram Panchayats/ group Gram Panchayats		
Talukas	Nagar Palikas	*GGP	** <i>IP</i>	Total Gram Panchayats	
Kheda	Kheda	2	35	37	
Kapadvanj	Kapadvanj	18	70	88	
Virpur		13	17	30	
Balasinor	Balasinor	9	31	40	
Kathlal		6	45	51	
Mahemdabad	Mahemdabad	5	58	63	
Matar		3	49	52	
Nadiad	Nadiad,Chaklasi,Kanjari	1	57	58	
Mahudha	Mahudha	2	38	40	
Thasara	Dakor	3	97	100	

*GGP: Group Gram Panchayats,(villages having more than one revenue village)**IP: Independent Panchayats, Source: Census 2011

1.3 Geographical location:

The whole district lies between 22°30' to 23°17' N and 72°30' to 73°34' E. The total geographical area of the district is 3958.84 sq. km. The district is bounded on the north by Sabarkantha district, on the east by Panchmahals district, on the west by Ahmedabad district and on the south by Anand district. Geographically, the district has a small hilly area only in northern parts of Kapadwanj and Balasinor Taluka. The remaining portion of the district is plain sloping gently from the North-East towards the South-West.

Table 1.2 Geographical Features		
Latitude	22°30' to 23°18' North	
Longitude	72°32' to 73°37' East	
Geographical Area	3958.84 Sq. Km.	
Source : District Statistical Office		
Nadiad ,Kheda		

1.4 Physiography:

Hills

Except for a small hilly area in the northern part of Kapadvanj and Balasinor Talukas and along the lower reaches of the Mahi River where the bank is cut by ravines, the district is an unbroken plain sloping gently from the north–east towards the south-west.

Forests

The district has mainly Tropical Dry Deciduous Forests. The district has a reserved forest area of 62.77sq km and it is mainly located in Balasinor, Kapadwanj and Virpur taluka. The State Government through Forest Department Authority has undertaken various concrete steps relating to forestry and waste land development. The Forest Department is having network of nurseries in all the tehsil for supplying of seeds. There is no production or collection of forest goods in the district. The district has no big forest area except some forest in Balasinor and Kapadwanj Talukas where Teak, Babul, Neem, Mahuda and Mango trees are grown.

Rivers

Kheda district is situated between two rivers Mahi and Sabarmati, two principal perennial rivers. The river Mahi is known as Mahisagar. Sabarmati River in the district is 88 km. Other rivers of the district viz. Shedhi, Vatrak, Meshwo and Khari meet Sabarmati River at its left bank. Moreover, there are Luni ,Varansi and Mahora rivers, which are seasonal and very shallow. Bajaj Sagar dam is situated in Rajasthan on Mahi River, while Wanakbori Dam is situated on Mahi at Wanakbori in Kheda district. There is no coastal area in Kheda district.

Table 1.3 Rivers in Kheda District			
Name of River	Route of River		
Name of Kiver	Across the Talukas	River side villages	
Shedhi	Nadiad,Mahudha,Matar, Kheda,Mahemdavad,Thasara,Balasinor	24	
Vatrak	Kheda, Mahemdavad, Matar, Kathalal	24	
Mesvo	Kheda, Mahemdavad	14	
Mahor	Kapadvanj, Kathalal, Mahudha, Nadiad	22	
Sabarmati	Kheda, Matar	5	
Mahisagar	Balasinor, Thasara	17	
Luni	Nadiad, Mahudha	11	
Kahri	Kheda	4	
Lavri	Virpur	1	
Varasi-Dhamni	Kapadvanj	4	
	Total	126	
Source: District Statistical Abstract-2009			

1.5 Transportation

Road Connectivity:

The entire district length of road network is 1023.00 km which consists of major district roads 182.00 km, other district roads 44.00 km, village roads 66.00 km. National highway covers 205 km length while state highway covers 526.00 km length of Kheda district. National Highway No. NH 8 and NH 59 passes through the district. National Highway (NH) 8 connects the city with smaller towns and villages offering excellent, affordable and rapid transport service for business, education and leisure. Gujarat State Transport buses connect Nadiad to other major cities of Gujarat as well as neighboring states. National express

Table 1.4 Road lengths in Kheda (as on 31st March, 2014)		
Road Category	Road Length in Km.	
National Highway	205.00	
State Highway	526.00	
Major Dist. Road	182.00	
Other Dist. Road	44.00	
Village Road	66.00	
Total	1023.00	
Source: R & B Department, Nadiad		
Major Dist. Road Other Dist. Road Village Road Total	182.00 44.00 66.00 1023.00	

highway (Ahmedabad – Vadodara) passes through the District. The newly built Gujarat Expressway (a limited access divided highway) has an exit for Nadiad offering a rapid transport service to Ahmedabad, Vadodara or Anand.

Rail Connectivity:

Kheda district is well connected with other districts and cities of the state. Broad gauge Western Railway (Delhi-Mumbai) also runs crosses the district that connects the district to Delhi, Mumbai

and Ahmedabad. The Ahmedabad-Mumbai railway line of the Western railway passes through Nadiad and it serves several places in the district. The railway junction is also connected to Vaso and Bhadran on a narrow gauge line as well as Modasa on a meter gauge line.

Air Connectivity:

The nearest airport is located at Vadodara which is about 38 km from district headquarter Nadiad. The airport connects the district to important cities such as Ahmedabad, Delhi, Mumbai and Pune.

Port Connectivity:

There is no port in Kheda district. The nearest ports are Hazira and Dahej.

1.6 Travel and Tourism

Dakor

Dakor is the most famous religious place of Lord Ranchhodraiji in Gujarat. It is located at a distance of 33 km from Nadiad Taluka and attracts thousands of pilgrims every year. It has eight domes and twenty four turrets covered with gold leaves.



Dinosaur and Fossil Park

Raioli in Kheda district is a treasure of fossils and fossilized eggs of a 10 meter long dinosaur. These fossils are about 65 million year old. The park has some basic plaster models and information about the dinosaur.

Santaram Temple –It is a popular pilgrimage site in Gujarat dedicated to Saint Santaram Maharaj who is believed to be the incarnation of Hindu trinity of Lord Brahma, Vishnu, and Shiva, depicted with three heads and six hands, There is one temple of Meldi Mata in Kheda, which holds annual fair every year on the 13th 14th and 15 February. Around 100000 people visit Kheda during these days.



Water Structures - Kapadwanj Taluka has two subterranean water structures a Kund and the Battris Kothani Vav. The Kundis a large square tank with steps on all four sides leading to the water. The Vav consists of five descending stories. The columns that support the pavilion roofs have beautiful carvings.

The Galteshwar Monument-

Galteshwar is known for the ancient temple. It is situated on the confluence of the rivers Mahi and Galti. Galteshwar is an ancient Shiv temple and also a place where Galav Muni had his Ashram in early times. The temple is a protected monument and belongs to the Chalukyan period. This is evident from the plan of the shrine, which consists of a garbhagraha (shrine proper) and mandapa. The outer wall of the temple depicts architectural beauty belonging to the ancient period. The mandapa or portico is about 12 ms. each way, and its roof is supported by 8 pillars of the central dome and by the smaller ones standing in the screen walls that surround it. The inner eight columns are each 4.3 meters in height, have double capitals and are square for the lower third part of their height, then through an octagonal and sixteen-sided belt are changed into cylindrical form. There is a perennial flow of underground water round the Shiv Ling in the temple. It is believed that the water of the river Galti flows here through a perennial stream. Fairs are held here on Janmashtmi and Shivratri festival and on every Monday of the month of shravan.



Chapter 2

Demographic Features







2.1 Population and Demographic Features of Kheda District

As per census 2011 the population of Kheda district is **2299885** of which males were 1185727 (51.55%) and females were 1114158 (48.45%) as shown in the figures. The district has 3.8 percent of state's population and 2 percent area. The total population in urban area is 523609 (22.8%) and total population in rural area is 1776276 (77.2%). The density per sq.km is 582 in 2011 which was 479 as per census 2001.

Figure 2.1: Population Density of Kheda and Gujarat

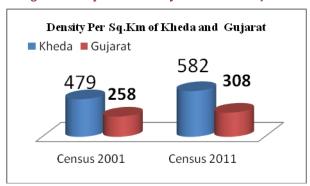
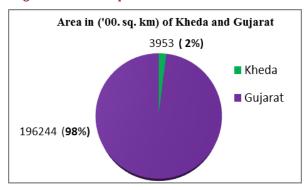
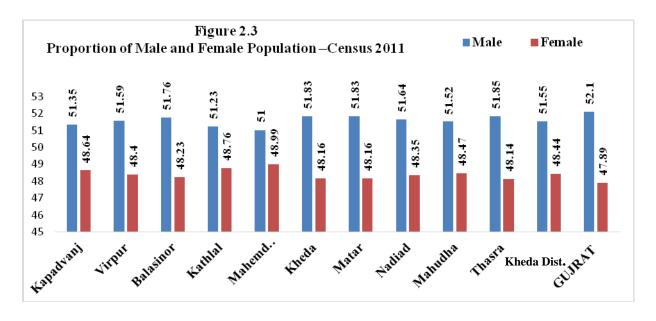


Figure 2.2: Area in Sq.Km



Source: Census of India 2011



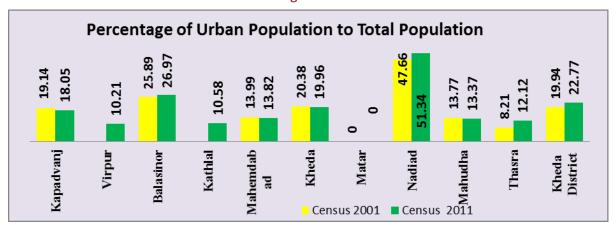
Source: Census of India 2011

2.2 Rural and Urban population:

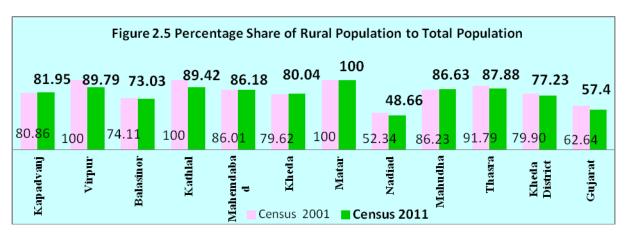
The share of urban population in Kheda district is 22.7% while the rural population stands at 77.3%. The share of urban population in Gujarat is 42.6% and the share of rural population in Gujarat is 57.4%.

As per census 2011 the urban population of Kheda district is about 523609 of which 270530 (51.66%) are males and 253079 (48.34%) are females where the rural population of Kheda is 1776276 of which 915197 (51.52%) are males and 861079 (48.48%) are females.

Figure 2.4



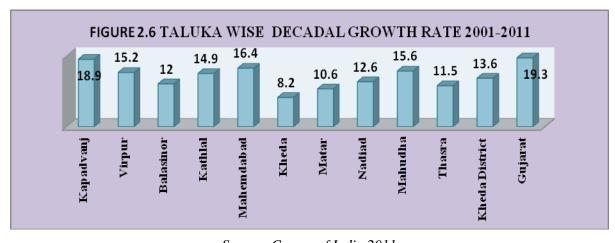
*Percentage of Urban population for Kathlal Taluka as per census 2001 is not available. Source: Census of India 2001/2011



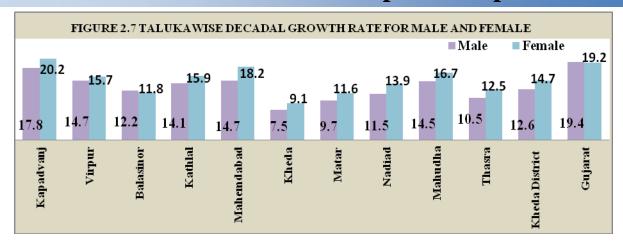
Source: Census of India 2001/2011

2.3 Decadal Growth Rate (DGR):

The population growth during 2001-2011 is **13.61** percent compared to 13.3 percent during 1991-2001. The percentage of decadal growth of persons in **rural** area has decreased from 14.3 percent (1991-2001) to **9.79** percent (2001-11). Conversely the percentage of decadal growth for **urban** area has increased from 9.5 percent to **28.82** percent. Talukawise decadal growth rate is given in the Figure 2.6 shows that the highest DGR is in Kapadwanj taluka 18.9 percent and lowest is in Kheda taluka 8.2 percent.

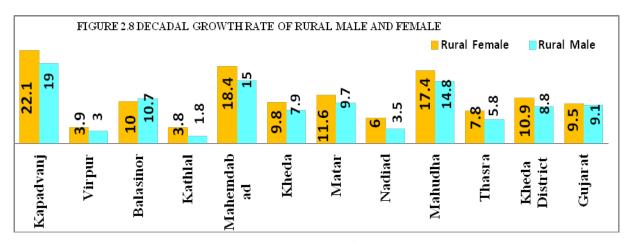


Source: Census of India 2011

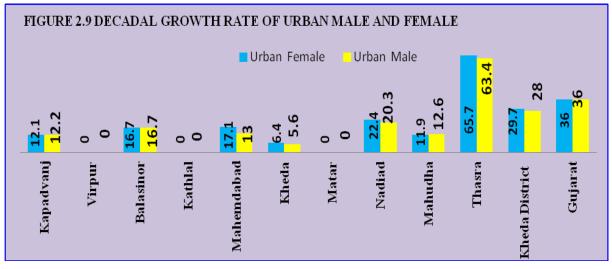


Source: Census of India 2011

The **male** population grew by 12.6 percent during 2001-11 wherein DGR for rural male was 8.8 percent and urban male was 28.0 percent. The highest DGR in terms of male is observed in Kapadwanj taluka 17.8 percent and lowest is in Kheda district 7.5 percent. The **female** population grew by **14.7 percent** during 2001-11 wherein DGR for rural female was 10.9 percent and urban female was 29.7 percent. The highest DGR in terms of female is observed in Kapadwanj taluka 20.2 percent and lowest is in Kheda district 19.1 percent.



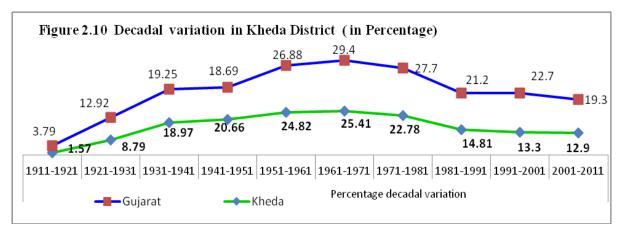
Source: Census of India 2011



Source: Census of India 2011

Percentage Decadal Variation:

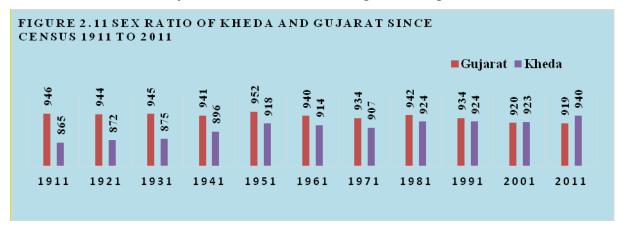
The percentage decadal variation of Kheda district is shown in the figure.



Source: Census of India 1911 to 2011

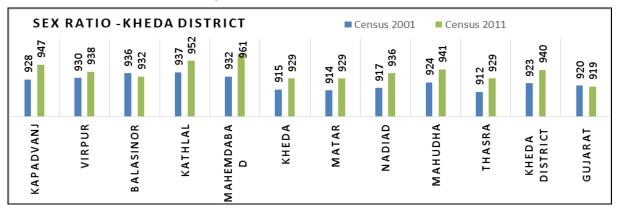
2.4 Sex ratio:

The sex ratio of Kheda district as per census 2011 is **940** and has increased compared to previous census 2001(923). The sex ratio of Kheda (940) is higher than that of the Gujarat (919). As per census 2011 the sex ratio in **rural** area is **941** and for **urban** area is **935**. The sex ratio in census 2001 for rural areas was 922 and urban area was 923. In previous census 2001 Kheda district ranked 19 in terms of sex ratio in Gujarat and now it is ranks 11th position as per census 2011.



Source: Census of India 1911 to 2011

Figure 2.12 Sex Ratio in Kheda District



Source: Census of India 2001/2001

2.5 Child population:

As per census 2011 the child population is **291133**. The percentage of child population in census 2011 is 12.7%. It has decreased compared to previous census 2001(14.7). **The child sex ratio** as per census 2011 is **896**, it has increased compared to previous census 2001(876). The child sex ratio in rural areas is 903 and in urban areas it is 867 as per census 2011.

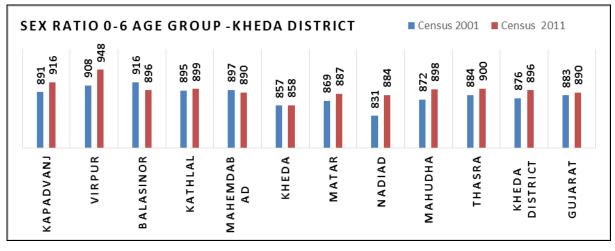
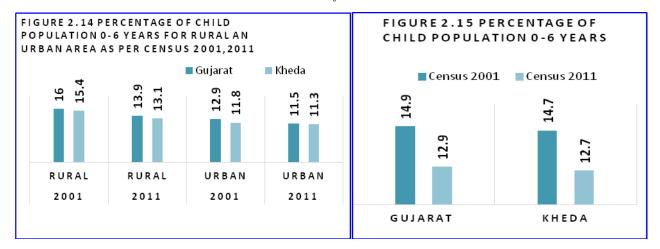


Figure 2.13 Sex Ratio in the age group of 0-6 years in Kheda District

Source: Census of India 2001/2001



Source: Census of India 2001/2001

The child sex ratio of the district has improved over the years and there is a significant improvement in rural areas where it stood at 903 in census 2011 whereas it was 867 in census 2001. But the figure is still low in urban areas as it is 867 as per census 2011.

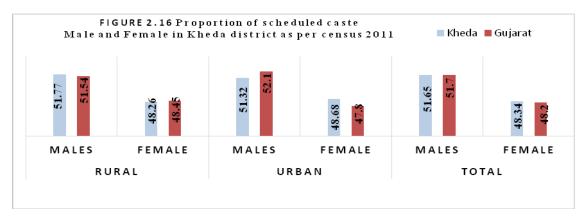
2.6 Population of scheduled castes and scheduled tribes:

Around 5.03 percent of the population in Kheda is the scheduled caste and 1.75 percent is scheduled tribes.

2.6.1 Scheduled Castes Population:

The population of scheduled castes as per census 2011 is 115631(2.84% of the state's SC population of 4074447) of which males are 59734 and SC female is of 55897. The total population of SC in rural areas of Kheda district is 867994 which consist of 44935 males and 41859 females and the total population of SC in urban areas is 28837 which consist of 14799 males and 14038 females.

	Table 2.1 Scheduled Castes Population										
District	Year % share of SC population to the total SC population of the state % share of SC population to the total population of the district										
	2001	2.95	5.24								
Kheda	2011	2.84	5.03								
	Source: Census of India 2011										

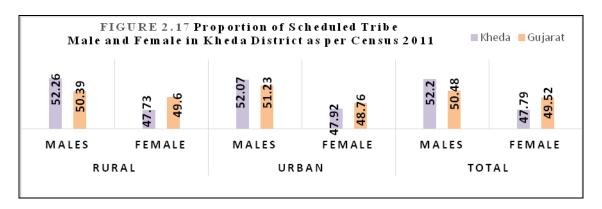


Source: Census of India 2011

2.6.2 Scheduled Tribes Population:

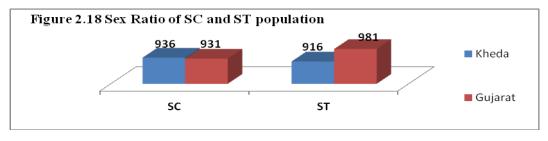
The scheduled tribe population as per census 2011 is 40336 in Kheda district (0.45% of the state's ST population and 1.75 percent of the total population of Kheda) of which 21057 are males and 19279 are females. The total scheduled tribe population in rural areas is 27275 of which 14255 are rural males and 13020 are rural females. The scheduled tribe population in urban areas is 13061 of which 6802 are urban males and 6259 are urban females.

	Table 2.2 Scheduled Tribes Population										
District	% share of ST population to the total year ST population of the state population of the district										
Kheda	2001	0.43	1.60								
Kiieua	2011	0.45	1.75								
	Source: Census of India 2011										



2.6.3 Sex Ratio of scheduled caste and scheduled tribe population:

Sex Ratio for Scheduled Castes is 936 for Kheda district where it is 931 for Gujarat. For Scheduled Tribes, Sex Ratio is 916 for Kheda district and it is 981 for Gujarat.

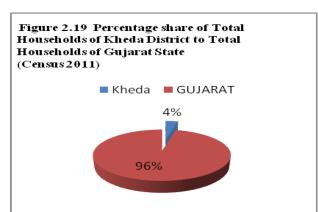


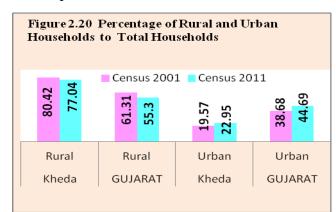
Source: Census of India 2011

The sex ratio for STs in Kheda district is very low compared to the overall sex ratio for STs in Gujarat as well as India. Sex ratios for tribal communities have always been better because of the culture of gender parity and no social bias against women among tribal communities. But the figures for Kheda district are alarming and needs to be addressed.

2.7 Household Enumeration as per Census 2011 in Kheda District:

The total number of households has increased from 395493 in census 2001 to **466856** in census 2011. The percentage share of rural and urban households shows that about 22.95 percent of households are in urban areas and the share of rural households is about 77.04 percent in census 2011.





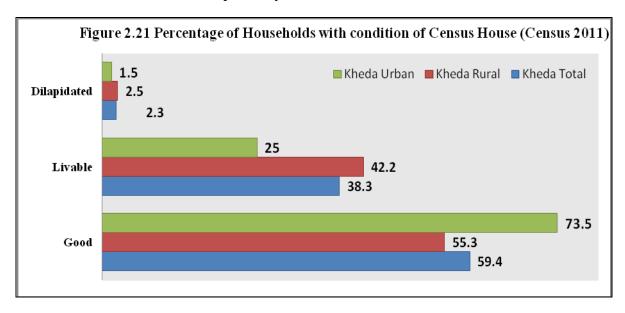
Source: Census of India 2001/2011

Tab	le 2.3 Percentage of Hou	seholds as per Census 200	01 and 2011
District / Taluka	T/R/U	Percentage	of Households
District / Taluka	1/K/U	Census 2001	Census 2011
Kapadvanj	Total	11.34	11.78
Virpur	Total	4.16	4.30
Balasinor	Total	6.15	6.17
Kathlal	Total	9.04	9.06
Mahemdabad	Total	11.17	11.17
Kheda	Total	5.91	5.60
Matar	Total	7.22	7.047
Nadiad	Total	24.28	24.61
Mahudha	Total	5.67	5.64
Thasra	Total	15.02	14.58
	Total	100(395493)	100(466856)
Kheda District	Rural	318077	359691
	Urban	77416	107165
	Source: Cen	sus of India 2001/2011	

2.7.1 Indicators used for Household Enumeration:

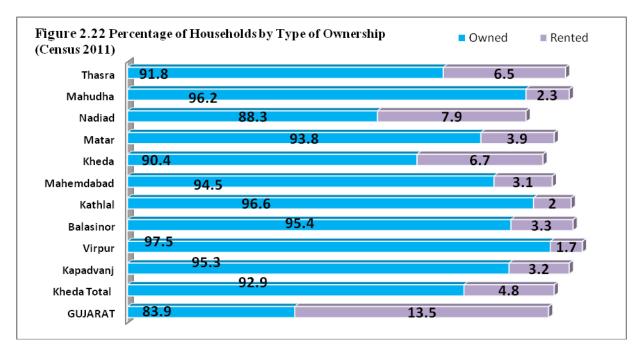
Percentage of Households with condition of census house, type of ownership:

As per census 2011 the total numbers of households in good conditions are about 59.4 percent in Kheda district. About 55.3 percent of households in rural areas and 73.5 percent in urban areas are in good conditions. The percentage of households which are livable is 38.3 percent and in rural areas 42.2 percent houses are livable whereas this figure for urban areas stood at 25 percent. The percentage of dilapidated households in Kheda is 2.3 percent and this figure is 2.5 percent and 1.5 percent for rural and urban areas respectively.



Source: Census of India 2011

The figure shown below represents the percentages of households on the basis of type of ownership, households with ownership being 92.9%, living in rented house are 4.8%.



Percentage of Households by Main sources of Lighting:

The total number of households having electricity as a main source of lighting are 80.5 percent, in rural areas it is 77.1 percent and in urban areas it is 92.3 percent. There is still a scope for electrification of the remaining households.

Tab	Table 2.4 Percentage of Households by Main Source of lighting in Kheda District 2011											
District/Stat	e	Electricity	Kerosene	Solar energy	Other oil	Any other	No lighting					
Kheda	Total	80.5	17.1	0.1	0.2	0.3	1.8					
	Rural	77.1	20.2	0.1	0.3	0.3	2					
	Urban	92.3	6.4	0.1	0.1	0.1	0.9					
Gujarat	Total	90.4	8.1	0.1	0.2	0.2	1					
	Rural	85	12.8	0.2	0.3	0.3	1.4					
	Urban	97.2	2.1	0	0.1	0.1	0.5					
			Source: Cen.	sus of India 201	!1							

There are about 17.1 percent of total households in the district which use kerosene as a main source of lighting. The data shows that there are still 1.8 percent households in Kheda district which do not have lighting sources, 2 percent being in rural areas and 0.9 percent in urban areas.

Kapadvanj 81 Thasra Virpur Electricity *7*13.1 Mahudha₈₀ Balasinor 15.6 23.9 80.5 Kerosene 73.6 Kathlal 87.1 Nadiad Other source (Solar 70.9 energy+ Other oil+ 86.8 Any other Mata Mahemdabad 86.3 Kheda

Figure 2.23 Talukawise Percentage of Households by Main Source of lighting (Census 2011)

Source: Census of India 2011

• Percentage of Households by type of Fuel used for Cooking:

The data of census 2011 show that the district is still dependent on wood as a major source of fuel for cooking. About 64.2 percent of households are dependent on firewood as a source of cooking whereas only 21 percent of households use LPG and PNG as a source of cooking. The remaining households dependent on crop residue are 8.4 percent, biogas is 0.9 percent and cow dung cake are one percent.

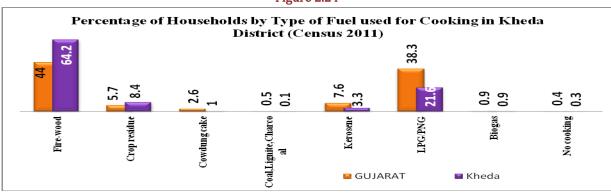
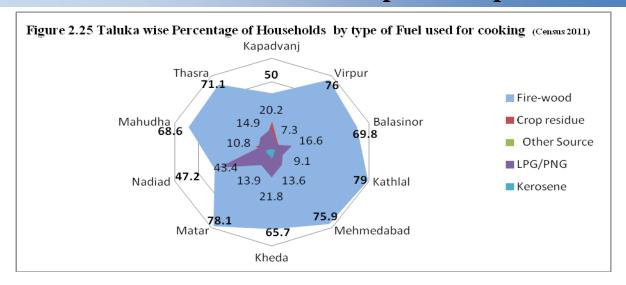


Figure 2.24

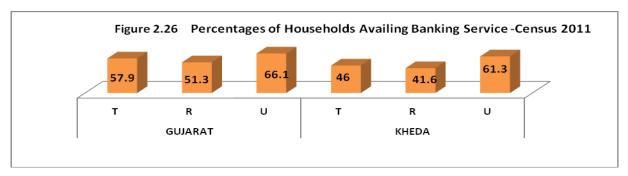


*Percentage in Radar chart shows district usage of Fire wood and LPG/PNG.

Source: Census of India 2011

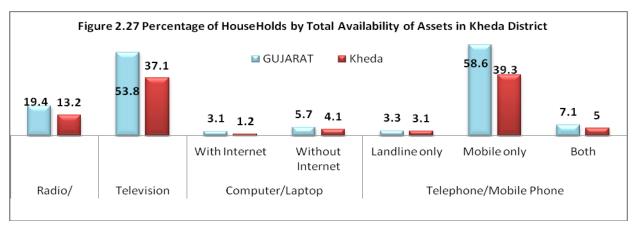
Percentage of households by Ownership of Assets:

The census data 2011 show that the total numbers of households availing banking services are 46 percent, households availing banking in rural areas are 41.6 percent and in urban areas are 61.3 percent. Banking penetration in rural area is very important for the overall development of the rural Kheda.



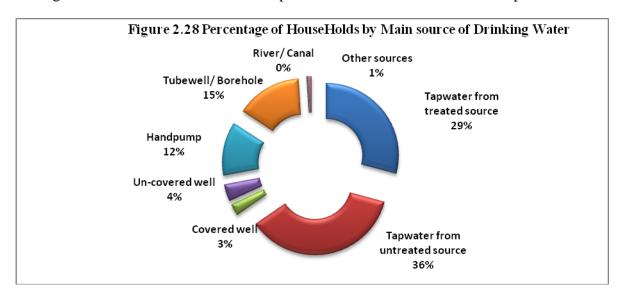
Source: Census of India 2011

It can be observed from the census data that households having radios are 13.2 percent, with television are 37.1 percent, computer laptops with internet connections are 1.2 percent, and without internet connection are 4.1 percent. Households having landline connections only are 3.1 percent, with mobile phones only are 39.3 percent, and five percent households have both the mobile and landline connections.



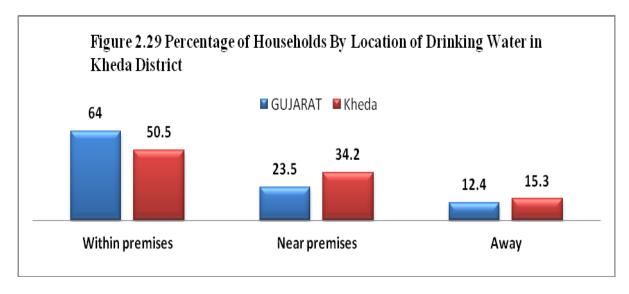
• Percentage of Households by Drinking Water Facility

The households availing water from hand pumps are 12.2 percent, from tubewells are 14.8 percent, from river canals are 0.3 percent, households availing tap water from treated sources are 29.2 percent, households availing Tap water from untreated sources are 36.2 percent, households availing water from covered wells are 2.7 percent and uncovered wells are 3.9 percent.



Source: Census of India 2011

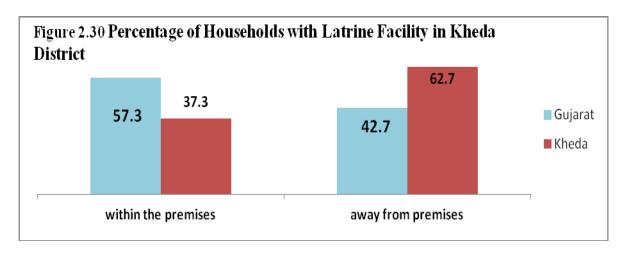
The percentage of household having drinking water facility within the premises is 50.5 percent, 34.2 percent of households have drinking water facilities near the premises and remaining 15.3 percent of households depend upon the drinking water facilities away from home.



Source: Census of India 2011

Percentages of Households have Latrine Facility:

The census 2011 data of percentage of households with latrine facility shows that 62.7 percent of households have latrine facility away from premises whereas the percentage of households with latrine facility within the premises is about 37.3 percent in Kheda District. The district administration is taking this task of constructing toilets at a very urgent basis and there is a mission mode approach being followed. The district is committed towards achieving the target of *Toilet for All* and the positive outcomes are in the offing.



Chapter 3

Literacy and Education



The MDG 2014 Goal 2 is "To ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling".

As per Human Development "Education occupies supreme position in improving the knowledge well being income and employment of the people". High education status among male and female enhances the earning capacity of the people, reduces poverty, improve standard of living and removes social inequities. Education plays an important role in improving people's standard of living, empowering them with relevant skills and knowledge. It provides adequate employment opportunity to earn a sustainable living".

Kanya Kelavni and Shala Pravesh Mohatsav







3.1 Introduction:

The Education system in Gujarat is divided into four levels

- 1) Primary (Class 1 to 8)
- 2) Secondary and Higher Secondary
- 3) Graduation and other technical degree
- 4) Post Graduation.

Right to Education Act has been implemented in the state, which included Class 1 to 5 as Primary Schooling and Class 6 to 8 as Upper Primary Schooling but since 2012, changes in the policies have been made which now considers Class 1 to 8 as Primary Schooling and Class 9 as Upper Primary schooling.

It can be observed from the data obtained from SSA that since its bifurcation from Anand district, many new educational institutes have been established showing an expansion of public education system in Kheda District. The data from SSA shows that a large number of new schools have been set up, there is an increase in number of classrooms and teachers. There is an improvement in basic amenities like drinking water, electricity, pucca building, computer laboratory and library, accessibility of schools, etc. This increase in number of Primary Schools and facilities has developed a strong foundation to the growth in Primary Education.

3.2 Overview of Literacy in Kheda District

As per census 2011 the total literacy rate of Kheda district is 82.65 percent and in previous census it was 71.96 percent so there is an improvement of 10.69 percent. There has been considerable increase in the literacy rate of Kheda district in both rural and urban areas. Gujarat state total literacy rate as per census 2011 is 78.03 percent and in census 2001 it was 69.14 percent.

As per the State Government publication "State, District and Talukawise literate population and literacy rate, 2001 & 2011" which is based on Primary Census Abstract 2011, Kheda district ranks 5th position in the category of literacy rate in "Rural area" with a literacy rate of 81.42 percent and 4th position having 91.31 percent literacy rate for "Male" and Nadiad Taluka having 5th position by 85.98 percent of literacy rate for "Rural area".

Table 3.1 Position of Kheda District with respect to literacy rate in the state										
District Taluka Rank Name Value										
Kheda -5 th		Literacy rate rural	81.42%							
Kheda -4 th		Literacy rate male total	91.31%							
	Nadiad -5 th	Literacy rate rural	85.98%							
Source: State, D	istrict and Talukawi	se Literate Population and Literacy	rate, 2001 &							

2011" -Directorate of Economics and Statistics- Gandhinagar.

Education is in the concurrent list of the Indian constitution.

Article 45 of the constitution enjoins that the state shall endeavour to provide within a period of ten years from the commencement Of this constitution for free and compulsory education for all children until they complete the age of fourteen years.

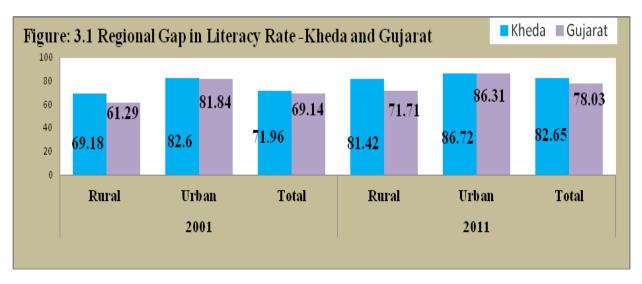
For universalization of elementary education the role of government is extremely important.

Article 46 states that the state shall promote with special care the educational and economic interest of the weaker sections of the people and in particular of the scheduled tribes and scheduled castes and shall protect them from social injustice and all forms of exploitations.

The 83rd constitutional amendment establishes elementary education as a fundamental right of all citizens of India

3.3 Rural and Urban Literacy Rate:

The literacy gap in rural and urban areas of Kheda district in Census 2011 has substantially improved compared to previous census. It can be observed that in census 2001 the literacy rate for rural area in Kheda district was 69.18 percent and it has increased to 81.42 percent between the years 2001-2011, the literacy rate for urban area was 82.6 percent in census 2001 and it has increased to 86.72 percent between the years 2001-2011. The gap between rural and urban literacy rate was 13.42 percent in census 2001, but it has now reduced and it is now 5.3 percent.



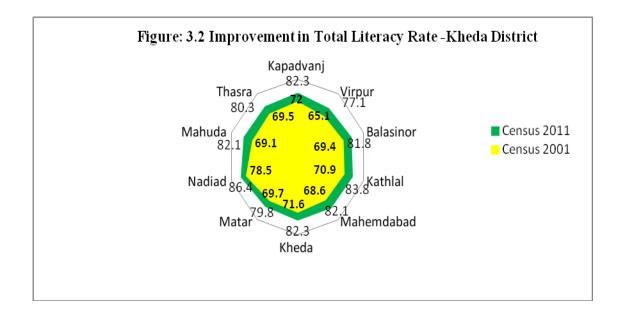
Source: Census of India 2001/11

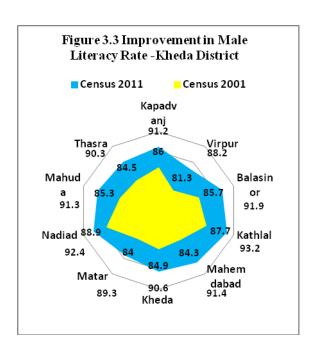
Therefore the gain in literacy rate for rural area is about 12.42 percent and gain in literacy rate for urban area is about 4.12 percent. It is very encouraging to note that Kheda is placed among the districts that are doing very well in terms of literacy rates. Gujarat literacy rate for rural area is about 71.71 percent whereas it is about 81.42 percent for Kheda, Gujarat literacy rate for urban area is about 86.31 percent and for Kheda district it is about 86.72 percent.

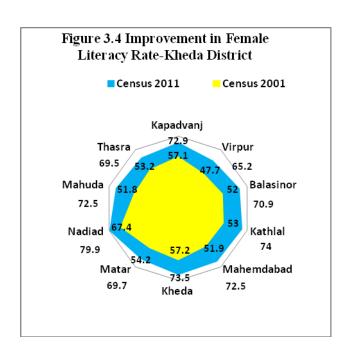
3.4 Male and Female Literacy Rate:

The district has witnessed a consistent improvement in the literacy rate for male and female both in rural and urban areas of the district. The total literacy rate as per census 2011 for male is 91.31 percent and for female it is 73.49 percent, and as per census 2001 the total literacy rate for male was about 85.99 percent and for female it was 56.90 percent. So there is an improvement of 5.32 percent in male literacy whereas female literacy rate improved by 16.59 percent in census 2011.

In terms of the total Literacy Rate, Nadiad taluka ranks highest among all the talukas of the district in both the census 2001 and 2011. Its total literacy rate is 86.4 percent in census 2011. Nadiad taluka also stands first in the female literacy rate with 79.9 percent female literacy rate in census 2011. However in terms of male literacy rate, Kathlal taluka ranks highest at 93.2 percent in census 2011, compared to Nadiad where male literacy is 92.4 percent. Virpur taluka performance is relatively very poor compared to other talukas of the district with the lowest literacy rate which is 77.1 percent, female literacy rate which is 65.2 percent and male literacy rate which is 88.2 percent as per census 2011. As per census 2011 the second lowest taluka in terms of total literacy rate which is 79.8 percent and male literacy rate which is 89.3 percent is of Matar taluka and lowest in terms female literacy rate is in Thasra taluka which is 69.5 percent in Kheda district.







Source: Census of India 2001/11

3.4.1 Talukawise analysis of Male-Female Literacy Gap

The literacy gap of overall Kheda district is 17.8 percent, in urban areas it is 11 percent and in rural areas it is 19.9 percent. These figures for Gujarat state stood at total literacy gap of 16.1 percent, in urban area it is 10 percent and in rural area male-female literacy gap is 20.2 percent. Thus Kheda is performing well in terms of Male-Female Literacy Gap in rural areas but there is a lot of scope for improvement. There is a visible improvement over the last few years and this commitment of improving literacy levels in the district needs to be continued. Based on census 2011, it is observed that the highest male and female literacy gap is observed in Virpur taluka at 23 percent and the lowest literacy gap is in Nadiad taluka which is 12.5 percent, we can observe that there is positive improvement in the literacy gap of Nadiad taluka which was previously 21.5 percent in 2001 it has reduced by 9 percent in census 2011.

Table 3.2 Mal	e Female Lite	racy Gap Talı	ıkawise as pe	r Census 2001	l and 2011		
	Litera	cy Rate		Litera	cy Rate		
Taluka	Censu	ıs 2001	GAP	Censu	Census 2011		
	Male	Female		Male	Female		
Kapadvanj	86.0	57.1	28.9	91.2	72.9	18.3	
Virpur	81.3	47.7	33.6	88.2	65.2	23	
Balasinor	85.7	52.0	33.8	91.9	70.9	21	
Kathlal	87.7	53.0	34.8	93.2	74.0	19.2	
Mahemdabad	84.3	51.9	32.3	91.4	72.5	18.9	
Kheda	84.9	57.2	27.7	90.6	73.5	17.1	
Matar	84.0	54.2	29.8	89.3	69.7	19.6	
Nadiad	88.9	67.4	21.5	92.4	79.9	12.5	
Mahuda	85.3	51.8	33.4	91.3	72.5	18.8	
Thasra	84.5	53.2	31.3	90.3	69.5	20.8	
Kheda District	86.0	56.9	29.1	91.3	73.5	17.8	
Gujarat	79.7	57.8	21.9	85.8	69.7	16.1	
		Source: Censi	is of India 200	01/2011			

			Table 3.3 M	Iale Female	e Rural an	d Urban Li	teracy Ra	te Taluk	awise			
Taluka	RURA	L 2001		RURAL 2011			URBA	N 2001		URBA	N 2011	
Taluka	M	F	GAP	M	F	GAP	M	F	GAP	M	F	GAP
Kapadvanj	85.2	52.6	32.5	91.0	70.6	20.4	89.5	75	14.4	91.7	83.2	8.5
Virpur	81.3	47.7	33.6	87.9	64.3	23.6	NA	NA	NA	90.4	73.2	17.2
Balasinor	84.2	45.5	38.7	91.2	66.6	24.6	90	70	20	93.8	82.2	11.6
Kathlal	87.8	53.0	34.8	93.4	73.3	20.1	NA	NA	NA	91.5	79.5	12
Mahemdabad	83.8	48.9	34.8	91.3	71.1	20.2	87.2	70	17.2	92.3	81.5	10.8
Kheda	83.9	53.4	30.5	89.9	71.4	18.5	88.9	71.8	17.1	93.1	82.0	10.1
Matar	84.0	54.2	29.8	8 9.3	69.7	19.6	NA	NA	NA	NA	NA	NA
Nadiad	87.3	58.3	29	93.1	78.4	14.7	90.6	76.9	13.7	91.8	81.4	10.4
Mahuda	84.7	49.7	35	91.2	72.5	18.7	88.9	65	23.8	91.4	73.0	18.4
Thasra	84.0	51.2	32.8	90.0	68.0	22	90.2	74.6	15.6	92.9	80.4	12.5
Kheda	85.0	52.2	32.7	91.1	71.2	19.9	74.7	90	15.2	92.1	81.1	11
Gujarat	74.1	47.8	26.3	81.6	61.4	20.2	88.3	74.5	13.8	91.0	81.0	10
	·			Source	e: Census	of India 20	01/2011	·				

As per census 2011 in rural areas the highest literacy gap is in Balasinor taluka which is 24.6 percent and lowest literacy gap is in Nadiad taluka which is 14.7 percent. The lowest urban male and female literacy gap is in Kapadwanj taluka which is 8.5 percent and highest is in mahuda taluka (18.4) percent in census 2011.

Gender Gap in Literacy Taluka wise in Kheda District

Gender Gap in Literacy-Kheda
District

29.1

17.8

2001

2001

2011

Kathlal

34.8

19.2

Kheda

32.3

18.9

33.4

18.8

31.3

20.8

GAP IN
2011

Mahuda

Thasra

Nadiad

Map not to Scale

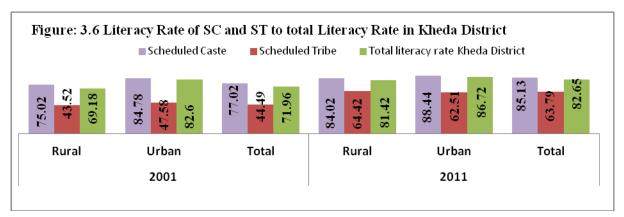
Figure: 3.5 Gender Gap in Literacy

Source: Census of India 2001/2011

3.5 Literacy Rates of Socially Weaker Sections:

3.5.1 Scheduled Castes (SCs)

The district has achieved quiet high growth rate in terms of literacy rate among the socially weaker section of scheduled caste and tribes residing in rural and urban areas of the district. The literacy rate for SCs in the district stood at **85.13** percent as per census 2011 compared to 77.02 percent as per census 2001. Thus there is an increase of 8.11 percent in the total literacy rate of the scheduled caste community during 2001-11. The literacy rate of SCs for Gujarat state is 79.18 percent as per census 2011.



Source: Census of India 2001/2011

3.5.2 Scheduled Tribes (STs)

The literacy rate for STs in the district stood at **63.79** percent as per census 2011 compared to 44.49 percent as per census 2001. Thus there is an increase of 19.3 percent in the total literacy rate of the scheduled tribe communities during 2001-11 which is commendable. The literacy rate of STs for Gujarat state is 62.48 percent as per census 2011. There is an increase of 8.11 percent in literacy rate for scheduled castes, whereas this figure of increase in literacy rate for scheduled tribes stood at 19.3 percent.

3.6 Primary Education in Kheda District

3.6.1 Total number of Primary and Upper Primary Schools in Kheda District:

There are total numbers of 1950 primary and upper primary school located in Kheda district in the year 2014. Out of these schools 1649 are government schools, 54 are grant-aided schools, 32 ashram shalas, and 189 recognized private unaided schools.

		Table 3.	4 Total (Prima	ry and Upp	er Primary) Schools		
Talukas	Central Govt.	Local body	Municipal School Board(MSB)	Others (KGBV)	Pvt. Aided	Pvt. Unaided	Tribal/Social Welfare Dept.	Grand Total
Balasinor		134		1	2	18	5	160
Kapadvanj		275			6	13	7	301
Kathlal	1	178			5	8	4	196
Kheda		82			3	17	1	103
Mahemdavad		171			1	17	3	192
Mahudha		85			4	7		96
Matar		104			4	8	4	120
Nadiad		224	24		22	72	2	344
Thasara		254			6	21	2	283
Virpur		142			1	8	4	155
Total	1	1649	24	1	54	189	32	1950
_		Soi	ırce: Sarva Shiks	ha Abhiyan	– Nadiad, Kl	heda		

The talukas with the highest concentration of schools are Kapadwanj (301), Nadiad (344), Thasra (283) and Balasinor (160), Kathlal (196), Mahemdabad (192), Matar (120) and Virpur (155) having more than hundred number of schools by the end of the year 2014. The data related to total number of schools obtained from SSA-2014 is given in the below table.

3.6.2 Staffing patterns, Enrollment in Schools, Gross Enrollment Ratio and Net Enrollment Ratio:

• Staffing patterns in primary and upper primary schools:

The growth in number of teachers is fairly consistent with the growth in number of students since last 5 years. There is an improvement observed in employment of teachers among the socially weaker sections like ST, SC, SEBC and other community groups. There were a total of 9918 teachers in the year 2010 of which consisted of 192 male and 204 female teachers of ST communities, 533 male and 562 female teachers of SC communities, 1910 male and 1411 female teachers of socially economic and backward castes, and 2542 male and 2564 female of other communities teacher were employed in primary and upper primary schools. In 2014, there are a total of 14711 teachers in Kheda district of which 294 male and 363 female teachers of scheduled tribe communities, 635 male and 799 female of scheduled castes, 1871 male and 3108 female of SEBC and 3341 male and 4300 female of other communities. Therefore this shows an increase in the total number of teachers against the increase in the number of students enrolled every year in all the schools of Kheda district since the year 2010. The table given below shows the enrollment and staffing pattern of the teachers in the primary and upper primary schools in all the talukas of Kheda district. The highest numbers of teachers were recorded in Nadiad taluka where 2130 teachers are employed against the 78178 total number of students.

	Table 3.5 Total Number of Teachers, Kheda District												
YEAR		ST		SC		SEBC	OTHERS		Total				
ILAK	Male	Female	Male	Female Male Female				Female					
2010	192	204	533	562	1910	1411	2542	2564	9918				
2011	222	223	626	620	2233	1598	2811	2890	11223				
2012	219	234	619	611	2326	1653	2899	2973	11534				
2013	371	287	777	640	2922	1844	4026	3286	14153				
2014	294	363	635	799	1871	3108	3341	4300	14711				
				Source: SSA,	Nadiad –Kl	heda							

• Enrollment in Schools

As per the data from SSA given in the table, the total numbers of students enrolled in primary education were 348910in all the 10 taluka of the district in the year 2013-14, Nadiad being the most literate taluka recorded 78178 number of students highest compared to all the talukas of the district. There were about total number of 9113 boys and 7756 girls of scheduled caste communities, 5605 boys and 3888 girls of scheduled tribe communities, 143990 boys and 124225 girls of SEBC and 29832 boys and 24501 girls of other communities enrolled in the year 2014. Comparing these figures with those of the year 2010, it is observed that there is an increase in the total number of students of socially weaker section enrolled in the schools.

	Table 3.6 Total Enrollment of Students in Kheda District												
YEAR	ST		SC		SEI	SEBC		OTHERS					
ILAK	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total				
2010	4984	3727	8985	7729	134362	115829	31899	25273	332788				
2011	5172	4100	8808	7373	136164	117159	30259	24458	333493				
2012	5576	4125	8992	7609	136075	118072	30060	24623	335132				
2013	5686	4697	9054	7976	140864	127901	32410	28226	356814				
2014													
				Source	e: SSA , Nadiad	–Kheda							

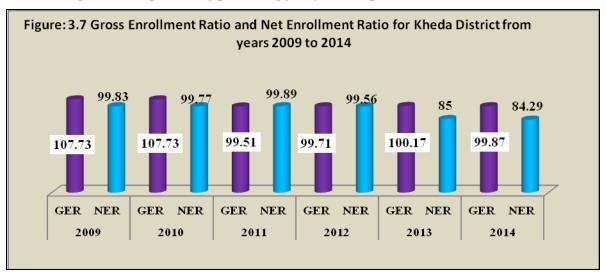
• Gross Enrollment Ratio and Net Enrollment Ratio

As per the research experts opinions in primary education "A sharp discrepancy between the GER and the NER indicates that enrolled children enter late to the first grade or do not progress regularly through the grades and that the system's internal efficiency could be improved. Appropriate policies and measures could then be adopted to address problems of grade repetition and drop-out as well as bottlenecks with regard to retention in school." A high NER denotes a high degree of enrolment in education by the official school-age population. The theoretical maximum value is 100 percent. NERs below 100 percent provide a measure of the proportion of primary school age children who are not enrolled at the primary level. This difference does not necessarily indicate the percentage of students who are not enrolled at all in education, since some children may be enrolled at other levels of education. When the NER is compared with the Gross Enrolment Ratio (GER) the difference between the two ratios highlights the incidence of under-aged and over-aged enrolment.

The figure 3.7 indicates the gross enrollment ratio and net enrollment ratio for last 6 years for Kheda district since 2009. The GER for year 2014 is 99.87 percent and the NER for the district in the year 2014 is 84.29 percent. It shows that children progress regularly through the grades.

There is still some scope for improving the GER and NER to 100 percent. The foremost thing which is required to improve education sector is hundred percent enrollments. Every child has a fundamental right to Education and every child of the country should have access to the formal education system.

"The Gross Enrollment Ratio of the district on average is 101 percent and Net Enrollment Ratio on average is 96.65 percent of preceding five years as per SSA."



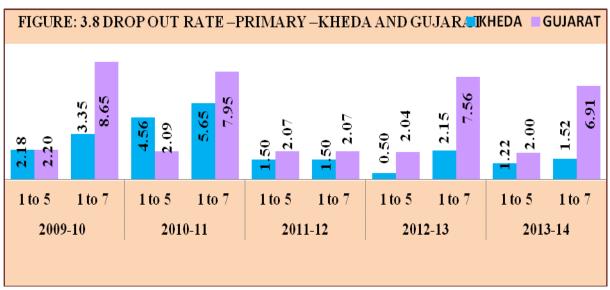
Source: SSA-Nadiad Kheda

3.6.3 Issues and Challenges in Primary Education:

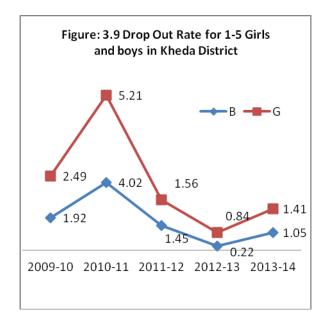
- School Drop outs
- Repetition and Retention Rate
- Out of School Children
- Gender Parity Index
- Children with Special Needs

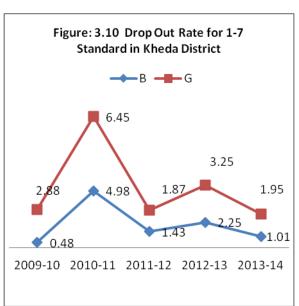
3.6.3.1 School Drop Outs

The dropout rate for the year 2014 is 1.52 for 1-7 standards and 1.22 for 1 to 5 standards. The dropout rate shows decreasing trend over the past five years. The dropout rate in both the standard from 1-5 and 1-7 seems to be decreasing from the year 2011-12. A higher rate of drop out was observed in the year 2010-11 but due to immediate action taken by the district primary education department the dropout rate reduced after 2010-11. The data for last five years shows that the dropout rate for district has always been lower than that of the state.



Source: Sarva Shiksha Abhiyan- Gandhinagar

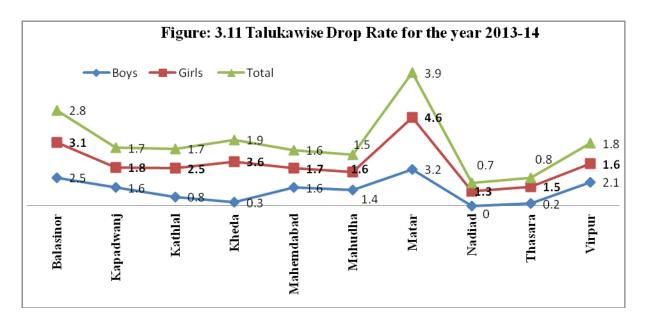




Source: Sarva Shiksha Abhiyan- Gandhinagar

• Analysis of Dropout Rate Talukawise

Nadiad taluka has significantly improved in terms of boys drop out ratio in the year 2013-14 it was recorded nil and the talukas with the higher dropout rate in the year 2013-14 were Matar (3.9) and Balasinor (2.8). The highest boy's dropout rate is recorded in Matar (3.2) Balasinor (2.5) and Virpur (2.1) and the highest dropout rate for girls were in Matar (4.6), Kheda (3.6) and Balasinor (3.1).



Source: SSA- District Primary Education office - Nadiad, Kheda.

3.6.3.2 Repetition and Retention Rate

Table shows the Talukawise repetition rate for boys and girls. The overall repetition rate for all the talukas of Kheda district for the year 2013-14 recorded from SSA-2014 is 1.85 of which 2.31 consists for girls and 1.39 consists of boys repetition rate, the rate has increased by 0.36 percent compared to the previous year 2012-13 which was 1.49. There is an increase of girl's repetition rate by 0.74 percent and decrease in boys repetition rate by 0.04 percent, when compared to the year 2012-13. In the year 2013-14 the highest repetition rate was recorded in Matar taluka (3.89) and the lowest repetition rate was recorded in Nadiad taluka (0.67). However in the year 2012-13 the highest repetition rate was recorded in Kapadwanj taluka (2.53) and it has improved in the year 2013-14 to 1.71.

	Tab	le 3.7 Repeti	tion Ratio and	Retention Rate for	year 201	3-14		
No	Taluka		Repetition R	atio	Retention Rate			
110	Taluka	Boys	Girls	Total	Boys	Girls	Total	
1	Balasinor	2.50	3.15	2.82	97.5	96.9	97.2	
2	Kapadwanj	1.64	1.78	1.71	98.4	98.2	98.3	
3	Kathlal	0.84	2.47	1.65	99.2	97.5	98.3	
4	Kheda	0.35	3.55	1.95	99.7	96.4	98.1	
5	Mahemdabad	1.60	1.65	1.63	98.4	98.3	98.4	
6	Mahudha	1.42	1.64	1.53	98.6	98.4	98.5	
7	Matar	3.22	4.56	3.89	96.8	95.4	96.1	
8	Nadiad	0.04	1.31	0.67	100	98.7	99.3	
9	Thasara	0.18	1.46	0.82	99.8	98.5	99.2	
10	Virpur	2.10	1.58	1.84	97.9	98.4	98.2	
	Kheda Total	1.39	2.31	1.85	98.9	98.0	98.4	
	Source: Sarv	a Shiksha Ab	hiyan , District	Primary Education	ı Office –l	Nadiad, Kheda		

A higher repetition rate was recorded for girls as compared to the boys which was in Matar taluka 4.56, the other taluka recorded with highest repetition ratio for girls were Kathlal (2.47), Balasinor (3.15), and Kheda (3.55) at both primary and upper primary stage. The taluka with highest repetition ratio for boys were Matar (3.22) Balasinor (2.50) and Virpur (2.10). The retention rate presents retaining capacity of the student in education system at primary and upper primary level. The district has quiet improved in terms of retention rate in all the talukas for both boys and girls. The overall retention rate for the year 2013-14 for the district was 98.4, for boys 98.9 and for girls (98.0)

3.6.3.3 Out of School Children

Out of schools children is a major issue of concern related to education sector. The data for last 4 years show the numbers of out of school children which consists of girls and boys who were never enrolled and number of dropouts.

	Table: 3.8 Out of School Children (6-14 age group)												
Sr. Year		Out of School Children (6- 14 Age)			Never Enrolled – (6-14 Age)			Drop Out-(6-14 Age)					
No lear	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total				
1	2010-11	404	652	1056	156	211	367	248	441	689			
2	2011-12	269	348	617	140	161	301	128	188	316			
3	2012-13	541	525	1066	239	192	431	302	333	635			
4 2013-14 285 386 671 207 288 495 78 98 176										176			
	Sou	rce: Sarvo	a Shiksha .	Abhiyan , D	istrict Primar	y Educatio	on Office –N	ladiad, Kl	neda				

In the year 2014 the total number of out of schools children were 671 of which consisted of 285 boys and 386 girls. The figure is decreasing and it now stands at 671 in 2013-14 against 1066 in 2012-13. The number out of schools girls are more than those of out of school boys in the district in all the four years. Therefore appropriate measures needs to be taken address the issue of out of school children.

3.6.3.4 Gender Parity Index

A GPI equal to 1 indicates parity between females and males. In general, a value less than 1 indicates disparity in favour of boys/men and a value greater than 1 indicates disparity in favour of girls/women. It is observed from the data obtained from SSA that the GPI has always remained lesser than one, and on average it has remained 0.85 during preceding 8 years.

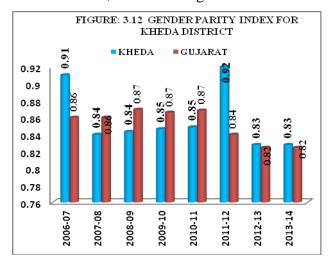


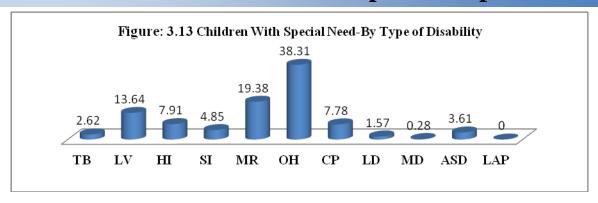
	Table: 3.9 Gender Parity Index				
Sr.	Block Name	GPI			
No		2012-13	2013-14		
1	Balasinor	0.87	0.87		
2	Kapadwanj	0.86	0.86		
3	Kathlal	0.82	0.85		
4	Kheda	0.84	0.81		
5	Mahemdabad	0.86	0.85		
6	Mahudha	0.87	0.86		
7	Matar	0.83	0.87		
8	Nadiad	0.86	0.83		
9	Thasara	0.87	0.86		
10	Virpur	0.88	0.87		
Soi	Source - SSA, District Primary Education Office,				
	Nadio	ıd, Kheda			

Source: Sarva Shiksha Abhiyan, Gandhinagar.

The GPI values for all talukas for the year 2012-13 and 2013-14 for the district are less than 1 which indicates disparity in favour of boys. Therefore the problem related to gender disparities need to be addressed and proper measures need to be taken to fulfill the gap and improve the status of education among girls.

3.6.3.5 Children with Special Needs

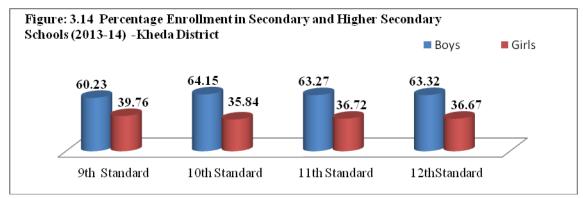
As per the data obtained from SSA 2014, there were a total number of 5256 numbers of students with special needs. In the year 2014 there were total of 1169 teachers proposed for imparting education to these students with special need. Categorizing these 5256 children as per their disability the highest numbers of students were with OH(2014) type of disability. 1019 were mentally retarded students. Other types of disability observed were students with TB(138), LV(717), HI(416), SI(255), CP(409), LD(83), MD(15) and ASD(190).



Source: Sarva Shiksha Abhiyan, District Primary Education Office -Nadiad, Kheda

3.7 Secondary and Higher Secondary Education in Kheda

There are total of 388 secondary and higher secondary schools located in Kheda district in the year 2014. There were about 15125 boys and 8778 girls in 11th standard and 12772 boys and 7397 girls in 12th standard in the year 2014.



Source: District Education Office -Nadiad, Kheda

Table 3.10 Enrollment in secondary and Higher Secondary Schools for the Year 2013-14					
	Boys	Girls	Total		
9 th Standard	24589	16230	40819		
10 th Standard	22831	12754	35585		
11 th Standard	15125	8778	23903		
12 th Standard 12772 7397 20169					
Source: District Education Office –Nadiad, Kheda					

3.8 Pupil Teacher Ratio

As per the Right to Education Act an ideal pupil teacher ratio (PTR) is of 30:1. The pupil teacher ratio for last 6 year indicates a decline in number of students per teacher from 2009 to 2014. In the year 2009 and 2010 the pupil teacher ratio was 32 and 33 respectively. The data shows that there is a consistent improvement in the ratio which was 29 in 2011 and 2012,25 in 2013 and 23 in 2014. The pupil teacher ratio in secondary school was 28:1 and 42:1 in higher secondary schools in the year 2013-14.

	Table 3.11 Pupil Teacher Ratio in Primary Schools –District Kheda						
Year	Number of Pupil	Number of Teachers	Pupil Teacher Ratio				
2009	340155	10499	32:1				
2010	332788	9918	33:1				
2011	333493	11223	29:1				
2012	335132	11534	29:1				
2013	356814	14153	25:1				
2014	2014 348910 14711 23:1						
	Source: Distri	ict Primary Education Office , Nadiad I	Kheda				

	Table 3.12 Pupil Teacher Ratio in Secondary and Higher Secondary Schools (2013-14)					
	Secondary schools Higher secondary schools					
Number of Number of Pupil Number of Number of Pup					Pupil	
	Pupil Teachers Teacher ratio Pupil Teachers Teacher ratio					Teacher ratio
	19892 693 28:1 44072 1045 42:1					
	Source: District Education Office , Nadiad Kheda					

3.9 School Infrastructure

3.9.1 Status of Classrooms:

Information acquired from primary education department relating to classrooms shows that there is remarkable increase in number of schools and classrooms, which shows that the district has improved in terms of classroom infrastructure in rural as well as urban area.

Table 3.13 Total schools and Class Rooms in Primary Schools in Kheda District for the year 2014					
Taluka	Total Schools	Total Class Rooms	Total Number of Students	Student Classroom Ratio	
Balasinor	143	763	23085	30:1	
Kapadvanj	289	1441	41555	28:1	
Kathlal	190	1095	32150	29:1	
Kheda	87	571	21051	36:1	
Mahemdabad	177	1138	40364	35:1	
Mahudha	89	584	19257	32:1	
Matar	112	770	23305	30:1	
Nadiad	272	1627	78178	48:1	
Thasara	263	1644	52885	32:1	
Virpur	148	639	17080	26:1	
Total	1770	10272	348910	33:1	
Source	ce : SSA -Primary E	ducation Departm	ent – Nadiad, Khed	la	

3.9.2 Accessibility and Availability of Basic Amenities

3.9.2.1 Accessibility of Primary, secondary and higher secondary schools:

As per norms for setting up of primary schools in villages the data obtained from SSA for the year 2014 shows that there are 675 primary schools located within the village. Overall there are about total number of 1214 upper primary schools with distance exceeding 1 K.m, 349 secondary and higher secondary schools with a distance exceeding 3 K.m and 737 primary schools with distance of 1 K.m. located in 675 villages of Kheda district.

Table 3.14 Access to schools by distances within taluka- upto 1-km, 3-km, 5-km						
11000	(As Per Government Norms) 2013-14 (in Kilometers)					
Taluka	Within Village	1-Km	3-Km	5-Km		
Balasinor	52	42	118	34		
Kapadvanj	109	138	163	39		
Kathlal	59	83	113	35		
Kheda	46	38	65	18		
Mahemdabad	72	82	110	31		
Mahudha	42	37	59	23		
Matar	54	41	79	19		
Nadiad	82	115	229	70		
Thasara	104	97	186	52		
Virpur	55	64	92	28		
Total	675	737	1214	349		
Source.	: Sarva Shiksha Abhiyan , Dist	rict Primary Education (Office –Nadiad, Kheda			

3.9.2.2 Availability of basic amenities:

The state government also incurs development expenditure for the construction of schools with pucca building and improving the basic facilities like drinking water, electricity, toilets and separate toilets for girls. The focus should be on enhancing and maintaining the current facilities at the primary schools in rural areas because the schools in district still faces shortages in terms of availability of water and electricity. By creating a strong and permanent infrastructure in primary education will lead to reduction in dropouts, improving the enrollment of boys & girls and retention of well qualified teaching staff. As per the data obtained by SSA 2014, all the schools in the district are covered by basic necessities of drinking water, toilets, playground and modern education requirement of computer laboratory and library facilities. The data's shown in the table below shows that all the schools in all the 10 talukas of Kheda district have been covered by minimum basic amenities.

• Basic Amenities at Primary Schools:

There are about total 1770 number of schools in Kheda district out of these, the availability of electricity is in 1765 schools of Kheda district. There are total of 10271 rooms which are electrified. There total 1653 schools having library facilities. The total number of schools with drinking water facilities is 1768, the state government has also taken an initiative of providing RO water facilities in all the schools, it is observed that there are many schools in the district which provide RO water facilities. The schools with separate toilet for girls are 1648. The number of schools having playground is 1478.

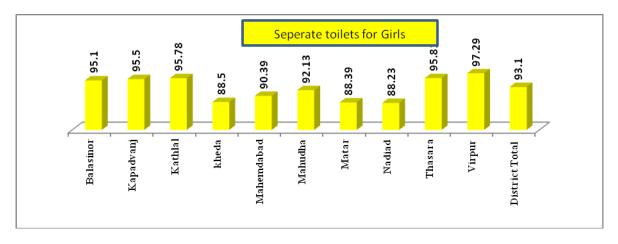


Figure: 3.15 Availability of Separate Toilet for Girls



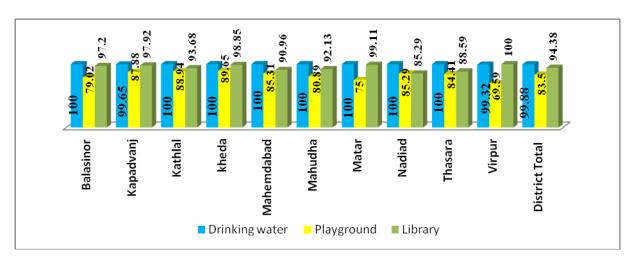


Figure 3.17 Schools with Electricity and Electrified Classrooms

Source: Sarva Shiksha Abhiyan – Nadiad, Kheda

Sr.No	Name of Taluka	No of Schools With Smart Class	Total Smart School	No of Schools with Internet Connection	Number of Schools with Computer Lab	
1	Balasinor	0	1	9	100	
2	Kapadvanj	24	1	15	135	
3	Kathlal	17	1	50	98	
4	Kheda	11	1	25	51	
5	Mahemdabad	23	1	3	87	
6	Mahudha	8	1	47	54	
7	Matar	17	1	62	71	
8	Nadiad	0	1	58	156	
9	Thasara	0	1	14	164	
10	Virpur	0	1	5	82	
Total 100 10 288 998						

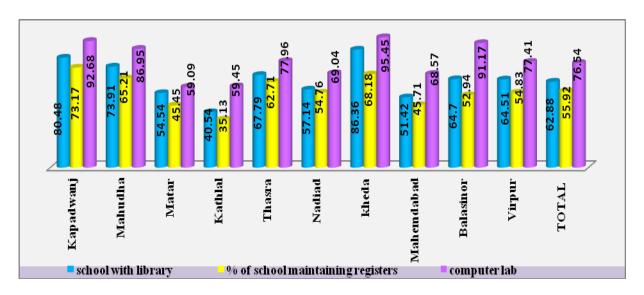
Currently, there are 10 Smart Schools and 100 Smart Classrooms in Kheda district. The number of Smart Schools and Classrooms should be increased in phased manner.

• Basic Amenities at Secondary and Higher Secondary Schools:

There are about 388 secondary and higher secondary schools located in Kheda district. It is noted from the data's available from district education office that all the schools are having electricity till date. There are about 244 schools with library facilities out these 217 schools are maintaining registers. There are about 1113 toilets in all the schools and 552 separate toilets for girls in all the 388 schools of the district. Total number of 314 Schools have playground in the district. There are about 378 schools having drinking water facilities and 297 schools are having computer laboratory facilities.

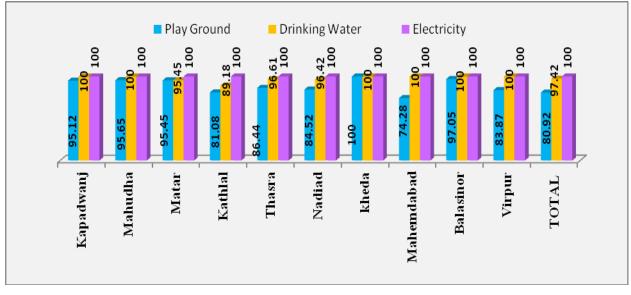
Table 3.16 Total number of Secondary and Higher Secondary Schools				
Kapadwanj	41			
Mahudha	23			
Matar	22			
Kathlal	37			
Thasra	59			
Nadiad	84			
Kheda	22			
Mahemdabad	35			
Balasinor	34			
Virpur	31			
TOTAL	388			
Source : District Education Office Nadiad Kheda				

Figure: 3.18 Basic Amenities in Secondary and Higher Secondary Schools



Source: District Education Office - Nadiad, Kheda

Figure: 3.19 Basic Amenities in Secondary and Higher Secondary Schools



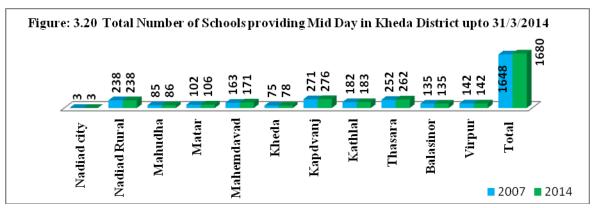
Source: District Education Office - Nadiad, Kheda

3.10 Government Initiative in Education Sector:

Government has taken a number of initiatives by framing schemes to improve the status of literacy and education. The various schemes of central and state government implemented are as follows:

1. Mid-Day Meal Programme:

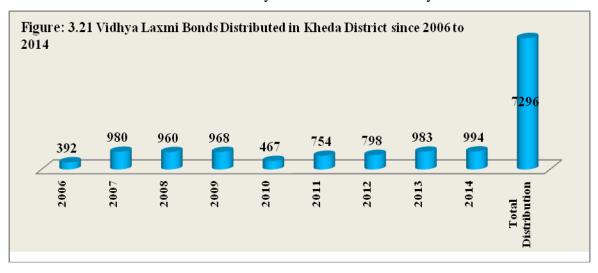
The Mid-Day Meal Scheme is being implemented throughout the State. During the year 2013-14, about 217197 lakhs of children of Standard I to VIII were provided hot cooked meal at the MDM centers through 1680 MDM centers of the district. There are ample kitchen shed in number of schools which requires repairing and government has taken an initiative to repair those kitchen shed in year 2014.



Source: Mid Day Meal -Department Nadiad, Kheda

2. Vidya Laxmi Bonds:

The scheme of "Vidya Laxmi Bond" has been introduced to encourage the parents to send their girl child to school and provide education at least upto primary level. The total number of bonds distributed in Kheda district were 983 in the year 2013 and 994 in the year 2014.



Source: Sarva Shiksha Abhiyan, District Primary Education Office -Nadiad, Kheda

3. "PRAGNA" Schools in Kheda District:

Launching of "PRAGNA" schools in the district is another innovative initiative launched by the state government. The detail of phase wise launching of PRAGNA schools is given below the table. In the year 2014-15 in phase five there are about 1206 PRAGNA school units having total number of 1980 class, 2005 teachers and 61,960 students studying in the schools.

	Table 3.17 "PRAGNA" School details Phase wise of Kheda District					
	Total	Total number	Total number of	Total number		
Phase	number of	of class	teachers	of students		
	units					
1 st	10	18	18	513		
2 nd	126	223	227	7133		
3 rd	164	287	289	9480		
4 th	243	419	422	13175		
5 th	663	1033	1049	31659		
Total	1206	1980	2005	61960		
	Source : Sarva Shiksha Abhiyan Nadiad – Kheda					

This **Activity based Learning Programme "PRAGNA"** is running in some schools with Standard 1 to 5. As this innovative programme has proven very successful, each and every school with standard 1 to 5 should be covered under PRAGNA project.

4. Building as Learning Aid (BaLA):

BaLA (Building as Learning Aid) is an innovative concept towards qualitative improvement in education, through developing child-friendly, fun and learning based physical environment building in school infrastructure. This concept was originally developed by Vinyas, Centre for Architectural Research & Design with support from UNICEF. It is now implemented across the state in all districts. SSA Gujarat has trained its large team of civil engineers at district and block level, several teachers and Head Masters of schools have been trained to plan. implement and effectively use the BaLA concept in Model schools. BaLA is about innovatively using the school spaces - the classrooms, the floors, walls, doors, windows, pillars, corridors and the natural environment as learning resources.

Table 3.18 Total number of primary schools having BaLA						
S.No.	Name of Taluka	Total number of primary schools having BaLA				
1	Balasinor	6				
2	Kapadvanj	10				
3	Kathlal	12				
4	Kheda	4				
5	Mahemdabad	9				
6	Mahuda	5				
7	Matar	5				
8	Nadiad	9				
9	Thasara	6				
10	Virpur	7				
	Total	73				
_	Source : SSA –Nadiad ,Kheda					

The Visible benefits of BaLA in schools of Kheda District

BaLA interventions in the Model schools bring a tangible, visible change. The improvement in enrolment, attendance and retention of children in Model schools can be credited to the concept of BaLa. Most importantly, learning becomes fun through this concept. Few interviews with the parents suggest that children now come before school hours and go back much after school hours. They find that learning in school is now more interesting, joyful for children and teachers.







"Me and my world allows the child to discover, understand and relate to the world around from her immediate surroundings to the distant world in a concrete way.- It must be located in corridors, or large staircase landing. But proper natural light must be ensured on it and height that is accessible for children. In addition to the complete visuals from neighborhood, city, country, continent and the world in one concentric set of visuals, another visual can be made with some blank portion and writable surface so that children also make their own visuals, as shown above". The other activity is map activity with Grids of size 450 x 450mm for outline brick map to play with mud and sand.

Creative Activities in BaLA schools of Kheda district







Learning distance through pathway

My World

Door Protector to learn "Angles"

5. Gunotsav:

The past years performance of the schools in Kheda District has been given below, the data shows that there is a need to increase the number of schools to score Grade A and Grade A+.

Table 3.19 Gunotsav Results of Kheda District							
GUNOTSAV	Grade A+	Grade A	Grade B	Grade C	Grade D	Grade E	Grade F
2009-10		0	20	373	1076	187	6
2010-11	0	70	313	62	6	1	1
2012-13	3	282	1150	247	68	-	-
2014-15	35	548	685	156	49	-	ı
	Source : SSA-Nadiad , Kheda						

6. Schools providing Drinking water through RO Facilities:

The state government has also taken an initiative to provide drinking water by RO facility in various schools of Kheda district, the table below show total number of schools having RO water Facilities.

	Table 3.20 Schools providing Drinking water through RO Facilities						
Sr.No.	Name of Taluka	No. of School with R.O.	No. of School with U.V.				
1	Galteshwar	2	80				
2	Kapadvanj	44	143				
3	Kathlal	26	119				
4	Kheda	10	46				
5	Mahemdabad	63	66				
6	Mahudha	7	61				
7	Matar	30	24				
8	Nadiad	94	28				
9	Thasara	2	127				
10	Vaso	13	18				
	Total 291 712						
		Source : SSA-Nadiad, Kheda					

3.11 Higher Education in Kheda:

The numbers of higher education institutions located in Kheda district are 41. Of these there is one government grant-aided Ayurvedic College, 9 engineering college of which 3 are government-aided and 6 private, 9 arts colleges of which 7 are government-aided and 2 are private, 14 commerce colleges of which 11 are government-aided,2 private and one government and 3 science colleges which are government-aided, one ADT and one CPED colleges which are government granted,4 PTC colleges of which 3 are government granted and 1 government colleges. So far no medical colleges have been set up in Kheda district.

SWOC ANALYSIS "EDUCATION"

STRENGTHS

- As per census 2011 the total literacy rate of Kheda district is 82.65 percent and in previous census it was 71.96 percent so there is an improvement of 10.69 percent.
- Kheda district ranks 5th position in the state in the category of literacy rate in "Rural area" with a literacy rate of 81.42 percent and 4th position having 91.31 percent literacy rate for "Male"
- The total literacy rate as per census 2011 for male is 91.31 percent and for female it is 73.49 percent and it has substantially improved compared to previous census.

WEAKNESSES

- There is need to address the quality of teaching in primary and upper primary schools.
- There are still persisting gaps between male and female literacy (17.8%).

OPPORTUNITIES

- There is ample opportunity to promote the concept of Smart Classrooms and Smart Schools with computer laboratories and internet.
- Proper training needs to be imparted to the teachers to improve upon the quality of education in the system.
- School monitoring committees need to be strengthened and the PRIs should be involved in monitoring the school education.

CHALLENGES

- The major areas of focus should be on reducing dropout rate among the girls after standard 8th and 10th and focusing more on girl's enrollment as the gender disparity in education, needs to be addressed.
- There is still a scope for improving Pupil Teacher ratio for Higher Secondary schools.

Chapter 4 Health and Nutrition





Status of Public Health

World health Organization (WHO) defines health as "a State of complete physical, mental, and social, well-being and not merely the absence of disease or infirmity."

Evaluating the Public health status in general, the chapter deals with maternal health care, various services provided for it, child health and child health care service and other major Disease covered under national health programmes, Family Planning, disabled population and issues related to health sector in the district.

4.1 Infrastructure related to Healthcare in Kheda District:

The data available of health infrastructure facilities in the district shows that there are about 51 primary health centers, 12 community health centers, 317 subcentres of health. There is one government dispensary and one district hospital located in the district. The district has total of 16 ayurvedic hospitals where 11 ayurvedic hospitals belongs to state government and 5 hospital belongs to local bodies. The district has 9 hospital homeopathic hospitals and all these 9 hospitals belong to state government.

	Table 4.1 Health Infrastructure Facility (2013-14) (In Nos.)							
	Sub	Primary	Community	Medical	District	Ayurvedic	Homeopath	
	Centres	Health	Health Centres	College	Hospital	Hospital	ic Hospital	
		Centres						
Kheda	317	51	12	upcoming	1	16	9	
Gujarat	Gujarat 7274 1158 300							
	Source: Gujarat State Health Statistics 2013-14							

4.1.1 Performance of PHC and CHC:

There are 12 CHCs sanctioned which consists of 30 beds in each CHCs. There are total of 333 beds in 12 CHC of the district. The district has 51 PHC's sanctioned having total of 300 beds.

Table 4.2 Performance of Community Health Centers and Primary Health Centers							
	Unit	2009-10	2010-11	2011-12	2012-13	2013-14	
[A] Community Health Centers							
Out Door Patients	No.	352646	345749	324961	359662	365942	
In Door Patients	No.	43327	46899	43623	51619	52464	
[B] Primary Health Centers							
Out Door Patients No. 394887 366040 335136 357225 435744						435744	
In Door Patients	No.	10299	12539	13506	19363	16923	
Source: Gujarat State Health Statistics 2013-14							

Table 4.3 Talukawise PHC and CHC in Kheda District							
Taluka wise	с.н.с.		Total Beds	Р.Н.С		Total Beds	
	Sanctioned	Functioned	Functional CHC	Sanctioned	Functioned	Functional PHC	
Kapadvanj	1	1	30	6	6	36	
Virpur	1	1	30	2	2	12	
Balasinor	1	1	30	3	3	18	
Kathlal	1	1	30	5	5	30	
Mahemdabad	2	2	30	6	6	36	
Kheda	1	1	30	3	3	18	
Matar	1	1	30	5	5	30	
Nadiad	1	1	30	8	8	48	
Mahudha	1	1	7	5	5	30	
Thasra	2	2	86	8	8	42	
Total-District	12	12	333	51	51	300	
Source: CDHO –Nadiad ,Kheda							

4.1.2 Maternal Health Care and Institutional Deliveries:

The major health indicators available for maternal health for Kheda District are ANC and PNC registrations, percentages of women who received full ANC, pregnant women receiving TT booster and percentages of institutional deliveries.

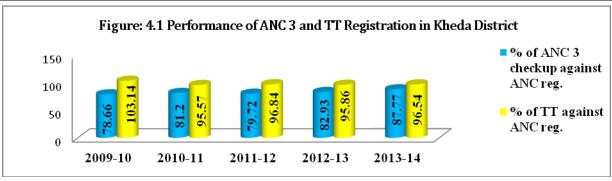
4.1.2.1 Post Natal Care and Ante Natal Care:

Post natal checkups are extremely important to safeguard the health of the mother and the baby for the births which have not taken place in health institutions. In Kheda district, about 47636 post natal 3 checkup were done against the total deliveries of about 52420 i.e. 91 percent for the year 2012-13 and for the year 2013-14 there were 49989 post natal checkup against the total deliveries of about 54061 i.e. 92 percent. It shows that there is still scope for improvement in post natal checkup.

Table 4.4 Post Natal Care – Kheda District							
Sr. No							
1.	1. Post partum check up within 48 hours of delivery 44899 35381						
2.	2. Post partum check up between 14 days and 48 hrs of delivery 42081 32624						
3.	3. Post Natal 3 check up 47636 49989						
Source :HIMS Data as on 2 nd June 2014							

As the data for the last five years suggest that for the deliveries from the year 2009 to 2014 both in institutional and home deliveries on average about 76.50 percent of pregnant women were registered for Ante natal care in their early pregnancy, about 82.06 percent of pregnant women had 3 or more ante natal visits. Out of all the pregnant women registered for ante natal care, on average about 97.60 percent were immunized against tetanus toxic.

Table 4.5 Performance OF ANC and TT Registration in Kheda DISTRICT							
Year	ANC Reg.	Early Reg.	Early Reg.(%)	ANC 3 Check up	% of ANC 3 checkup against ANC reg.	% of TT against ANC reg.	
2009-10	63519	43197	68)	49966	78.66 \	103.14 \	
2010-11	60199	44690	74.23	48883	81.2	95.57	
2011-12	58030	44707	77.04 (76.50)	46263	79.72 (82.06)	96.84 (97.59)	
2012-13	60473	48380	80	50053	82.93	95.86	
2013-14	60932	50739	83.27	53482	87.77	96.54	
Source: Gujarat State Health Statistics 2013-14							



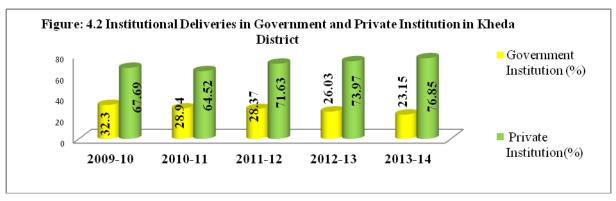
Source: Gujarat State Health Statistics 2013-14

4.1.2.2 Evaluation of Institutional and Home Deliveries:

The data of preceding six years related to institutional deliveries show that the total number of institutional deliveries in the district has increased to 98.94 percent and the health department should take more steps towards reducing home deliveries. The total institutional deliveries in the year 2009 to 2014 are given in the table 4.6. This improvement is mainly because of more and more women having maximum ANC visits during their pregnancy.

Table 4.6 Institutional and Home Deliveries in Kheda District							
	Delivery Registration	Of which Institutional	Of which Home Delivery				
Year	Nos.	Delivery (in %)	(in %)				
2009-10	38924	88.53	11.47				
2010-11	52792	93.46	6.54				
2011-12 53484 95.19 4.81							
2012-13 49471 96.93 3.07							
2013-14	48272	98.94	1.06				
Source: Gujarat State Health Statistics 2013-14							

The increasing number of institutional deliveries is also due to increase in education, awareness about schemes relating to health, increase in wealth and standard of living of people. The probable reason for 1.06 percent of home deliveries could be the traditional mind sets of some particular communities. The awareness about the risks involved in delivering the baby at home must be spread.



Source: Gujarat State Health Statistics 2013-14

The data preceding five years also shows that maximum deliveries were done in private institutions. It shows that maximum patients in rural as well as urban areas prefer deliveries in private institution.

Key Observations of Institutional and Home Deliveries in Kheda District						
Improvement in "Institutional	The Probable reason for "Home					
Deliveries" is due to:	Deliveries" is due to:					
Janani Suraksha yojana and Chiranjeevi yojana to rural people -better services at zero cost are provided.	Two percent cases of home deliveries are in rural areas. Main reasons observed are that communities like nats and banjaras they are not ready for institutional deliveries because of their old customs and traditional mindsets.					
Women having maximum ANC visits during their pregnancy. Due to increase in education, awareness of health yojana, people being more health conscious, increase in wealth and "standard of living of people and urban residence". Availability of 108 services and "Khilkhilahat service"	Hence this requires effective strategy of shifting of mindsets from home deliveries to institutional deliveries.					

4.1.2.3 Safe Motherhood Index in Kheda District:

A simplest measure of reproductive health of mother is the simple average of the percentage of institutional delivery and the percentage of ANC-3 check up.

Tabl	Table 4.7 SAFE MOTHERHOOD INDEX							
Year	ANC 3 checkup against ANC registration (%)	Institution al Delivery (%)	SAFE MOTHE R HOOD INDEX					
2009-10	78.66	88.53	83.59					
2010-11	81.2	93.46	87.33					
2011-12	79.72	95.19	87.45					
2012-13	82.93	96.93	89.93					
2013-14	87.77	98.94	93.35					



Source: Gujarat State Health Statistic

The safe mother hood index for the preceding 5 years on average is about 88.33 percent for Kheda district. There is increase in the safe mother index since past five years it was 83.59 percent in the year 2009-10 and now it has increased to 93.35 percent it shows consistent improvement in safe mother hood index.

4.1.3 Child Health Care and Nutrition:

4.1.3.1 Child Nutrition:

Inadequate child nutrition is a problem throughout India. It is observed that under nutrition in infants and children is found to be higher in rural areas than the urban areas. Better health of a child leads to better attendance in school, higher level of knowledge attainment, more productivity. Nutritional deficiency in the children results in long-term disabilities such as blindness, reduction in cognitive functions, mental retardation, etc.

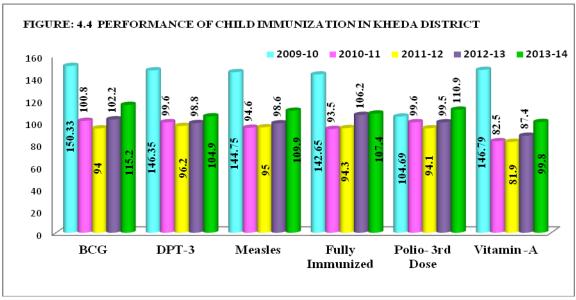
The numbers of undernourished children are very disturbing. In order to address the problem related to child nutrition the mothers need to be educated about breastfeeding to child. "Breastfeeding" is a universal and the first and foremost step towards better child nutrition. As per the findings of NFHS report it is observed that in India a very few children are put to breastfeeding immediately after birth, NFHS-3 also finds that only 44 percent of breastfed children are fed at least the minimum number of times recommended. In order to improve child health, Government of Gujarat has taken several initiatives by launching of various schemes, different immunization and vaccination programmes. Evaluating the status of new born care, as per the HIMS report about 90.3 percent of newborns were breast fed within one hour of birth and 8.1 percent of new borns weighted less than 2.5 kg in the year 2013-14.

Table 4.8 NEW BORN CARE	2012-13		2013 -14				
	Kheda	Gujarat	Kheda	Gujarat			
New Borns breastfed within 1 hr of birth (to total reported live births)%	93.5	89.8	90.3	91.1			
New Borns weighed at birth (to total reported live births)%	94.0	95.2	91.4	96.9			
New Borns weight less than 2.5 kg (to total new borns weight at birth)%	6.6	9.6	8.1	10.3			
Source: HMIS Data as on 2 nd June 2014							

4.1.3.2 Child Immunization:

Children are considered fully immunized if they receive one BCG injection to protect against tuberculosis, three doses each of DPT (diphtheria, pertussis, tetanus) and polio vaccines, and one measles vaccine. Evaluating the performance of Kheda district with respect to child immunization and calculating average percentage of immunization of last five years show that about almost 100 percent of the children were fully immunized against the live birth in the district, a brief description about the child immunization is given below in the figure 4.4. Immunization coverage has improved substantially since the year 2010 in Kheda district.

Table 4.9 Children Fully Immunized in Kheda District							
	Total Reported Live Births	Fully Immunized					
Year							
2009-10	38953	142.65					
2010-11	52792	93.5					
2011-12	52708	94.3					
2012-13	50897	106.2					
2013-14	48089	107.4					
Source: Gujarat State Health Statistic							



Source: Gujarat State Health Statistic

The coverage of individual vaccines has also improved substantially in the district during last five years the BCG, DPT 3rd dose, polio 3rd dose have been received been by 100 percent of the children in the district which is very positive improvement it is suggest to continue with the same strategy and keep strict vigilance for the upcoming years to too.

The health experts also recommend that children should be given vitamin A supplements every six months until they reach three years of age, starting at the age of 9 months. The data related to performance of vitamin first dose for children in Kheda district shows that on average about 89.44 percent of children in preceding five years received the vitamin A first dose against the total live births. So more steps needs to be taken to achieve the target of 100 percent of vitamin A supplement to children in urban and rural areas of the district. So strict monitoring and evaluation should be done by health department through health workers to reduce this gap.

4.1.3.3 Performance of Various Schemes under Reproductive Child Health:

a) Janani Suraksha yojana:

Janani Suraksha yojana has been the most effective scheme in increasing institutional deliveries in Kheda district. The key findings reveal that JSY has resulted in an increase in institutional deliveries and has helped the rural poor women of Kheda district to access institutional delivery.

	Table 4.10 Total Number of Beneficiaries under Janani Suraksha Yojana.							
Year	BPL	SC	ST	GENERAL				
2009		1788	694	6697				
2010		1941	347	13760				
2011	5634	906	263	9988				
2012	7819	685	274	5480				
2013	9172	239	106	1490				
2014	10714	319	46	314				
	Source: CDHO, Nadiad –Kheda							

b) Chiranjeevi Yojana:

This scheme was evolved to harness and accredit the private sector to provide obstetric care (institutional delivery) to below poverty line women living in rural areas of Gujarat. Its objective is to realign health system human resources in Gujarat, by relocating obstetric services from the public sector to the private sector, so the state took responsibility to ensure its mothers received obstetric care. The study reveals that the total number of deliveries under this yojana seems to be reducing in Kheda district probably because of low specialist doctors enrolled. Though the schemes have attractive pay packages for the doctors still the enrollment of the specialist doctors seem to be low. There is a need to increase participation of doctors by few initiatives such as increasing the incentives paid to the doctors and providing these incentives on time. Focus should be on increasing the number of doctors at rural as well as urban areas to maintain the effectiveness of the scheme.

Table 4.11 Chiranjeevi Yojana Particulars									
	2010-11	2011-12	2012-13	2013-14					
Total Deliveries under Chiranjeevi scheme	2521	3514	12634	1034					
Normal Deliveries	2308	3278	10827	950					
LSCS* C-section	182	228	798	81					
Complicated Deliveries	31	8	1009	3					
Private specialist Doctors enrolled	18	27	34	8					
Source: Gujarat State Health Statistics 2013-14									

c) Bal Sakha Yojana (BSY):

Neonatal mortality accounts for majority of child deaths and many of these happen within the seven days of birth. The Bal Sakha Yojana was launched by the State government to make accessible expert care by private pediatrician to all BPL and tribal children born under the ambit of the Chiranjeevi Yojana or in Government Health Care institution. It is also meant for all the children up to 1 month age identified at risk by Mamta Abhiyan and IMNCI trained health worker as per protocols.

	Table 4.12 Bal Sa		Total							
Year	Total new born attended under BSY	No. of neonates admitted & treated to NICU-2	No. of neonates referred to NICU-3	Total Deaths	Private Specialist Enrolled					
2009-10	610	13	4	6	7					
2010-11	664	36	15	24	7					
2011-12	358	6	18	9	13					
2012-13	0	0	0	-	3					
2013-14	200	0	0 0		1					
	Source: Guiarat State Health Statistics 2013-14									

d) Mamta Sandarbh (Referral Services):

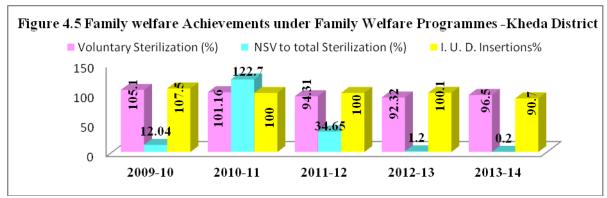
One Mamta Referral centre has been developed in each block. Services of a pediatrician who has been commissioned on call basis are available on a definite day, at the referral centre to provide specialist medical care to the children screened on Mamta day found with acute and chronic illness. About 1737 Mamta divas sessions planned in Kheda district and 1727 session were conducted during the session about 8229 women were registered under ANC and about 6305 antenatal women were distributed IFA tablets, about 4481 women were registered for Post natal checkup and 4027 women under PNC checkup were distributed IFA tablet. In order to provide iodine about 1848 women were given iodized salt.

Table 4.13 Mamta Sandarbh (Referral Services)								
PARTICULARS	2012	2013	2014					
Mamta Divas sessions Planned	1571	1813	1737					
Mamta Divas sessions held	1560	1813	1727					
No. of ANC registered	7822	7373	8229					
No. of Antenatal women given IFA tablet	6692	6371	6305					
No. of PNC registered	4134	4171	4481					
No. of Postnatal mothers given IFA tablet	3640	3674	4027					
No. of Antenatal and Postnatal women given iodized salt	2914	2189	1848					
Source: CDHO –Nadiad ,Kheda								

4.2 Family Planning

"Family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility. A woman's ability to space and limit her pregnancies has a direct impact on her health and well-being as well as on the outcome of each pregnancy." - WHO on Family Planning.

The data of family planning in Kheda district from the year 2009 to 2014 as against workload show that on average about 97.87 percent of voluntary sterilization occurred, 99.66 percent of IUD were applied and 34.16 percent of total NSV were performed as against total sterilization workload. The percentages of NSV show that it is still low and it needs to be increased by more motivation and wide acceptance by male population. This needs is to be addressed by proper motivation of males so that they can accept the NSV.



Source: Gujarat State Health Statistics 2013-14

4.2.1 Daughter's Scheme (Dikri Yojana)

Under this scheme eligible couples undergoing sterilization after having only one daughter and two daughters, get a six year saving certificate worth Rs.6000/- and 5000/- respectively. The saving certificates distributed in the district so far are 3 in the year 2012, 28 in the year 2013 and 11 in the year 2014 .The performance of the scheme is found to low, may be people are not aware about the scheme. There is a need to increase its awareness among the people by involving ASHA workers.

4.3 Burden of Diseases: Performance of National Rural Health Programmes

1. Leprosy Eradication Programme:

Kheda district has achieved the goal of elimination of leprosy as a public health problem, defined as less than 1 case per 10,000 population. The district has remarkable achievement of 0.36 prevalence rate per 10000 populations during the year 2013-14 and has maintained the standard of prevalence rate to less than 1 per 10,000 populations throughout past six years.

Tabl	Table 4.14 Progress and Achievement of Leprosy Eradication Programme in the District								
Year	Annual New	ANCDR	MB RATIO	Deformity Rate	PR/10000 Pop.	Cases Released From Treatment			
	case					RFT	Others		
2008-09	161	6.77	64.59	11.81	0.54	161	02		
2009-10	183	7.54	63.93	3.82	0.49	189	05		
2010-11	139	5.62	73.38	4.23	0.42	150	05		
2011-12	124	5.30	81.77	3.23	0.43	122	05		
2012-13	98	4.12	67.34	9.18	0.39	102	02		
2013-14	140	6.00	60.00	10.71	0.36	146	0		
	S	ource: Lepros	sy Departme	nt-General Ho	spital Nadiad , K	heda			

2. Revised National Tuberculosis Control Programme (RNTCP):

The aim was to achieve and maintain a cure rate of at least 85 percent among newly detected infectious (new sputum smear positive) cases, and to achieve and maintain a case detection rate of at least 70 percent. Treatment success rate is more than 85 percent, TB death rates have been cut from 4 percent to 3 percent, Case detection rate has been maintained at more than 70 percent.

	Table 4.15 Achievement of RNTCP indicators in Kheda District									
Year (Jan to Dec)	Total patients registered for treatment	Total New patients smear registered positive for patients		Annualized new smear positive case Detection Rate (%)	3 month conversion rate of new smear positive patients	NSP Success Rate	Suspects examined per lakh population per quarter	Death Rate among New Smear Positive		
	Non	rms	>56	>70%	>90%	>85%	>150	<5%		
2009	3130	1491	65.2	81.5	91.2	86.57	166.7	4.13		
2010	3237	1531	65.76	82.21	92.00	88.12	169.3	4.13		
2011	2301	1238	58	72	92	88	195	5		
2012	2995	1481	63.34	79.18	91.5	86.75	160.6	5.45		
2013	2922	1478	62.17	77.72	92.22	86.19	164.3	5.40		
*2014	1423	710	33.45	41.82	92.47	87.58	67.05	3.95		

Source: Gujarat State Health Statistic Publication / *For the year 2014 the information contains 1st and 2nd quarter information. TB Department – Civil Hospital Nadiad Kheda

3. National Programme for Control of Blindness (NPCB):

In Gujarat NPCB is implemented since 1978. The data's related to cataract surgery performance shows that maximum people in Kheda district prefer cataract operation in NGO, then at private hospital. A very positive improvement is observed that the performance of cataract surgeries has always been higher than the set target.

	Table 4.16 Cataract surgery performance in Kheda District									
Year wise	Target	Dist. Hosp.	Sub-Dist. Hosp.	NGO	Private	Total	%			
2009-10	30500	765	498	25399	7171	33833	110.93			
2010-11	25500	705	623	31654	5814	38796	152 .14			
2011-12	25500	62	340	35407	4440	40249	157.84			
2012-13	25500	363	260	34113	3320	38056	149.24			
2013-14	25500	355	124	35813	2614	38906	152			
	Source: Gujarat State Health Statistic Publication									

Eye Donation Activities in Kheda district:

As per the eye donation report total number of eyes collected were 22 and 22 eyes were sent to eye banks and other hospitals. In the previous years the total number of eyes collected were 28 in the year 2013, 12 in the year 2012, 8 in the year 2011 and 4 in the year 2009.

Table 4.17	Table 4.17 Eye donation in Kheda District					
Year	Collection of Donated Eyes					
2008-09	4					
2009-10	0					
2010-11	8					
2011-12	12					
2012-13	28					
2013-14	22					
Source :Eye Department –Nadiad Kheda						

Refractive errors in school children

Under school eye screening programme, a total number of 2293 schools were covered about 2.07 percent of student were found to be with refractive errors, and the same percent of student were distributed free glasses.

	Table 4.18 School Eye Check Up Programme in Kheda District								
Year	School Covered under SES	No. of Students Screened	Provided free glasses	No. of Teachers Trained					
2009-10	2110	388088	7203	1.86 %	7203	0			
2010-11	2128	407012	8650	2.12 %	8650	1177			
2011-12	2127	414350	9801	2.36 %	9801	0			
2012-13	2129	399921	9982	2.5 %	9982	0			
2013-14	2293	476201	9878	2.07 %	9878	0			
		Sour	ce: Gujarat State Health Sta	tistics 2013-14					

4.4 Disability in Kheda District

As per census 2011 the proportion of disabled population to total population of the state is about 4.42 percent. The disabled population of Kheda district is about 48278 persons. The figure 4.6 given below shows the disabled population by type of disabilities in Kheda district as census 2011. About 26.04 percent of disabled populations have disability related to movement which is the highest among all the disabilities.

Table 4.19 Taluka wise Total population with Physical Disability in Kheda District as per Census 2011	Total population with disability
Balasinor	3058
Kapadwanj	5735
Kathlal	4378
Kheda	2690
Mahuda	2785
Matar	3415
Mahemdabad	5364
Nadiad	11563
Thasra	7184
Virpur	2106
Total district	48278
Gujarat	10,92,302
Proportion of Disabled Population of the district to state (%)	4.42
Source : DDRC and Census 2011	

4.4.1 District Disability Rehabilitation Centre (DDRC):

Achievements of DDRC:

Total number of persons with disabilities in Kheda District as per census 2011 is 48278 out of which total 55811 i.e. 115.6 percent of persons with disability are registered online in Ability Gujarat. As per the records received from DDRC Nadiad about 34277 disability certificates have been issued. Out of total registered person with disability, 17,906(37.09%) have been issued online e-Certificate till the end of October 2014.

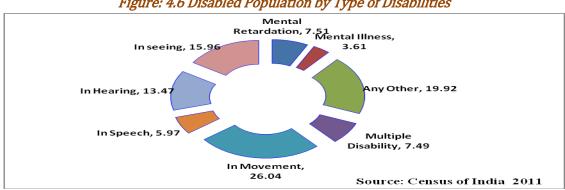


Figure: 4.6 Disabled Population by Type of Disabilities

4.5 Integrated Child Development Schemes (ICDS) - Kheda District

The factors that lead to malnutrition are ignorance about nutritional needs of infants and young children, unawareness about the importance of hygiene, unhealthy food habits, poor care of pregnant women, unsafe drinking water, poor sanitation facilities, teenage pregnancy, and poor breastfeeding practices. ICDS is an important state sponsored programme meant for strengthening nutrition among 0-6 year age group children and pregnant women/lactating mothers. It is a major effort to not only strengthen childhood it is also an important anti-poverty programme. Central to this programme are Anganwadies, nutrition supplements and the Anganwadi worker.

Performance of Integrated Child Development Scheme (ICDS) to improve maternal and child health:

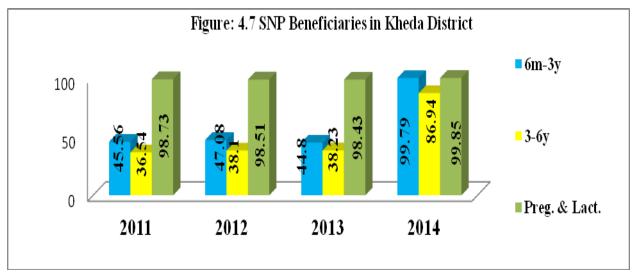
The district has 2222 numbers of Anganwadies which are fully operational in all the blocks of the district. The data related to past four years shows that Anganwadi providing SNP and PSE have increased as well as the beneficiaries under the programmes have also increased.

Table 4.20 Total Anganwadies Functioning								
Owned premises	wned Rented Total AWC							
1477	1477 745 2222							
Source: ICDS –Nadiad Kheda								

	Table 4.21 Population Enrolled , AWC providing SNP and PSE												
AWC AWC Providing AWC Enrolled Population													
Operational SNP 21+ Days Pro.PSE Preg.&Lact. Child. Weighted 0-6													
			21+	Mothers									
2013	2163	2163	2163	40027	172489	197294							
2014	2014 2222 2222 38237 184739 174378												
		Sou	rce: ICDS- Ga	ndhinagar									

Coverage of beneficiaries under Supplementary Nutrition Program and Pre School Education programme of ICDS:

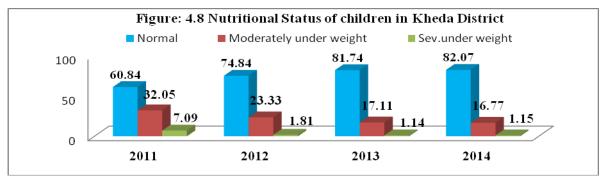
It is observed that since past 4 years the SNP beneficiaries have increased drastically. In 2011 the SNP beneficiaries between 6 months to 3 year were about 44.56 percent and have drastically increased to 99.79 percent in 2014. The pregnant and lactating mothers too have increased from 98 percent to 99 percent. In the year 2014 there were about 38180 pregnant women registered, 42949 young girls (kishories) beneficiaries were registered under SNP. Total 90426 children between 6 months and three year were registered and 72829 children between 3-6 years were registered as SNP beneficiaries. The total beneficiaries registered under preschool education were 44017 boys and 42177 girls in the year 2014.



Source: ICDS- Gandhinagar

Nutritional status of Children:

There is an improvement observed in the nutritional status of children in Kheda district, however still more measure need to be taken to cater to rural children and provide them required nutrition as children are the future of our country severe death among the children occur due to malnourishment. The data's related to past four years shows that the percentage of children that were moderately under weight and severely underweight seems to be reducing initially in the year 2011 there were about 32.05 percent of children who were moderately underweight and in the year 2014 it has become almost half and 7.09 percent of children were severely underweight and in the year 1.15 percent of children are severely underweight.



Source: ICDS- Gandhinagar

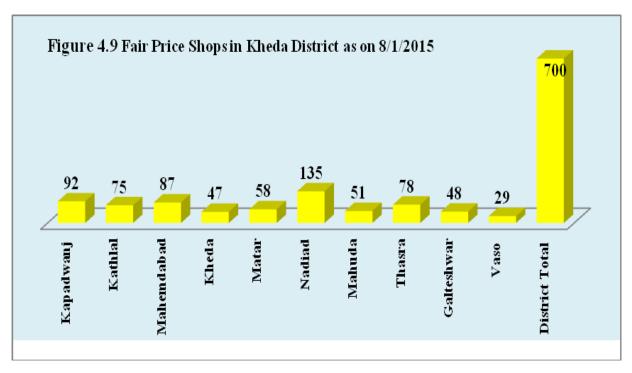
Various activities at Anganwadi Centers in Kheda District



4.6 Food Security in Kheda District:

Table 4.22: Statement showing Commodity and Quantities distributed to APL and BPL in Kheda district in the month of till the month of march from the year 2014							
RICE	(Qty in Quintals)						
1.BPL	3454.99						
2.Antyoday	6097.95						
3.BPL Special	3266.75						
WHEAT							
APL	18324.10						
4.BPL	14581.14						
5.AAY	7207.32						
6.BPL Special	17204.51						
Iodized Salt	1227.11						
Levy Sugar	3441.16						
Kerosene(k.l) 2232.80							
Source : Food and Civil Supplies Dep	Source : Food and Civil Supplies Department Nadiad Kheda						

Kheda is agriculturally developed and prosperous district. The district is self sufficient in production of food grains. The public distribution system plays an important role in ensuring food security to public at large. The data related to PDS coverage in the district shows that the coverage of scheme is quite better in the district there are about 700 fair price shops in the district. There is need to do a comprehensive survey to find out the access of PDS food grain by the poor.



Source: Food and Civil Supplies Department Nadiad Kheda *Balasinor and Virpur taluka have been merged with Mahisagar district.

	Table 4.23 Total Number of Ration Cards distributed in Kheda District for the year 2014										
Sr	Taluka	AP	PL-1	Al	PL-2	В	PL	A	AY	Total	
No		Cards	Popul ation	Cards	Popul ation	Cards	Popul ation	Cards	Popul ation	Cards	Popul ation
1	Kathlal	13,711	86,996	656	3,859	13,087	93,626	4,307	22,306	31,761	2,06,787
2	Kapadwanj	21,451	1,12,453	830	3,754	19,338	1,23,342	6,758	38,349	48,377	2,77,898
3	Kheda	14,762	76,012	950	4,779	6,318	38,901	1,764	9,152	23,794	1,28,844
4	Thasra	14,402	83,362	874	4,596	15,964	1,10,354	4,898	29,140	36,138	2,27,452
5	Nadiad	39,970	2,17,606	1,695	9,563	8,007	47,904	2,584	12,819	52,256	2,87,892
6	Nadiad city (urban)	38,130	1,85,167	4,218	20,104	4,066	22,767	1,567	7,317	47,981	2,35,355
7	Mahuda	17,529	1,10,672	554	3,463	4,176	29,697	1,266	7,770	23,525	1,51,602
8	Mahemdab ad	19,682	1,04,466	535	2,669	16,013	99,915	6,152	31,953	42,382	2,39,003
9	Matar	15,808	84,981	483	2,682	7,708	47,668	2,759	15,427	26,758	1,50,758
	Total	2,11,840	11,53,081	12,084	62,676	1,04,865	6,84,859	35,424	1,94,285	3,64,213	20,94,901
		S	Source : Fo	od and C	Civil Suppl	ies Depar	tment Nadi	ad Khed	а		

4.7 Drinking Water Facilities in Kheda District:

The data related to coverage of drinking water supply scheme shows that about 313 villages are covered under regional water supply scheme. About 41 percent of villages have connectivity by surface source and 59 percent of villages have connectivity by ground source. The total numbers of hand pumps in the district are about 3499 and about 94 minipipes are there, the water supply schemes are completed in 262 villages.

	Table 4.24 Coverage of Drinking Water Facilities in Kheda District											
	Cove	red in Region	al Water Sup	oply Scheme								
Total village	Total	Narmada Base	Other surface source based RWSS	Ground water source based RWSS	Individual	Connectivit y by surface source	Connectivity by Ground Source					
517	313	64	151	98	204	41%	59%					
			Ot	her facilities								
Total village	Nos. of Hand Pump	Nos. of Mini Pipe	Solar Mini	In village Water Supply Scheme (Completed)	House Hold	Connectivity	Roof Top Rain Water Harvesting Structure					
517	3499	94	0	262	269434(86.92%)	0					

Source: GSWSS – Gandhinagar, Gujarat

SWOC ANALYSIS "HEALTH"

STRENGTHS

- The district has made good progress in controlling leprosy and reducing IMR and MMR.
- The district has achieved an impressive growth in health indicators such as institutional deliveries, ANC & PNC check up, child immunization, family planning and in controlling other major health problems such as leprosy and TB.

WEAKNESSES

- There is also a need to focus on reducing anemia among female members.
- There is need to reduce patient load per doctor by way of appointing and retaining doctors.
- Proper nutrition management of newborns remains a matter of concern in the district.
- Safe child birth, nutrition and immunization are taken care in order to improve Neonatal Mortality in the district.

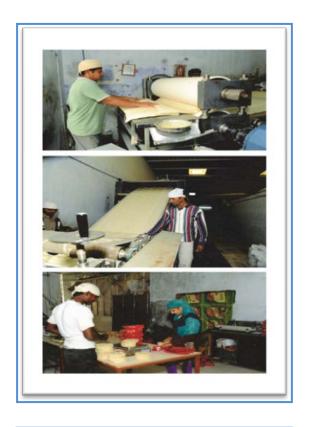
OPPORTUNITIES

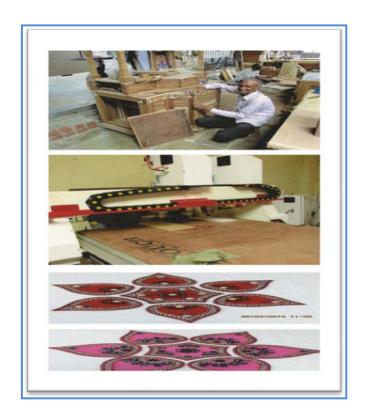
- There is a need to create residential clusters and improve facilities for doctors in remote areas of the district.
- The mothers also need to be educated about the importance of nutrition and immunization.
- Apart from constructing toilets, there is a need to connect water facilities to the toilet.

CHALLENGES

- Large number of vacancies of doctors and paramedic staff are a serious challenge and needs to be effectively addressed.
- Tobacco consumption among female members leads to cancer, so there is a need to educate the female member about the negative impact of tobacco and the danger of Cancer.
- Sanitation is another challenge that needs to be addressed, as it is observed that the open defection is still practiced in remote rural areas.

Chapter 5 Livelihood









Chapter 5: Livelihood

"In this chapter we will analyze the occupational structure of people, Employment in organized sectors in Kheda District and their various means of livelihood like

- Agriculture,
- Horticulture,
- Animal Husbandry,
- Fish Farming (Pesiculture)

Chapter Outline:

- 5.1 Occupational Patterns in Kheda district.
- 5.2 Development of Industries and Employment in organised sectors of Kheda district.
- 5.3 Development of Agriculture.
- 5.4 Development of Horticulture.
- 5.5 Development of Animal husbandry.
- 5.6 Development of Fish farming (Pesiculture).

5.1 Occupational Patterns:

5.1.1 Talukawise Occupational Classifications:

As per the census 2011 the proportion of the total numbers of workers in Kheda district is 933983 persons of which 259397 are female workers and 674586 are male workers. The total main workers are about 722134 persons and out of these 593568 are male main workers and 128566 main workers are female. The total numbers of cultivators are 239241 persons and 216070 are male cultivators and 23171 are female cultivators. The agricultural labourers are 359842 persons and 230061 are male agricultural labourers and 129781 are female agricultural labourers. The total households industry workers consists are about 12455 persons and of these 7429 household workers are male and 5026 households workers are female.

Table 5.1 T	Table 5.1 Talukawise Cultivators, Agriculture labourers , Household industry workers and other workers as a Percentage to Total Workers by Residence, 2011 (Persons)									
Taluka/District/		vators to total We			e Labourers to tota	l workers				
State	Total	Rural	Urban	% of Agriculture Labourers to total worker Total Rural Urbs						
Kapadwanj	31.0	35.2	2.4	35.9	40.9	2.2				
Virpur	31.7	33.9	5.8	34.4	35.9	17.0				
Balasinor	35.3	43.7	4.8	27.0	33.0	4.8				
Kathlal	25.6	27.3	7.3	44.6	46.7	21.4				
Mahemdabad	26.0	28.8	3.7	36.4	39.7	8.8				
Kheda	19.9	22.5	8.2	43.5	49.3	16.6				
Matar	30.1	30.1	-	48.1	48.1	-				
Nadiad	12.5	20.7	3.7	32.4	50.4	12.9				
Mahuda	33.6	36.5	8.7	44.5	45.8	33.4				
Thasra	30.5	32.9	7.3	45.1	47.9	18.5				
Kheda District	25.6	30.5	4.5	38.5	44.5	12.8				
Gujarat	22.0	33.7	2.1	27.6	41.6	3.9				
	% of Household Inc	dustry Workers to	total Workers	% Other	Workers to total W	orkers				
Kapadwanj	1.2	1.2	0.9	32.0	22.8	94.5				
Virpur	1.8	1.8	1.9	32.0	28.4	75.3				
Balasinor	1.3	1.1	2.3	36.4	22.2	88.1				
Kathlal	0.7	0.6	2.5	29.0	25.4	68.8				
Mahemdabad	1.0	0.9	1.9	36.6	30.6	85.7				
Kheda	1.3	1.1	2.0	35.3	27.2	73.2				
Matar	1.1	1.1		20.7	20.7					
Nadiad	2.0	2.3	1.6	53.1	26.6	81.9				
Mahuda	1.3	1.0	3.7	20.6	16.7	54.2				
Thasra	1.1	0.9	3.2	23.3	18.3	71.1				
Kheda District	1.3	1.2	1.9	34.5	23.8	80.8				
Gujarat	1.4	1.1	1.9	49.0	23.6	92.1				
		Source:	Census 2001/201	1						

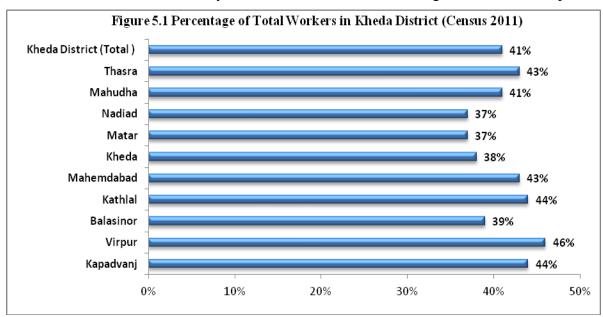
The table given also depicts economic activity of Kheda district. The percentage of cultivators is 25.6 percent and nearly 38.5 percent of workforce is engaged as agricultural labourers so we can conclude that 65.1 percent of workforce is engaged in agricultural sector.

The percentage of workforce engaged as cultivators has reduced in the district in both rural areas as well as urban areas, it was 27.4 percent in 2001 and now it is 25.6 percent in census 2011. In rural areas it was 31.1 percent and reduced to 30.5 percent in census 2011 and in urban areas it was 5.4 percent and reduced to 4.5 percent. The percentage of workforce engaged as agricultural labourers shows a significant increase in census 2011. The total workforce employed as agricultural labourers have increased from 31.3 percent to 38.5 percent in census 2011. The workforce engaged as agricultural labourers in rural areas have increased from 34.6 percent to 44.5 percent in census 2011 and in urban areas it has increased from 11.6 percent to 12.8 percent in census 2011.

Evaluating the total workers engaged in agriculture occupation in rural and urban area shows that the percentage of workforce engaged as cultivators is 25.6 percent and it is very high in rural areas (30.50) and low in urban areas (4.5). The highest percentage of labour force engaged as cultivators is in Balasinor taluka (35.3) and lowest is in Nadiad (12.5). The percentage of agricultural labourers is higher in rural areas (44.5) compared to that of urban areas (12.8). The Matar taluka is highly dominated by agricultural labourers at 48.1 percent.

The workforce engaged in other occupation is more in urban area than that of rural area. It is remarkable to note that about 94.5 percent of workforce is engaged in other occupation in urban areas of Kapadwanj taluka. The other taluka having highest workforce engaged in other occupations in specifically in urban areas is Balasinor (88.1), Mahemdabad (85.7) and Nadiad (81.9), where more than 80 percent of workforce is engaged in other occupation.

The percentage of household industry workers is 1.3 percent. Nadiad taluka (2.0) having the highest number of household industry workers and Kathlal taluka being the least with 0.7 percent.



Source: Census of India 2011

5.1.2 Trend and Pattern of Work Participation in Kheda District:

The workers participation rate for Kheda district is **40.6 percent** as per census 2011, it has reduced to compared to previous census which was 44.9 percent. The female workers participation rate in census 2011 is 23.3 percent and it was 33.8 percent in census 2001. The workers participation rate for males have increased marginally it is 56.9 in census 2011 and it was 55.1 in census 2001.

The workers participation rate in rural areas is 42.7 percent and in urban areas it is 33.6 percent in census 2011.

Table 5.2 Work Par	Table 5.2 Work Participation Rate- Talukawise , District , State as Per Census 2001/2011										
Taluka		2001			2011						
/District/State	Total	Rural	Urban	Total	Rural	Urban					
Kapadwanj	47.1	51.1	30.5	43.5	46.3	30.9					
Virpur	50.2	50.2	0	45.5	46.8	34.4					
Balasinor	45.4	50.7	30.2	39.0	42.0	31.0					
Kathlal	47.3	47.3	0	43.5	44.6	34.4					
Mahemdabad	46.1	48.6	31.3	43.1	44.5	33.9					
Kheda	42.4	44.9	32.8	37.5	38.6	38.6					
Matar	44.3	44.3	0	37.1	37.1	0					
Nadiad	38.5	44.6	31.8	36.9	39.4	34.5					
Mahuda	46.3	48.0	35.9	41.3	42.8	31.9					
Thasra	49.8	51.3	33.9	42.5	43.8	33.5					
Kheda district	44.9	48.1	31.8	40.6	42.7	33.6					
Gujarat	41.9	47.2	33.1	41.0	44.9	35.7					
		Source: Cer	ısus 2001/2011								

5.1.3 Gap in Male and Female Worker Participation Rate:

The overall gap in male and female worker participation rate for Kheda district as per census 2011 is about 33.6 percent and it was 21.3 percent in census 2001, it is a matter of concern that gap has increased in census 2011 by 12 percent compared to previous census. The highest gap observed to be in Matar taluka 42.6 percent, then Kheda taluka 42 percent and lowest gap in male and female worker participation rate is observed to be in Virpur taluka. The gap for female and male worker participation rate is increasing there is a need to take appropriate measures to increase worker participation rate for female.

Table 5.3 (Table 5.3 Gender Gap in Worker Participation Rate as per Census 2011										
Talukas	WPR (Male)	WPR (Female)	Gender Gap in WPR								
Kapadwanj	57.6	28.6	29								
Virpur	54.9	35.5	19.4								
Balasinor	54.6	22.2	32.4								
Kathlal	57	29.4	27.6								
Mahemdabad	57.5	28.1	29.4								
Kheda	57.7	15.7	42								
Matar	57.6	15	42.6								
Nadiad	56.2	16.3	39.9								
Mahuda	58.2	23.4	34.8								
Thasra	57.5	26.4	31.1								
Kheda District	56.9	23.3	33.6								
	Source	e: Census 2001/2011									

5.1.4 Growth rate of Main and Marginal workers by Industrial Categories and Residence:

The percentage of main workers to total workers was 76.5 percent in census 2001 and now it is 77.3 percent in census 2011. In rural areas also the main workers are 75.0 percent whereas in urban areas the figure stood at 87.2 percent in census 2011.

Table 5.4 Ta	Table 5.4 Talukawise Main Workers and Percentage to Total Workers by Residence, 2001 - 2011											
		2001		2011								
	Total	Rural	Urban	Total	Rural	Urban						
Kapadwanj	80.9	78.9	95.3	77.5	74.7	96.3						
Virpur	75.2	75.2	-	68.0	67.5	73.9						
Balasinor	70.9	67.4	88.0	75.1	72.3	85.6						
Kathlal	69.8	69.8	-	77.7	76.7	89.3						
Mahemdabad	89.6	89.3	92.2	72.4	70.9	85.2						
Kheda	80.5	79.7	84.9	85.1	84.9	86.2						
Matar	73.9	73.9	-	80.5	80.5	-						
Nadiad	80.4	75.1	88.4	80.8	75.8	86.2						
Mahuda	72.7	71.4	83.2	78.2	76.8	90.5						
Thasra	67.1	65.8	89.2	75.3	73.9	89.0						
Kheda	76.5	74.4	89.0	77.3	75.0	87.2						
district												
Gujarat	80.1	74.1	94.4	82.2	76.3	92.3						
		Source	e: Census 20	001/2011								

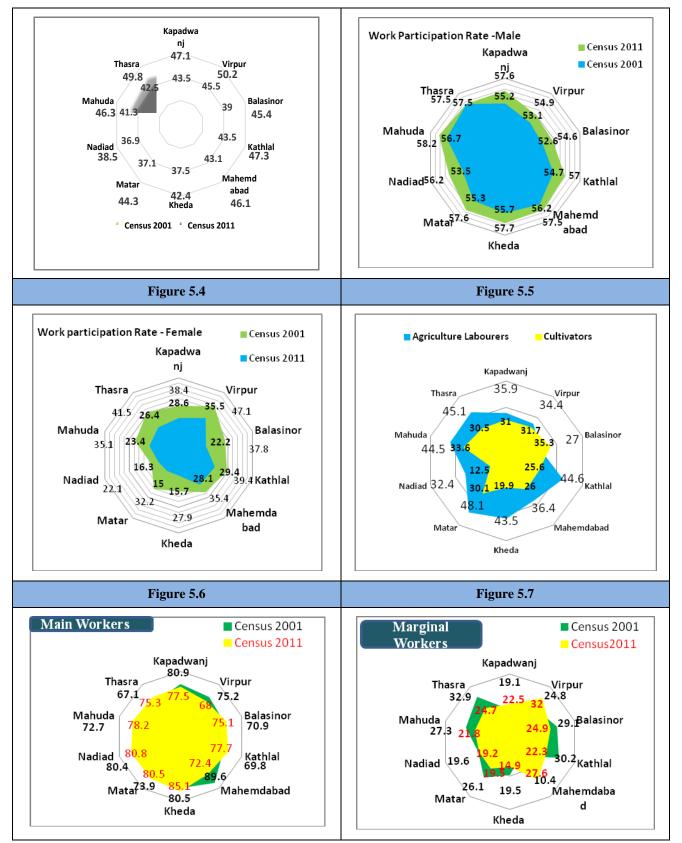
In the marginal work category the data of census 2001 and 2011 shows the proportion of marginal workers to be lower to main workers in both rural as well as urban areas of the district. It can be observed from census data that marginal workforce is 22.7 percent in census 2011 and it was 23.5 percent in census 2001

Table 5.5 Talukawise Marginal Workers and Percentage to Total Workers by Residence, 2001 - 2011									
		2001			2011				
	Total	Rural	Urban	Total	Rural	Urban			
Kapadwanj	19.1	21.1	4.7	22.5	25.3	3.7			
Virpur	24.8	24.8	-	32.0	32.5	26.1			
Balasinor	29.1	32.6	12.0	24.9	27.7	14.4			
Kathlal	30.2	30.2		22.3	23.3	10.7			
Mahemdabad	10.4	10.7	7.8	27.6	29.1	14.8			
Kheda	19.5	20.3	15.1	14.9	15.1	13.8			
Matar	26.1	26.1	-	19.5	19.5	-			
Nadiad	19.6	24.9	11.6	19.2	24.2	13.8			
Mahuda	27.3	28.6	16.8	21.8	23.2	9.5			
Thasra	32.9	34.2	10.8	24.7	26.1	11.0			
Kheda district	23.5	25.6	11.0	22.7	25.0	12.8			
Gujarat	19.9	25.9	5.6	17.8	23.7	7.7			
		Source: C	ensus 2001/2011						

RADAR ANALYSIS

Figure 5.2 Total Workers Participation Rate 2011

Figure 5.3



Source: Census of India 2001/2011

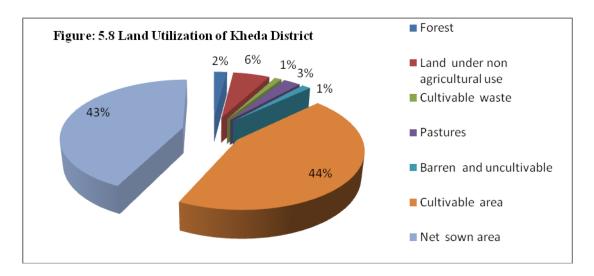
5.2 Agriculture

The growth of the agriculture sector in Gujarat has been particularly noteworthy. The role of the agriculture sectors remains crucial because it is the main source of employment for majority of the population. As per census 2011, 57% of the population of Gujarat lives in rural areas and depends for its livelihood on agriculture and the rural nonfarm sectors that are interlinked with agriculture. The state has to become the benchmark as far as the progress and development of agriculture and nonfarm sectors are concerned. Evaluating agriculture of Kheda district majority of geographical land area of 78.66 percent is under cultivation, the average annual rainfall during last 10 year is more that 857 mm, the average temperature and humidity are conducive to good Kharif and rabi harvest, the average temperature varies from 20.2 degree Celsius to 34.3 degree Celsius. Kheda District has the main rice research station in Nawagam, in Daskoshi area well known as "Rice Bowl of Gujarat state". Wheat, paddy, Bajra, castor, cotton and tobacco are the main crops of the district.

5.2.1 Land Use Pattern in Kheda District:

The land use pattern in the region varies from village to village depending upon the availability of irrigation water, cultivable lands and other factors See for details of land use pattern of Gujarat and Kheda. About 44 percent of the area is cultivable area and 43 percent is net sown area.

	T	able 5. 6	Land Utili	zation Stat	istics (Ar	ea in Ha.)		
Taluka	Geogr	Forest	Land	Cultivable	Pastures	Barren and	Cultivable	Net
	aph	area	under non	waste		uncultivable	area	sown
	ical		agricultural			land waste		area
	area		use			land		
Nadiad	40415	0	5133	200	1454	654	34082	33882
Mahuda	25858	0	3154	680	2029	680	21074	20394
Mahemdabad	28735	0	4570	1049	2435	200	24040	22991
Kheda	40497	0	3495	200	2032	1049	34880	34680
Matar	38641	0	4020	900	1505	900	33721	32821
Kapadwanj	60758	3098	5827	512	1700	1287	49562	49050
Kathlal	29855	0	3546	10	1543	620	25457	25447
Balasinor	29292	2359	1245	346	1200	346	24577	24231
Virpur	25985	8908	1598	1136	1067	1136	18535	17399
Thasra	66353	0	8310	2950	4128	2956	44477	41527
Total	394589	14356	40898	7983	19093	9828	310405	302422
			Source: Distric	ct Statistical Of	fice 2010-11			



Source: District Statistical Office 2010-11

5.2.2 Land holding pattern:

In Kheda district about 83.26 percent of small and marginal farmers are there out of which small farmers are about 21 percent and marginal farmers are about 62 percent. The total small and marginal farmers are about 212978 in the district. In Kheda district, Nadiad taluka has highest number of marginal farmers (31968) as well as area under marginal farmers land holding is about 11,944 hectares followed by Thasra having 20692 marginal farmers with 8937 hectares area. Most of the farmers of the district being small and marginal, there is a need to focus on the strategies to increase the crop productivity and alternate sources of income to improve their standard of living.

		Table 5.7	Land holdi	ngs (Agricı	ılture Cen	sus 2007)		
Name of	Marginal	l farmers	Small	farmers	Large	farmers	Tot	al
talukas	(below	1.0 ha.)	(1.0-2	(1.0-2.0 ha.)		han 2 ha.)		
	No.	Area	No.	Area	No.	No. Area		Area
Nadiad	31968	11944	6522	9074	3365	11352	41855	32370
Mahuda	11309	4907	4013	5695	2872	9627	18194	20230
Mahemdabad	18212	7407	6091	8579	4562	16439	28865	32424
Kheda	8171	3635	3555	5054	3375	12936	15101	21626
Matar	16047	6704	5524	7814	4527	18194	26098	32712
Kapadwanj	17692	7812	8829	12593	8006	32520	34527	52925
Kathlal	16411	6934	5388	7602	3821	15742	25620	30278
Balasinor	9919	4073	3473	4935	2857	11446	16246	20454
Virpur	7837	3039	2818	3998	1970	7342	12625	14380
Thasra	20692	8937	8507	12059	7447	28899	36646	49895
Total	158258	65391	54720	77403	42802	164498	255780	307294
		Soi	urce : Agric	culture Cens	sus 2007			

Table 5.8 Types of Farmers Kheda District									
Types of Farmers	Area (in hectares)	Total Percentage							
Marginal farmers	158258	65391	61.87						
Small farmers	54720	77404	21.39						
Large farmers	42802	164498	16.73						
Total	255780	307292	99.99						
	Source: Agricultı	ire Census 2007							

5.2.3 Agro Climatic Conditions:

Agro Climatic Zone of Kheda District:

Gujarat state has been divided into eight agricultural zones based on the agro-climatic conditions and the soil profile. Based on this classification Kheda district falls under zone III. The table given below represents five distinctive Agro Eco Situations of all the Kheda districts done by SREP-ATMA projects 2010.

	Table 5.9 Agro Climatic Zones of Kheda District										
Sr. No	Name of the Agro Climatic Zone (ACZ)	Name of the Agro ecological situation (AES)	Blocks covered	Representative village							
1	Agro climatic zone -III	AES I	Kapadwanj	52%							
			Kathlal	23%	Ambliyara						
			And Thasra	25%							
2	Agro climatic zone -III	AES II	Nadiad	43%							
			Mahuda	27%	Dabhan						
			Mahemdabad	30%							
3	Agro climatic zone -III	AES III	Kheda	51%							
			Matar	49%	Undhela						
4	Agro climatic zone -III	AES IV	Balasinor	47%							
			Thasra	53%	Parbiya						
5	Agro climatic zone -III	AES V	Virpur 100%		Umariya						
		Source : SREP,A	TMA Project								

Soil topography:

The soil types of a particular area play a significant role on determining the fertility status and cropping patterns. The majority of the Kheda district soil is clay loam type. It covers about 191826 ha area and this soil is found in all the talukas of Kheda districts. It covers about 70 percent area of the district. It has high retention capacity with high water holding capacity and medium in soil fertility and suitable for majority of the agriculture and horticulture crops. The soil pH ranged from 6.95-8.069. Based on the type of soil appropriate type of crops should be grown so that it yields higher productivity resulting in higher profits for the farmers.





5.2.4 Area under Food crops and Gross cropped area:

The cropping intensity of the district is about 135 percent as per the season and crop report 2007. The predominant crops of Kheda district are paddy, wheat, Bajra, castor, cotton and tobacco. The main crops in Kharif season are paddy and Bajra and in Rabi season are wheat and potato. The production of oil seeds like castor has gained momentum due to introduction of high yielding varieties and higher net returns. Even the productions of vegetable crops like tomato and chili have increased. The production of banana and papaya has also increased due to the introduction of new technologies like tissue culture and INMS.

	Table	5.10 Area under	Food Crops and	l Gross Cropped Are	ea			
Taluka	Area under	food crop (Area	in Hectares)	Gross cropped Area (Area in Hectares)				
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14		
Kapadvanj	19564	14207	16350	46119	51762	49057		
Virpur	6557	7079	7808	15453	14156	14116		
Balasinor	8708	8867	2260	19690	20736	21574		
Kathlal	12338	12672	14246	24228	23926	23618		
Mehmedabad	20008	18500	21865	27750	28810	26454		
Kheda	17590	15900	16431	20015	18846	17673		
Matar	25265	20050	27351	27713	22639	28982		
Nadiad	18000	17490	22086	27561	27120	29469		
Mahudha	9205	8600	11890	17674	20780	18220		
Thasra	17219	15222	16000	45005	46505	45920		
		Source: District	Agriculture office	e Nadiad Kheda				





Table 5.11 Statement showing District-wise Area, Production and Yield in Kheda District

(Area in 00 Ha Production in 00 M T Vield in Kg/Ha)

	(<i>F</i>	Area in	. uu Ha.,	Proau	ction i	n uu Mi.	1., Y 1el	a in K	g/Ha)			
Crop		2009-10)		2010-11	l		2011-12	2	A	VERA	E
	Area	Prod	Yield	Area	Prod	Yield	Area	Prod	Yield	Area	Prod	Yield
Total cereals	2336	4663	1996	3181	7369	2316	3009	6882	2287	2842	6305	2218
Total pulses	55	30	545	77	60	779	55	51	927	62	47	754
Total food grain	2391	4693	1963	3258	7429	2280	3064	6933	2263	2904	6352	2187
Total jowar	7	7	1000	33	35	1061	1	1	1000	14	14	1049
Total bajra	504	690	1369	909	1788	1967	997	1942	1948	803	1473	1834
Total rice	924	2160	2338	974	2363	2426	1095	2465	2251	998	2329	2335
Total maize	141	126	894	242	448	1851	150	259	1727	178	278	1563
Total mung	8	3	388	16	9	563	14	6	429	13	6	474
Total udad	4	3	588	3	2	667	3	2	667	3	2	700
Total oilseeds	171	202	1181	153	188	1230	316	418	1323	213	269	1263
Total cotton	285	1016	606	215	853	675	304	733	410	268	867	550
Tobacco (total)	354	537	1517	376	675	1795	477	850	1782	402	687	1708
Cumin	5	3	576	4	3	657	3	2	702	4	3	667
Fennel	16	21	1323	18	28	1582	3	3	1003	12	17	1405
Isabgul	2	1	581	1	1	645	1	1	756	1	1	750
Onion total	3	68	26789	5	123	24600	2	62	31000	3	84	25300
Garlic	0	0	0	1	5	5709	1	9	6125	1	5	7000
Potato	58	954	16487	47	920	19413	43	991	23116	49	955	19376
Chillies	8	8	985	12	13	1081	12	12	1000	11	11	1031
Guar seed	13	4	281	19	11	586	9	5	581	14	7	488
Banana	1	57	70010	0	4	70308				1	31	57755
			Source:	Director	rate of A	gricultur	re –Gan	dhinaga	r			







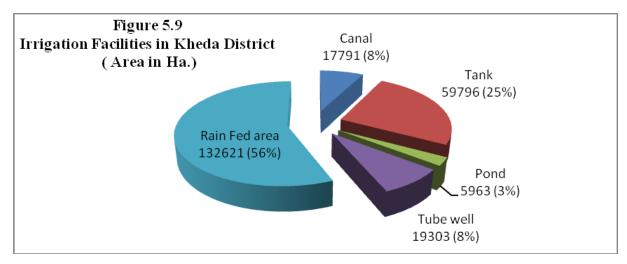




5.2.5 Irrigation and Ground Water:

The canal and tube well irrigation facilities account for about 16 percent share. The canal water is limited and available for full period. The underground water resources are concerned about 20 percent of the total water of the district is either saline or alkaline, thus making the use of underground water for crop production risky and unfit for irrigation.

T	able 5.12 Sou	rce wise Irrigate	ed area in Kheda	District (Area in l	na.)
Taluka	Canal	Tank	Pond	Tube well	Rain Fed area
Nadiad	3079	23325	255	1997	5480
Mahuda	187	6008	615	1234	11650
Mahemdabad	1266	-	858	7614	17540
Kheda	293	5715	2312	3487	8480
Matar	919	18841	580	982	3320
Kapadwanj	3538	-	200	332	28431
Kathlal	2095	-	425	1162	14220
Balasinor	2444	-	-	50	16000
Virpur	1760	-	200	247	12500
Thasra	2210	5907	518	2198	15000
Total	17791	59796	5963	19303	132621
	So	urce : District Ag	riculture Report 2	009-2010	



Source: District Agriculture Office Nadiad Kheda



5.2.6 Key Areas to improve Farming Activities in Kheda District:

5.2.6.1 Quality of seed and availability of seeds in various taluka:

There are six taluka seed farms at Nadiad, Matar, Kheda, Thasra, Kapadwanj and Balasinor taluka. The seeds availability in the district is badly affected by infrastructural facility, especially taluka seed farm at block/district level, so there is a need to strengthen existing taluka seed farm and open new seed farms in the remaining talukas.

5.2.6.2 Availability of fertilizers and knowledge of utilizing fertilizer:

Farmers need to have appropriate knowledge about the use of fertilizer to increase the fertility of the soil. Moreover the farmers should be made aware about the use of micronutrient in their crops, especially the small and marginal farmers.

5.2.6.3 Measures to protect the crops and plants:

Insect, Pest Diseases and Weed Control:

- Appropriate measures are required to be taken for promoting integrated measures for control
 of pest, diseases and weed control which are in tune with sustainability and profitability
 without enhancing cost.
- Integrated pest management program can be adopted by incorporating the control methods of mechanical, physical, cultural, biological, botanicals, microbiological and need based application of chemical insecticides was found effective in controlling the pests in vegetables, pulses fruit crops.
- Conservation of predatory spiders in rice by broadcast wheat/Lucerne straw (80kg/ha) at 15-20 days after transplanting in paddy found effective in management of leaf fodder.
- An integrated approach involving three years crop rotation, deep summer involving three years crop rotation, deep summer ploughing, soil solarization with clear linear low density polyethylene (LLDPE) plastic film (25mm) for 15days during summer, use of resistant varieties seed treatment with thirum /captan,use of bio-fungicide like trichoderma,use of organic manure /cakes and removal of crop stables after final harvest were found effective for the management of pest and Diseases of major agriculture crops.

5.2.6.4 Mechanization

There is a need to introduce the mechanized farming in the district. There are various government schemes which provides several instruments to enhance the mechanization level of farming in order to improve the productivity.





5.2.7 SWOT Analysis of Agriculture:

Anand agricultural university in association with Gujarat state government has developed the comprehensive agricultural plan for Kheda district (C-DAP) included each and every aspects of district development for long term viz, soil and water reclamations, irrigation facilities, value addition, post harvest technologies, integrated pest management precision farming sustainable farming, fisheries development, empowerment of the farm women and rural youth, new avenue of the development of the district as a whole keeping in mind the local situations, natural resource management and needs of the locality. In short C-DAP is a detail plan proposal for overall development of the district with RKVY budget. The SWOT analysis for agriculture and other allied sectors provided here is as per the CDAP – developed for Kheda district. It is also important to note that as per CDAP, each taluka has a potential for establishing dairy and poultry enterprise.

STRENGTHS

- ❖ Majority of geographical land area of 78.66 percent is under cultivation.
- ❖ About 44 percent of cultivable land is irrigated
- ❖ The average rainfall during last 10 years is more than 857 mm. the average temperature and humidity are conducive to good Kharif and Rabi harvest. The average temperature varies from 20.2 degree Celsius to 34.3 degree Celsius.
- Soil fertility indices are good from the point of view of agriculture.
- * Kheda district has main rice research station in nawagam, in daskoshi area well known as "rice bowl of the Gujarat state"
- The main source of irrigation is canals, tubewells and bore wells. There is assured irrigation facilities.
- Good transport facilities through rail and road.
- Financial help through banks and other cooperatives available.
- Mechanized farming gaining importance

WEAKNESSES

- The soil is poor in organic carbon (0.5 percent).
- The areas of the district especially Mahemdabad, Kheda and some part of Matar taluka (coastal saline ingress) are affected by salinity.
- High weed infestation
- Village pond siltation
- Over exploitation due to excessive irrigation and use of more chemical fertilizers has resulted in depletion of soil quality particularly in the paddy growing taluka of the district.



- Water logged condition is main feature of Nadiad as underground water quality is poor.
- Farmers are using low quality and quantity of organic manure in their fields.
- ❖ There is no special reclamation programme for improvement of saline and alkaline soils.
- There is proper drainage system to remove excess salts.
- Nor processing facilities for vegetables
- Good quality cattle are not locally available
- Increase in incidence of pest and Diseases.
- Poor feeding management of livestock
- Poor quality of ground water

OPPORTUNITIES

- ❖ A taluka seed farm may be opened in every taluka of the district.
- ❖ In Kheda and Matar taluka, there are no assured irrigation facilities so the farmers should be educated about conservation, tillage, judicious use of water and water harvesting technology in monsoon season.
- ❖ The state government can take the initiative to start reclamation programme for improvement of saline and alkaline soil and to prevent water logging, dig a big kans for drainage parallel with irrigation canals particularly in blocks of Nadiad, Kheda, Matar, Mahemdabad, Thasra and Kapadwanj of the Kheda district.
- ❖ Popularize the use of organic manure, vermi compost, green manuring, micro nutrient fertilizers in the district to enhance the soil fertility
- ❖ 12-15 percent land is not under cultivation part of them may be utilized under water shed development programme.















- ❖ 56 percent of the cultivable land is still under rainfed. They may be brought under irrigation by providing irrigation facilities through bore well, farm ponds etc.
- Organic manures may be prepared using gobar, organic wastes which can increase OC content of the soil and organic farming may be promoted.
- Leguminous crops pulses may be promoted to increase nitrogen content of the soil and also help to provide balance nutrition to the human beings and animals.
- ❖ A continuous IEC programmes may be organized to make farmer aware about various developments in agriculture and allied sectors.
- Developing of fruits vegetables and fisheries cooperatives.
- Increasing awareness about soil and water management among the farmers.
- Storage and market yards to be strengthened.
- Mechanization can also solve the problem of labour.
- All major banks have entered into collaboration with manufacturers /dealers for providing loans for purchase of tractors and other farm implements

THREATS

- Maximum area under rice wheat cropping system leads to decline in soil fertility.
- ❖ Indiscriminate use and over exploitation of canal and underground irrigation water.
- Unavailability of adequate drainage system.
- Low organic carbon content of the soil due to intensive farming (cereals cereals crop rotation rice wheat and non use of organic manure.
- Need to support training of farmers/ entrepreneurs in agro processing / food processing/ packaging technologies.
- Problem of salinity and water lodging.
- Shifting of productive land to non agriculture use.

Soil Health Cards

Gujarat is the first state in India to issue the "Soil Health Cards" to farmers. Soil health cards helps the farmers verify the soil specimen through experts who examine the mineral composition of the soil. Based on soil health card, they provide fertilizers with appropriate nutrients percentages. This helps in soil enrichment and also reduces land erosion to a great extent. Initially the farmers used to grow 1-2 crops now they can grow 3-4 crops and increase their profit margin.

Distribu	Distribution of Soil Health Cards in Kheda District								
Year	Total Farmers	As per Agri Census 2001							
2003-04	205872	27996							
2004-05	,,	22811							
2005-06	2005-06 " 13617								
2006-07	,,	7251							
2007-08	,,	13098							
2008-09	,,	10629							
2009-10	,,	61136							
2010-11	,,	24830							
2011-12	,,	24504							
Soil Health	n Cards distributi Census 2005	on as per Agri.							
2012-13	255780	64440							
2013-14	,,	54780							
2014-15	,,	8391							
1	Total	127611							
Source : D	istrict Agriculture Kheda	Office –Nadiad,							

Krishi Mohatsav

The Krishi Mohatsav campaign was launched in 2006 in Gujarat, it is being held on auspicious occasion of "Akshaytritiya". It is unique initiative of government which has created "Green Revolution" in Gujarat. The campaign has Krishi Raths reaching farmers with researchers, scientist, experts, agriculture officers and ministers who interact with district farmers providing information and counseling on soil health, organic farming, new technology, inputs and irrigation etc. During Krishi Mohatsav, teams tour all the villages of the district, providing information and counseling on soil health, organic farming, new seed varieties, chemical fertilizers uses of pesticides etc. as well as benefits of modernized farming and irrigation etc. It includes Krishi Mela, Exhibition and Seminars/Talks. Experts from agricultural universities directly interact with farmers at the village level and area specific and crop specific issues and concerns of farmers are discussed. Kheda district is predominantly an agriculture district and programme of Krishi Mohatsav has proven successful in transforming lives of small and marginal farmers offering them a good rate of return in the district. As a result of this programme, agriculture has witnessed impressive growth in the district.



Krushi Mahotsav: Kisan Rath and other Activities

	Kits Distribution during Krishi Mohatsav 2015 in Kheda District									
Sr.No	Details		Units in Number							
1	Visit of Agriculture Rath	S	120 Krishi Raths							
2	Animal Vaccination	43947 number of animals								
3	Agriculture and Horticult	ture Kits	1680 kits							
4	Animal Husbandry Kits		2400 kits							
5	Cattle Feed Kits distribut	51 kits								
	Beneficiaries u	inder various schemes during	Krishi Mohatsav							
Name of	Scheme	Number of Beneficiaries	Amount of Subsidy (in Lakhs)							
1. A.G.	R-4	382	14,89,800							
2. Natio	onal Food Security	1320	79,200							
Miss	ion - Bajri									
3. RKV	Y(FM)	380	32,00,000							
4. Insur	rance scheme for	2	2,00,000							
farm	ers(Khatedar Khedut									
Vima	a Yojana)									
	Total	2084	4969000							
	Source :	District Agriculture Office –Nac	liad, Kheda							

5.3 Horticulture

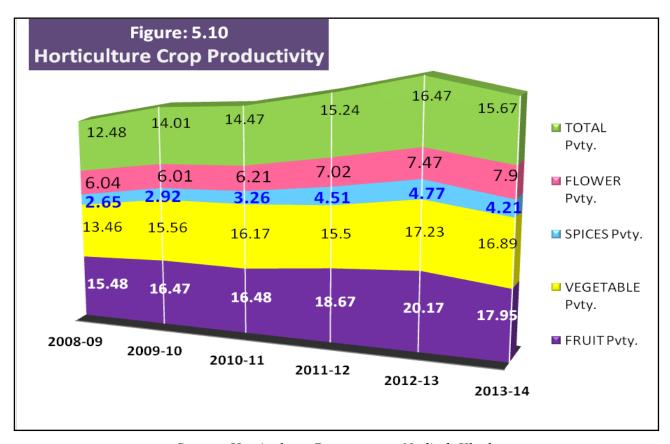
The horticulture also acts a means of livelihoods to an ample number of farmers located in Kheda district. Agro climatic conditions, soil and water availability and marketing opportunity in and around the district make it suitable for growing a wide variety of fruits like mango, banana etc, spice crops, cucurbits etc. The total fruit production for the year 2013-14 is 169122 tonnes, in an area of 9422 hectare and productivity is 17.95 quintals per hectares.

Key observations from 2008 to 2014:

Total horticulture productivity has increased by 3.21%

There is an increase in:

- 1. Flower production by 2%
- 2. Spice production by 2 %.
- 3. Vegetable production by 3 %
- 4. Fruit production by 2 %



Source: Horticulture Department –Nadiad, Kheda

	Table: 5.13 Estimated Area, Production & Productivity ofHorticultural Crops from 2008-09 to 2013-14 Area in Hectares, Production in M.T., Productivity M.T./Hec.														
Year	Year Fruit Crops		os	Veg	etable Cı	rops	Sp	ices Cro	ps	Flower Crops			Total		
	Area	Prod	Pvty.	Area	Prod	Pvty.	Area	Prod	Pvty.	Area	Prod	Pvty.	Area	Prod	Pvty.
2008-09	10066	155834	15.48	24964	336125	13.46	4714	12509	2.65	1326	8014	6.04	41070	512482	12.48
2009-10	10268	169107	16.47	26217	408003	15.56	4918	14358	2.92	1417	8521	6.01	42820	599989	14.01
2010-11	10693	176236	16.48	27574	445777	16.17	4972	16219	3.26	1525	9468	6.21	44764	647700	14.47
2011-12	9513	177628	18.67	24824	384822	15.5	2543	11465	4.51	1432	10048	7.02	38312	583963	15.24
2012-13	9739	196472	20.17	33016	568704	17.23	3906	18638	4.77	1689	12615	7.47	48350	796429	16.47
2013-14	9422	169122	17.95	33121	559576	16.89	4422	18608	4.21	1439	11363	7.9	48404	758669	15.67
				So	urce: Ho	rticultur	e Depar	tment –l	Vadiad,	Kheda					





5.3.1 SWOT Analysis of Horticulture

STRENGTHS

- Climate is quite favorable for production of different quality fruits like banana, mango, papaya, citrus and Aonla and vegetables like potato, tomato, and chili.
- Soil is sandy loam type and has high retention capacity which is suitable for horticulture crops.
- The proximity to the huge markets of Ahmedabad and Baroda with road and rail connectivity.
- Long tradition of cultivating specific vegetables.

WEAKNESSES

Majority of the farmers are small and marginal so government subsidy is required to grow horticulture crops as initial investment will be high for poly house, net house, drip irrigation and plant protection etc.

- Poor quality of underground water.
- High transport cost.
- Poor quality of seeds and planting materials.
- Lack of proper knowledge of farmers in modern production and post harvest handling and marketing practices.

OPPORTUNITIES

- Proximity to Ahmedabad and Baroda offers excellent marketing opportunities to the farmers.
- Established and upcoming cold storage and processing units.

Threats:

Weaker post harvest management and modern marketing facilities like cold storage / chains, pre cooling and waxing centers.

Green House of "Capsicum"-Kheda District





5.4 Animal Husbandry

Animal husbandry sector plays an important and vital role in Gujarat state domestic product. Livestock rearing is a way of life in rural areas of Kheda district. Animal husbandry and agriculture both go together they are also dependent on each other. It provides productive employment especially self employment and most valuable supplementary income to the vast majority of rural households, majority of them are small and marginal farmers and landless laborers. Kheda district is covered under livestock insurance scheme in the state.

It is observed that animal population is quite good in number in all the talukas of Kheda district. The demand for milk and other animal based produce offers high return to people in animal's husbandry in Kheda district. High numbers of females participate in animal husbandry activities such as selling of milk and its by products which offer a high return to these females in Kheda District.

The pasture lands of the district is shrinking for cattle feed, mainly due to industrialization and increasing population burden which leads to reduction in area under fodder crops. Therefore Kheda district farmers are facing the problem of feed and fodder shortage for their animals, it is extremely important to address this problem in order to increase milk yield and fertility. Green fodder is the best feed for animals for higher milk production so sufficient quality of good green fodder should be supplied to the animals. The district accounts for a large number of buffaloes and there is ample of marketing opportunities available for animal based products and by products in the district.

The other major problem that the district faces is good quality cattle, pure breed of cows and buffaloes which are not locally available. The farmers should be helped with pure breed of cows and buffaloes and improve upon poor feeding management of livestock. Farmers are also not aware of latest scientific technologies in livestock production and management so there is need to provide scientific knowledge related to management of livestock health and maintenance of cattle through camps. Biomass available from livestock, crop and farm residue can be utilized for vermicompost for increasing soil fertility. There is a need to provide appropriate manpower at the veterinary institution. The district has a huge potential for dairy development, largely due to rural women engaged in animal husbandry proper training should be provided to women in animal rearing in the district. The cost of the animals at which it is procured also acts a barrier to rural poor.



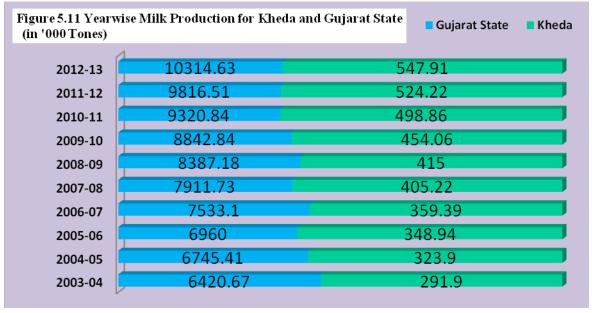




5.4.1 Production of Milk in Kheda District:

As per the 30th survey report the district ranks 4th in terms of milk production in the state. The total milk production was about 547.91 tonnes, therefore the percentage share of milk production toward the state is about 5.31 percent. The district has improved in terms of milk production in preceding nine years. Initially in the year 2003-04 the milk production was 291.9 tonnes and it has increased by 256 tonnes i.e. it is 547.91 tonnes in the year 2012-13.

	Table 5.14 District Rank & Percent	age of Milk Production for 201	12-13(in Tonnes)		
Rank	Name of the District	Milk Production	Percentage		
1	Banaskantha	1203.58	11.67		
2	Sabarkantha	913.98	8.86		
3	Mahesana	774.95	7.51		
4	Kheda	547.91	5.31		
5	Junagadh	523.63	5.08		
	Gujarat	10314.63			
	Source: 30 th survey report – on estimates of me	ajor livestock products. –directo	rate of animal husbandry.		



Source: 30th survey on estimates of major livestock products – Directorate of Animal Husbandry.

5.4.2 Establishment of Milk Cooperatives:

The data related to milk cooperatives shows that there about 636 number of milk cooperative societies which has about 3, 19,022 number of members in the district. It is also observed that maximum females are involved in animal husbandry in the district but very few i.e. only 7 female milk cooperative societies are there in the district and only about 53047 female members are there in the milk cooperative societies.

Sr .No	Table 5.15 Information regarding milk cooperative union as on 31 st March 2015	
1.	Number of milk co operative societies	636
2.	Members of milk cooperative societies	319022
3.	Number of female milk cooperative societies	7
4.	Members of female milk cooperative societies	53047
5.	Milk collected from villages cooperative societies in year 2014-15(in Kg)	288131233
6.	Number of societies with BMC	549
7.	Number of societies with AMC	590
8.	Number of chilling centers.	1
9.	Number of veterinary service centers	8
10.	Number of veterinarians working with union	92
	Source: Directorate of Animal Husbandry - Gandhinage	ır

5.4.3 Evaluation of Livestock Census 2007:

Table 5.16	Total nu	mber of	livestock a	and pou	ltry in l	Kheda Di	strict as p	er Census	s 2007
Talukas	Grazing land (in Hec)	Total Cattle	Total Buffaloes	Total Sheep	Total Goats	Total Donkey	Total Other livestock	Total livestock	Total Poultry
Kapadwanj	1700	62400	79119	5736	14533	323	393	162504	46503
Virpur	1067	30455	27832	267	11026	71	439	70090	11644
Balasinor	1200	19972	45153	4032	12025	147	96	81425	6434
Kathlal	1543	13973	64315	3439	6456	297	3401	91881	8934
Mahemdabad	2435	10190	98281	1573	10406	303	57	120810	21586
Kheda	2032	11521	35011	1940	5383	558	780	55193	5044
Matar	1505	11844	44970	1122	6331	217	249	64733	88232
Nadiad	1454	21276	97415	3017	17661	757	220	140346	215177
Mahudha	2029	11951	39129	2762	9597	217	87	63743	34506
Thasra	4128	33451	96598	5517	24969	867	1885	163287	22113
Kheda District	19093	227033	627823	29405	118387	3757	7607	1014012	460173

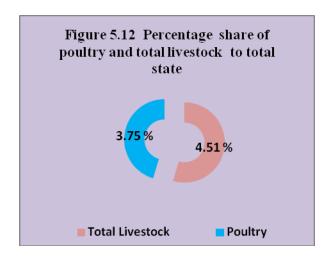
*Total poultry includes deshi fowl, improved layer fowl, total ducks, others poultry such as bird, turkey, quail and broiler fowl.

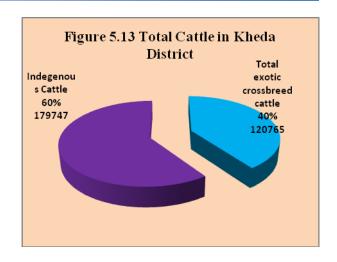
*Source:18th Livestock Census 2007

Kheda district has higher number of buffaloes in terms of milk animals the total number of buffaloes are about 627823 in the district, most of the surti, mehsani and banni breed of buffalo are found in the district. The total cattle were about 227033, total sheep were about 29,405 and goats were about 118387. The total poultry was about 460173.

Livestock Census 2012 Highlights:

- Kheda district is 3rd largest contributor in Buffalo population in the state, Kheda district share of buffalo population is 7.30 percent.
- The percentage share of poultry is about 3.75 percent and total livestock is about 4.51 percent.





Source 19th live stock census-2012

Table 5.17 Total Livestock in Kheda District as per Census 2012										
	Total cattle	Buffaloes	Total sheep	Total goats	Horses & Ponies	Donkeys	Camel	Total Livestock	Total poultry birds	
Kheda CENSUS 2007	227033	627823	29405	118387	222	3757	793	1007469	460173	
Kheda CENSUS 2012	300512	757806	22166	134236	339	6682	1558	1223299	562232	
%age change in 2012 over 2007	32.36	20.70	-24.61	13.38	52.70	77.85	96.46	21.42	22.17	
Gujarat CENSUS 2012 (in Millions)	9.98	10.38	1.70	4.95	0.018	0.039	0.03	27128.20	15005.75	
Source: Livestock Census 2012										

The total livestock and total poultry have increased compared to previous census. In census 2007 the total poultry was about 460173 and in census 2012 it is 562232 and total livestock has increased from 1007469 in census 2007 to 1223299 in census 2012. The total number of buffaloes has increased by 20.70 percent, total goats have increased by 13.39 percent, and poultry have increased by 22.18 percent but the total population of sheep has decreased by 24.62 percent.



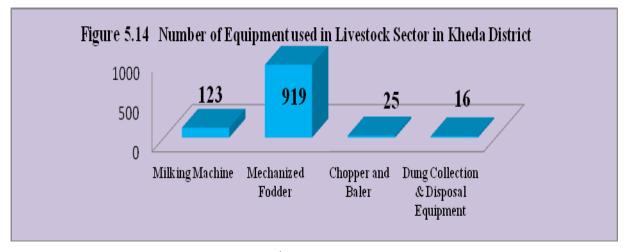


5.4.4 Infrastructure related to Animal Husbandry:

The data related to animal husbandry shows that district has one polyclinic, 21 veterinary dispensaries, and 4 veterinary ambulance van in the district.

The total number of livestock equipment used per thousand households are about 123 milking machine, 919 of mechanized fodder, 25 chopper and baler, 16 dung collection and disposal equipment. In the year 2014-15 about 61 beneficiaries were distributed milking machines worth rupees 20,58,750 ,the cost of each machine is about 45,000 this machine help to maintain the quality of the milk.

Sr No.	Table 5.18 Infrastructure rela Animal Husbandry Department as 2015	
1	Polyclinic	1
2	Veterinary dispensaries / BVD	21
3	Mobile AD cum Ambulance Van	4
4	FAVC	21
5	RPVHC	3
6	KVS	2
7	ICDP CENTERS	24
	TOTAL	76
	e: Directorate of Animal Husbandry Gandhingaar	Gujarat



Source: 19th Livestock Census-2012

The state government has launched many new schemes to boost animal husbandry in the district the government provides milking machines, financial support to develop cattle shed and goat units and chaff cutters are also provided. In the year 2013-14 about 15 beneficiaries has received the financial support of about 2.25 lakhs to develop the cattle shed, for setting up of goat unit in about 10 beneficiaries has received financial support of about 3 lakhs. In order to provide good quality cattle feed about 130 beneficiaries were provided cattle feed worth 2.6 lakhs. The government has also conducted camps and training programmes to provide scientific knowledge related to livestock management to the people involved in animal husbandry in the district.





5.4.5 Recommendation related to Animal Husbandry in Kheda District:

- ❖ Kheda district is facing acute shortage of fodder for animal feed. There is a need to develop a particular model like that adopted in village dharmaj in Petlad taluka of Anand district in order to address scarcity of fodder as well as making fodder available at remunerative price to people in the district.
- There is also need of mass breeding through artificial insemination programme in each villages of the district so that better qualities of animals are available at local level.
- ❖ As per the guideline of government of India one veterinary clinic per 5000 livestock should be there so there is a need to increase manpower of vetenary officers and technical staff to cover the livestock at village level.
- ❖ The utilization of waste products of farm weeds, cow dung, urine etc should be made for preparation of vermi compost thereby increasing soil fertility.
- There is a need to provide training to the veterinary doctors, imparting proper training to them will lead to specialized skilled manpower to treat animals.

5.4.6 SWOT Analysis of Animal Husbandry:

To improve the activities of animal husbandry state government can establish adequate veterinary centers at each talukas of the district, Arranging of animal healthcare camps. As per Comprehensive –District Agricultural Plan the major initiative that can be taken are given as follows:

Strength and Opportunities:

- ❖ Intensive pure breeding (Selective Breeding) programme may be undertaken so that better quality animals would be available at the local level.
- ❖ Storage and market yard facilities to be strengthened.
- ❖ Develop high yielding varieties of fodder seed to make fodder production more remunerative.

Weaknesses and Threats:

- ❖ High mortality and poor growth rate in calves, Infertility and delayed calving, Low milk yields in buffaloes and cows and shrinking pasture lands in the district.
- Lack of proper management and feeding practices, High cost of feed and chicks.
- ❖ Not getting remunerative price for the produce of milk, eggs and broilers.
- ❖ The growth of Poultry industry is dependent on availability of maize grains and their competitive price as feed cost is nearly 70 percent of total cost
- ❖ The Kheda district farmers are also facing feed and fodder shortage problems for their animals and majority farmers are not using chaff cutter for fodders resulting in wastage of fodders, therefore to avoid loss of fodders there is a need to provide electric chaff cutters.

Gov	Government Flagship Programs (Pashu Arogya Mela) during Krishi Mohatsav 2012-13			
Sr. no.	Details	Work Done		
1	Target	215		
2	Camps Arrange	215		
3	Villages Covered	397		
4	Total Treatment	38525		
5	A.I.	1293		
6	Castration	1126		
7	Vaccination	194825		
8	Beneficiaries of PashuArogyamela	29261		
9	Total Animal Covered	125313		
10	Exhibition	176		
11	Beneficiaries Of Shibir	25811		
	Source : Animal Husbandry Department –Nadiad,	Kheda		

5.5 Industries and Employment

5.5.1 Employment of people in Organised Sectors in Kheda District:

Employment in organized sectors is gaining its momentum with rapid establishment of small and medium size industries in the district. The table given below depicts the employment of people in public and private sectors. The employment patterns in organized sector shows that 957 people were employed in central government, 5499 people were employed in state government, 9803 people were employed in semi government, and 12081 people were employed in local institutes of the district.

About 25542 of people are employed in private sectors of the district in the year 2014. The data available from the labour and employment department of the district shows that 20.22 percent (5832) of female were employed in the year 2013 and in 2014, 22.88 percent (5845) female were employed. The employment of women in private sectors shows that about 10.49 percent female were employed in 2014 whereas 11.10 percent (2723) females were employed in the year 2013. The last five years data regarding employment of people in public and private sector are shown in the table 5.19.

Table 5.19 Employment in Public and Private Sectors (in Thousands)						
Year	2010	2011	2012	2013	2014	
Public Sector Employment						
Central Government	1069	1074	1020	997	957	
State Government	5793	5677	5526	5543	5499	
Semi Government	9903	10458	10179	9987	9803	
Local Institutes	12038	12405	12188	12109	12081	
Public sector Employment - Female	6076	5810	5812	5832	5845	
Public sector Employment - Female (%)	20.45	19.61	20.10	20.22	22.88	
Total	29703	29614	28913	28636	28340	
Private Sector Employment						
Private Sector	22072	22897	23964	24518	25542	
Employment of women (in thousands)						
Female employment in public sectors	6076	5810	5812	5832	5845	
Percentage of female employment in public sectors	20.45	19.61	20.10	20.22	22.88	
Female employment in private sectors	2308	2422	2508	2723	2681	
Percentage of female employment in private sectors	10.45	10.57	10.46	11.10	10.49	
Source: La	abour and Employm	ent Departmer	ıt –Nadiad			



Source: Labour and Employment Department -Nadiad, Kheda.

*Public Sector constitutes of central government, state government, semi government, local institutes.



Source: Labour and Employment Department –Nadiad, Kheda

5.5.2 Industrial Growth in Kheda District:

Nadiad city is the district headquarter and hub of industrial activity significantly led by New Shorrock Textiles Mills of the Mafatlal Group. The city is also a major trading center of Indian spices such as jeera, hing, haldi and rai (mustard seeds) as well as cotton. Apart from grains, tobacco is grown and tobacco process houses dominate in the town. Moreover, there are Cottage Industries of 'patrala' making, Tobacco snuff, Ropes of jute, Bamboo baskets, Weaving, Leatherwork, Iron-work, Carpentry, Textile cloth colouring, Printing of textile, etc.

Additionally the district has a strong base of cotton cultivation specifically in Nadiad Taluka. Nadiad Taluka is the industrial center in the district, with major concentration of industries in sectors like Textiles, Paper, Electrical equipments and Food processing.

- ♦ Kheda district is the major producer of "Tobacco" in the State
- ◆ Nadiad tehsil is the main industrial center in the district with major concentration of industries in sectors like textiles, Paper, Electrical equipments and food Processing etc. Core Emballage Ltd., one of the largest corrugated boxes manufacturing company is operating in the district.
- There are huge natural gas reserves in "Matar" tehsil of the district.
- Oil and Gas Company Sheel India Ltd. has its bottling and filling plant in the district.
- ♦ One of the oldest Textile industries New Shorock Mills (Division of Mafatlal Industries) is still operating in the district since its inception in 1912.
- ♦ Cattle Feed Plant Amul Daan is operating at Kanjari Village of Nadiad Tehsil since its inception in 1964.

5.2.2.1 Major Industrial Estates, Industrial Parks located in Kheda District:

The major industrial estates are Thasra, Kapadwanj, Matar, Nadiad and Balasinor. The Major Industrial Park is M/s Vraj integrated Textile Park located at Kheda taluka.

Table 5.20 Major Industrial Estates in Kheda District					
Sr.No	Industrial Estates	Area in Hectares			
1	Thasra	8.16			
2	Kapadwanj	10.84			
3	Matar	11.52			
4	Nadiad 1	15.33			
5	Nadiad 2	19.22			
6	Balasinor	25.90			
	Source : DIC - Nadiad KHEDA				

The various association located Kheda district are chamber of commerce and industries, industries association. **Nadiad GIDC** association and Kapadwanj GIDC industries association.

Sr.	Table 5.21
No.	
1	Chamber of Commerce & Industries.
2	Dakor Industries Association
3	Nadiad GIDC Association
4	Kapadvanj GIDC Industries
	Association
, A	Source : DIC- Nadiad KHEDA

5.5.2.2 Upcoming New Medium and Large scale Industrial Projects in Kheda District

There are total of 7 new upcoming industries with an investment of 330 crores in Kheda district which will provide employment to 1745 people in upcoming year.

	Table 5.22 Upcoming New Medium and Large scale Industrial Projects					
Sr.No	Taluka	Proposed projects	Amount of investment in industry (Rs.in Crores)	Number of Person Receiving Employment		
1.	Nadiad	2	73	143		
2.	Kheda	4	238	1602		
3.	Matar	1	19	0		
	Total	7	330	1745		
			Source: DIC-Nadiad –Kheda			

5.5.3 Growth of Small, Medium and Large Scale Industries:

There are 8,186 small scale industries operating in Kheda district. Some of the main industries under SSI are chemicals, miscellaneous manufacturing industries, repairing services, food products and nonmetallic mineral products. Most of the small scale industries are concentrated in Nadiad, Kapadwanj, Thasra and Mahemdabad talukas. The figure depicts the employment and total number of industries located in each taluka of Kheda district

Total Number of Industries and Total Employment in Kheda District (2009-31th March 2014)

Kapadwanj

Kathlal

Kathlal

Kathlal

Kapadwanj

Janus Sangadwanj

Kheda District

Kheda District

Kheda District

Kheda District

Nadiad

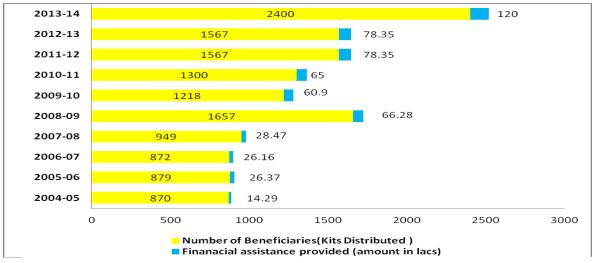
Map not to Scale

5.5.4 Scheme facilitating the growth of Industries and providing Employment:

1. Manav Kalyan Yojana:

This scheme provides additional tools/equipment to socially backward class community so as to generate adequate income and self employment.

Figure 5.18



Source: DIC-Nadiad, Kheda

The person can engage himself in any of the 72 different employment activities, the beneficiaries receives kits consisting of goods certified by GRIMCO. It is observed from the given data that the beneficiaries under the yojana are increasing in the district, there were 890 beneficiaries in 2004-05 and now in the year 2014 the beneficiaries have increased to 2400.

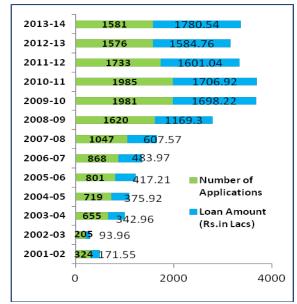
2. Shri Vajpayee Bankable Yojana:

This scheme provides self employment opportunity to educated unemployed and artisans. This scheme covers activities in industry, business and services sector. The scheme provides for assistance for employment generation through individuals. The details related to the scheme are given in the graph. The scheme is gaining momentum in the district. There are about 1112 numbers of beneficiaries who were provided subsidy of about 181.39 lakh rupees and 1581 loan application came for which 1780.54 lakh rupees loan was sanctioned.

Figure 5.19

2013-14 181.39 322.49 2012-13 1975 2011-12 282.65 197.97 2010-11 301.38 2009-10 160.38 2008-09 2007-08 111.41 ■ Number of Beneficiaries 99.03 2006-07 Amount of 2005-06 69.93 Subsidy paid 2004-05 69.71 (Rs in lacs) 2003-04 **500** 43.25 170.59 2002-03 **689** 75.51 2001-02 0 1000 2000 3000

Figure 5.20

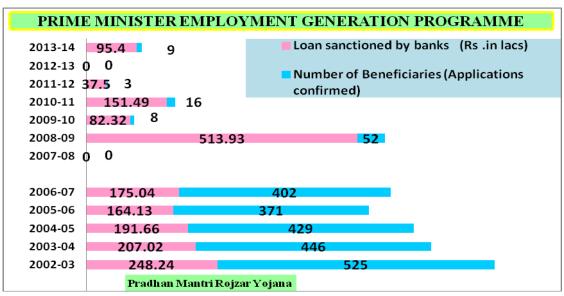


Source: DIC -Nadiad, Kheda

3. Prime Minister's Employment Generation Programme (PMEGP):

There is a sharp decline in the number of beneficiaries under this scheme.

Figure 5.21



Source: DIC -Nadiad, Kheda

5.6 Fish Farming/Pesiculture

Fisheries sector / pesiculture can become an alternate source of livelihoods means for many people especially small and marginal farmer promising additional source of income however Kheda district has no coastal areas but pesiculture can be developed by boosting inland fish production, by constructing of ponds and tanks. Assistance is provided in form of subsidy to fish farmers for construction of new ponds, reclamation / renovation of ponds and tanks first year inputs like fish seeds, fertilizers, manures etc.

It is possible to foster pesiculture in the Kheda district as technical, financial and marketing assistance by government agencies is provided for promotion of this sector apart from that the recent amendments in fisheries act related to increasing lease period from 3 years to 10 years can bring benefits. Therefore potential area for pesiculture should be recognized to popularize the fishing activity. Using of Composite Pesiculture a scientific technology for getting maximum fish production from a pond or a tank through utilization of available food organisms supplemented by artificial feeding can be done.

	Table: 5.23 Fishing Activities in Kheda District in 2013-14				
Sr. no	Particulars	Units			
1	Coastline(km)				
2	Continental shelf(sq,km)				
3	Brackish water area (ha)				
4	Fishing villages/town (number)	171			
5	Fishermen household	804			
6	Fishermen population	3055			
7	Reservoir area(ha)	751.4			
8	Area of ponds/tanks(ha)	838.62			
9	Inland landing center(number)	14			
10	Marine landing center(number)				
11	Mechanized fishing fleet(number)				
12	Annual fish production (tons)	670			
13	Fishermen primary cooperative societies	11			
14	Membership of Fishermen primary cooperative societies	490			
	Source: Fisheries Department – Nadiad Kheda				

^{*}The figures in the year 2012-13 is zero due the closure of the scheme in entire state.

5.6.1 SWOT Analysis of Fish Farming in Kheda District:

The various Strength and Opportunities recognized are as follows:

- ❖ Ample scope for mobilizing untapped water resource such as water logged area, village pond for aquaculture.
- ❖ The High cattle population releasing organic manures in ponds help in growth of natural food for fish.
- ❖ Introduce pen and cage culture technologies in village ponds of district to produce fish fingerling and yearling.

Weakness and Threats that need to be worked upon:

- ❖ Absence of fish feed Manufacture Company in the state as well as district results in higher feed price.
- ❖ Absence of fish seed production units and fish seed rearing spaces in the district.
- ❖ Lack of prawn post larvae and exotic fish seed.
- ❖ Weak infrastructure for fish seed production and genetic Upgradation.
- ❖ Inadequate availability of quality seed of high yielding fresh water prawn and exotic carps.
- Poor maintenance of common or Panchayat pond.
- ❖ Lack of post harvest management practices by farmers.
- Sewage of urban area and villages pollute the village ponds which affects the fishes by means of reducing the dissolved oxygen and mass mortality of fishes.

5.7 Measures to improve Allied Agriculture Sector

1. Agro Forestry Development:

Kheda district covers 95.84 sq km forest area in Gujarat which is located in Nadiad and Gandhinagar division of the state forest department. Kheda district has 1435 ha. Area under forest land but it has 7983 ha. Cultivable waste land, 9828 ha. Current fallows and 19093 ha. under pasture and grazing land. The farmers are growing trees on their farm boundaries in farm land to earn the income and to control soil erosion by water and wind. Trees are helpful to restore the plant nutrients in the soil. The CDAP also suggest that there is a greater scope to grow fruit trees, agro forestry trees and important timber trees to provide employment and generate income. The establishments of wood market and wood base industries have the greatest scope in Kheda district.

2. Vermi Composting:

District Horticulture office and district agriculture office can provide trainings on the efficient methods of vermicompost preparation. Financial assistance should be provided for establishment of vermicompost units in the district. The utilization of waste products of farm weeds, cow dung, urine etc should be made for preparation of vermicompost thereby increasing soil fertility.

3. Other measures such as:

- 1. Poultry farming and goat rearing
- 2. Agro forestry eco tourism
- 3. Organic farming
- 4. Establishing Green houses, increasing floriculture.
- 5. Soil conservation and rain water harvesting
- 6. Infrastructure for establishing industry for food processing and farm machinery.
- 7. Small and marginal farmers can get higher income through seed farms, nursery raising and animal keeping.
- 8. Promoting more innovative irrigation techniques

Chapter 6

Poverty, Housing and Rural Development



Chapter 6: Poverty, Housing, and Rural Development

Rural Development to achieve Human Development

The objective of Rural Development Programmes is to increase and provide wage/self employment to all persons, who are living below poverty line. For this purpose various programmes are launched to provide wage employment to rural persons, who are living below poverty line. Apart from providing wage employment, these programmes also create economic social assets for strengthening the rural economy. These programmes are meant for poverty alleviation, to reduce unemployment and to give additional employment to rural persons when there is less work in agriculture and allied areas.

The Central and State Government has taken several initiatives to improve the standard of living of rural people by implementing various schemes, one of them related to employment is Mahatma Gandhi National Rural Employment Guarantee Programme and more schemes are there for self employment, to provide housing Indira Awas Yojana, Sardar Awas yojana and many others. To improve sanitation and health it provides Nirmal Bharat Abhiyan – Total Sanitation Schemes. Unique programme "Garib Kalyan Mela" (GKM) also has been implemented to provide assistance to poor people.

Mahatma Gandhi National Rural
Employment Guarantee
Programme.(MGNREGP) to provide
employment and many more
schemes for self employment

TPDS (Targeted Public Distribution Programme)to ensure food security to rural poor –BPL, APL including Antyodaya yojana

Indira Awas Yojana and Sardar Awas Yojana to provide housing

Nirmal bharat Abhiyan – Total Sanitation Campaign to improve sanitation

Unique programme "Garib Kalyan Mela" (GKM) also has been implemented to provide assistance to poor people.

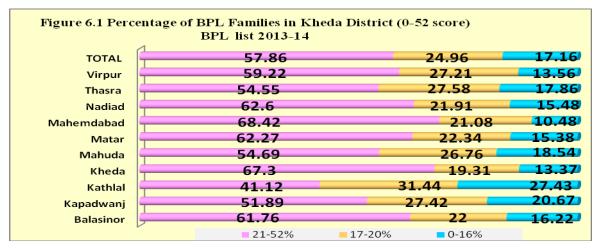
Chapter 6: Poverty, Housing, and Rural Development

- 1. Status of Poverty in Kheda district.
- 2. Evaluation of National Rural Employment Guarantee Act 2005.
- 3. Housing under Indira Awas Yojana and Sardar Awas Yojana.
- 4. Sanitation through construction of Individual Households Latrine under Nirmal Bharat Abhiyan.

6.1 Status of poverty in Kheda District

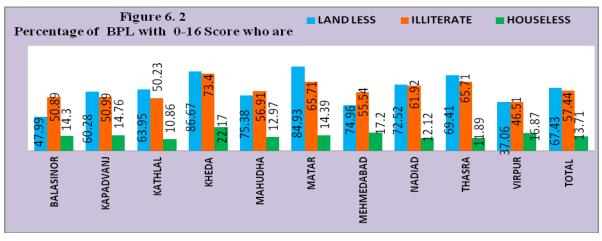
Analysis of Below Poverty Line families in Kheda District:

There are many schemes launched in the district to improve the status of below poverty line people assuring them employment, housing, sanitation and good health.



Source: DRDA-Nadiad, Kheda

Evaluating the status of poor in Kheda district there were about 368328 families surveyed and out of these about 17.16 percent of families were under 0-16 score, 24.96 percent of families were under 17-20 score and 57.86 percent of families were under 21-52 score. There is a positive improvement in the status of below poverty line families with the score of 0-16 in the district as the proportion of families between the score of 0-16 who are considered to be extreme poor, accounts to be lower in the district. According to this survey the highest percentage of families falling between the score of 0-16 are in Kathlal taluka (27.43), Kapadwanj taluka (20.67) and lowest is in Mahemdabad taluka (10.48).



Source: DRDA-Nadiad, Kheda

Further bifurcation of below poverty line families with 0-16 score was done according to those who are landless, illiterates and homeless, and it shows that about 67.43 percent of families were found to be landless, 57.44 percent of families were found to be illiterate and 13.71 percent were found to be homeless, therefore there are few extreme poor families which are homeless and there is a scope of improvement.

6.2 Evaluation of National Rural Employment Guarantee Act 2005

"The employment guaranteed under the Act has the potential of transforming the geography of poverty"

One of the significant objectives of the NREGA is to:

- 1. Arrest out migration
- 2. Ensuring up to 100 days of wage employment within their native jurisdiction.
- 3. Wage employment at prescribed minimum wages applicable in the region

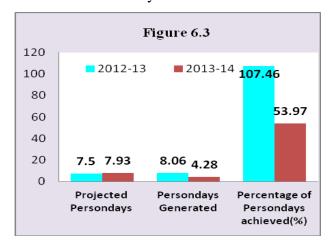
The act is expected to "enhance people's livelihood on a sustained basis, by developing the economic and social infrastructure in rural areas."

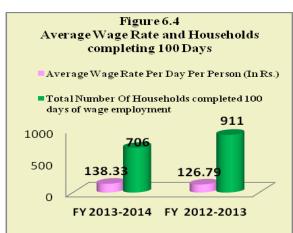
MNREGA-FY 2013-14 Highlights:

- 1. Total households registered were 112945 and
- 2. Total households issued job cards were 112842.
- 3. Persons registered were 357540.

6.2.1 Evaluation of MNREGA

In the year 2012-13 the total projected persondays were about 7.5 lakhs and persondays achieved were higher than those of projected in the year 2012-13 but contrasting results were observed in the financial year 2013-14 as the persondays were not achieved to the set level there were about 7.93 lakhs of projected persondays so only 4.28 lakhs of persondays were generated, therefore only about 53.97 percent of persondays were achieved in the district. The average wage rate paid in the year 2012-13 was about 126.79 Rupees and it has increased to 138.33 rupees in the year 2013-14. The total households completing 100 days of wage employment were about 911 in the year 2012-13 and about 706 in the year 2013-14.



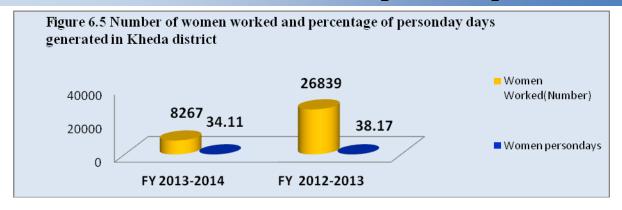


Source: DRDA-Nadiad, Kheda

Benefits of MNREGA in Kheda District

1. Empowerment of women: Significant Share of Women in Workforce

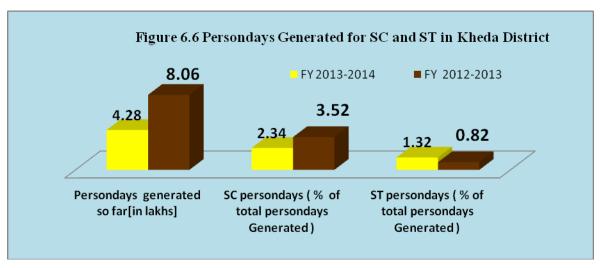
The Act of MNREGA stipulates that priority should be given to women workers, it mandates that a minimum of one-third of the beneficiaries should be women who have registered and have requested for work.



Source: DRDA -Kheda, Nadiad

2. Share of SC/ST Households in Employment

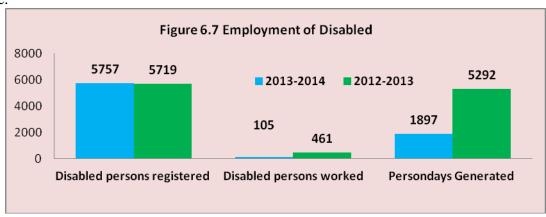
In terms of providing employment to members of SC and ST households in FY 2013-14 the figure stood at nearly 2.34 percent of total persondays for SC and 1.32 percent for ST. the figure is lower compared to previous FY 2012-13.



Source: DRDA -Kheda, Nadiad

3. Employment of Disabled

In the financial year 2012-13 about 5719 of disabled workers had registered under MNERGA and in the year 2013-14, 5757 of disabled workers had registered but the data for the persondays generated shows that there is a sharp decline in the persondays generated for the disabled. There is a need to address this by providing jobs which can be performed by physically disabled under this scheme.



Source: DRDA -Kheda, Nadiad

However the participation of disabled workers seems to be lower in both the years about 461 disabled worked in 2012-13 for whom 5292 persondays were generated and participation of disabled workers declined to 105 workers in 2013-14 for whom 1897 persondays were generated.

4. Total employment offered to people in Kheda District

In the year 2013-14 the total number of registered households were about 1,12,945 lakhs and persons were about 3,57,540 lakhs, total jobcards issued were about 1,12,842 lakhs. Employment was provided to about 9,534 households and 21,358 persons and persondays generated for them were about 4,27, 501 lakhs.

Table	6.1 Em	oloyment	Genera	ted dur	ing the y	year 20	13-2014	Distri	ct : KHI	EDA		
Block	No. of Registered		Block No. of Regis		Job Card	_	oyment anded	_	loyment fered	Em	ployment	Provided
	НН	Persons	Issued	НН	Persons	HH	Persons	нн	Persons	Person-days		
Balasinor	14005	45058	14005	655	1884	655	1884	589	1624	18250		
Kapadvanj	13161	52841	13155	715	1709	713	1707	621	1446	19145		
Kathlal	11299	29467	11299	769	937	769	937	710	867	23182		
Kheda	2770	9768	2765	504	1460	503	1459	474	1340	20137		
Mahudha	6912	16923	6911	1423	1960	1413	1937	1312	1785	56954		
Matar	7444	25568	7444	621	2076	621	2076	562	1867	34763		
Mahemdabad	8737	19930	8722	1866	2391	1866	2391	1781	2242	64194		
Nadiad	3957	10465	3957	1083	2193	1083	2193	1070	2149	52982		
Thasra	33492	111635	33416	2153	8398	2139	8346	1877	7235	122439		
Virpur	11168	35885	11168	573	926	573	926	538	803	15455		
Total	112945	357540	112842	10362	23934	10335	23856	9534	21358	427501		
	Source: DRDA-NADIAD KHEDA											

5. Creating Community Assests

The scheme contributes to the creation of rural assets such as roads, other land related works—etc. which can boost agricultural growth and provide wages which protects the rural poor from seasonal fluctuations in employment and income. Further the scheme has helped to curb rural and urban migration, by expanding employment opportunities in rural areas of the district.

Recommendations Related to MGNREGA:

- Since the programme guarantees 100 days of wage employment the problems related to staff shortages, training of staff members and Human Resource policies related to staffing should be refined to run the administration of MGNREGA smoothly.
- Higher wages should be paid to workers in blocks where industries are located.
- If the material cost of works related to developing of community assets at village level goes higher, the work still needs to be undertaken and completed.
- More works related to environment improvement like creating and maintaining ecological balance and biodiversity.
- Focus should also be there on works related to Assets creation.
- Works undertaken should be based on geographical location, physiographic features of the village and taluka of the district.
- The workers who work under MGNREGA should also be given first priority for benefits related to other government schemes.
- The scheme requires strong financial support and political commitment to make the schemes more successful and beneficial for people.

Other works related to MGNREGA that can be taken up

- Development of Horticulture Farms
- Treatment of saline and water logged areas.
- Labour intensive and earth work related, land development activities for quality seed protection.
- Eco friendly activities, establishment of model nurseries
- Reclamation of saline and alkaline soils
- Rain fed area development, Water shed development
- Implementation of NREGA through Sakhi Mandal

Table 6.2 Progress of Mahatma Gandhi National Rural Employment		
Guarantee Programme	FY 2013-2014	FY 2012-2013
Approved labour budget[in lakhs]	7.93	7.5
Persondays generated so far[in lakhs]	4.28	8.06
Job Cards issued	112842	176338
Persondays Generated for:		
SC	9988	28339
ST	5649	6618
OTHERS	411864	771257
Total persondays:	427501	806214
WOMEN	145806	307698
Disabled	1897	5292
SC persondays % as of total persondays	2.34	3.52
ST persondays % as of total persondays	1.32	0.82
Women persondays out of total (%)	34.11	38.17
No. of Registered		
Households	112945	176381
Persons	357540	492150
Disabled	5757	5719
Employment Provided to		
Households:		
SC	248	676
ST	109	186
OTHERS	9177	17661
Women worked	8267	26839
Disable Worked	105	461
Total households	9534	18523
Persons	21358	62668
Average days of employment provided per household	44.84	43.53
(i) Average persondays for SC households	40.27	41.92
(ii) Average persondays for ST households	51.83	35.58
Average wage rate per day per person(Rs.)	138.33	126.79
Total Number of Households completed 100 days of wage employment	706	911
Total households worked[in lakhs]	0.1	0.19
Total individuals worked[in lakhs]	0.21	0.63
% of men worked	61.29	57.17
% of women worked	38.71	42.83
% of ST worked	2.5	3.6
% of ST worked	1.35	0.78
% of Disabled persons worked	0.49	0.74
Source: MGNREGA-NADIAD KHEDA		

Assessment of MNERGA on Human Development Indicators:

The success story of Kaprupur bamboo project shows a very brief impact of MNERGA on human development indicators of Kheda District.

Figure 6.8 Impact of MNERGA on Human Development Indicators of Kheda District.



Box: 6.2.1 SUCCESS STORY -KAPRUPUR BAMBOO PROJECT -TALUKA MAHUDA DISTRICT: KHEDA

KAPRUPUR BAMBOO PROJECT

INITIATIVE BY: MGNREGP AND DRDA-KHEDA

In the year 2009-10 the land of 5 hectare was planted 5000 Bamboos, Balsukha species from Tamil Nadu. In the year 2010-11 again in other part of Kaprupur 10,000 more bamboo plants were planted in 10 hectare land

• IMPACT ON HUMAN DEVELOPMENT:

Training was provided by RUDSET- Rural development and self employment training institute Nadiad Kheda to make "BAMBOO PRODUCTS"

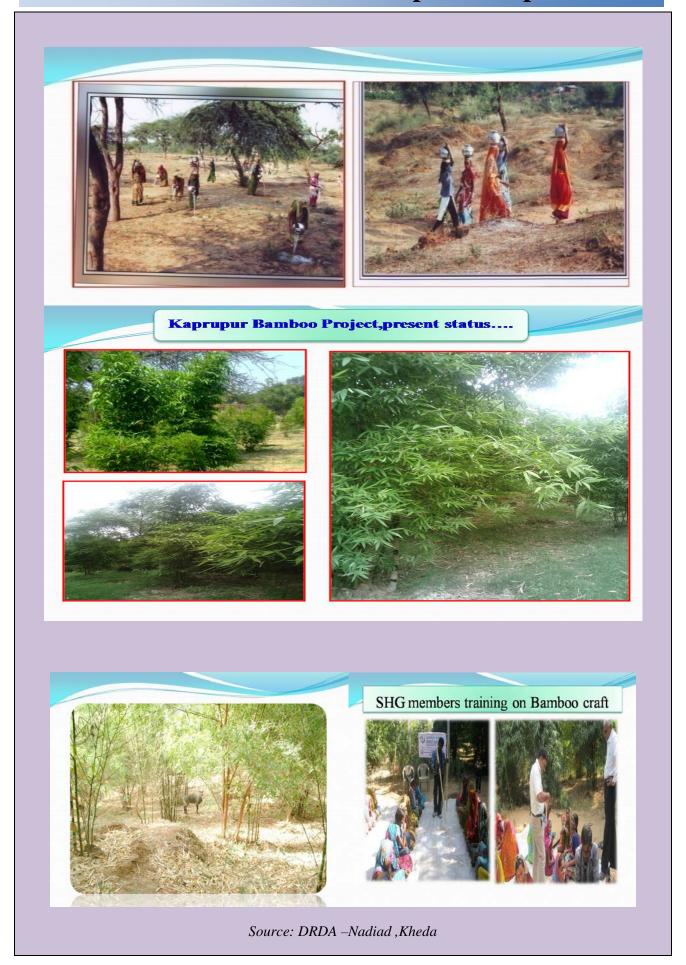
• EMPLOYMENT:

The female SHG groups got the job of water and planting the bamboo under MGNERA.

• IMPACT ON ENVIORNMNET AND BIODIVERSITY:

Wild life species were observed like "Saber". Resulted in creating luscious green environment in the taluka.





6.3 Housing under Indira Awas Yojana and Sardar Awas Yojana

Housing is one of the most basic necessities for a common man. About 57 percent of Gujarat population lives in villages and so the government has taken initiative to provide houses to the poor who are not able to afford it. Therefore the Central government as well as state Government has introduced several housing programme for the poor.

Housing condition as per census 2011 in Kheda district:

Number of households with condition of Census House as under:

Dilapidated houses 2.3 percent, Livable houses 38.3 percent, Houses in good condition 59.4 percent. 92.9 percent of people have self owned houses, 4.8 Percent live in rented houses, and 4.9 percent live in other arrangement.

6.3.1 Housing under "Indira Awas Yojana (IAY)" in Kheda District:

Rural poor are being assisted for construction of houses under Indira Awas yojana.

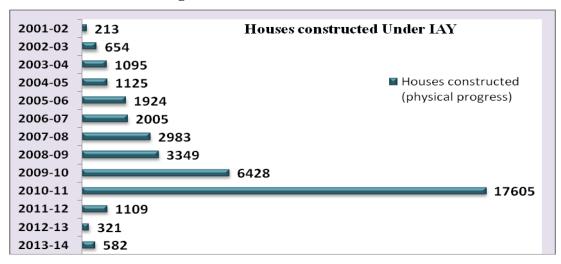


Figure 6.9 Houses constructed under IAY

Source: DRDA -Nadiad, Kheda

The total numbers of houses constructed for rural poor in Kheda district under Indira Awas yojana are given in the figure 6.9. The past thirteen year record shows that ample numbers of houses have been constructed for the rural poor in the district. The district still needs to do a survey and find out households if any are deprived of homes in rural areas. The figure 6.10 depicts the expenditure incurred upon the construction of these houses.

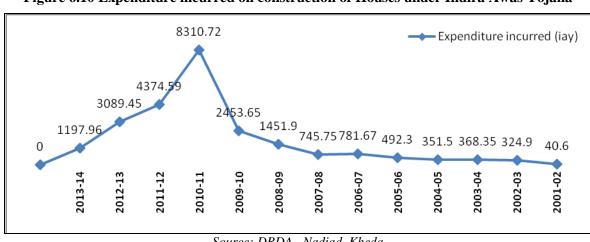
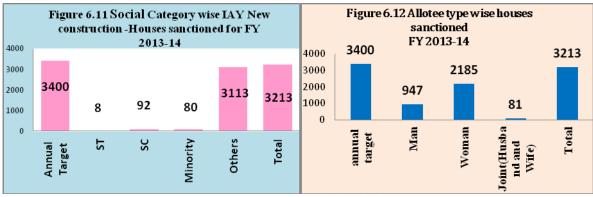


Figure 6.10 Expenditure incurred on construction of Houses under Indira Awas Yojana

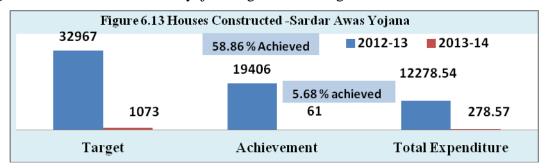
Source: DRDA -Nadiad, Kheda



Source: DRDA -Nadiad, Kheda

6.3.2 Housing under Sardar Patel Awas Yojana in Kheda District:

Sardar Patel Awas Yojana was started in the state from 1st April 1997. The scheme aims to provide houses to below poverty line families and homeless, Kheda district achievement with respect to housing scheme under Sardar Awas yojana is given in the figure.



Source: DRDA -Nadiad, Kheda

It is observed that in the year 2013-14 about 61 numbers of houses work constructed under Sardar Awas Yojana against set target 1073 and in the year 2012-13, 19406 numbers of houses were constructed against the target of 32967.

Recommendations:

- There is a need to conduct a primary survey to find out homeless households by involving Sarpanch, grampanchayats to reach the Homeless rural people in the district.
- The construction of the houses should be done by involving the beneficiaries to exercise their Choice.
- Ensure timely payment of installment directly to the beneficiaries through bank / gram panchayats.
- Ensure supply of skilled manpower Mason, Carpenter, Plumber etc.) if not available Locally.

6.4 Nirmal Bharat Abhiyan

Sanitation is a basic requirement for better quality of life. Individual health and hygiene is largely dependent on adequate availability of safe drinking water and proper sanitation. Consumption of unsafe drinking water, improper disposal of human excreta and lack of personal and food hygiene have been major causes of many diseases in developing countries.

Evaluating sanitation facilities in the Kheda district:

The objective of NBA is to accelerate sanitation coverage in rural areas to achieve the vision of Nirmal bharat by 2022 with all Gram Panchayats in the country attaining "Nirmal" status. In Kheda district only about 99 of total gram Panchayats out of 567 gram Panchayats from 10 blocks of Kheda district from the year 2008 to 2014 are awarded as "Nirmal". In order to achieve this goal, the grampanchayats must be motivated to achieve the status of "*Nirmal Gram*".

Key observations: Glimpses of Baseline survey

- 272890 households surveyed,
- 158599 households were without toilets
- and 114291 are with toilets.

Evaluating the sanitation facilities in the district, the Nirmal bharat Abhiyan project implementation plan based on "Baseline survey 2012" depicts that there are about 272890 number of total households consisting of BPL, APL families , physically handicapped ,small and marginal farmers , landless farmers and women headed households and out of these total households , the total number households with toilets are 114291, i.e. 41.88 percent and households without toilets are 158599 i.e. 58.12 percent. The total number of households having functional toilets are 104369 i.e. 91.32 so it shows that the district has progressed in terms of the sanitation facilities. Therefore the baseline survey shows that the district has 58.12 percent of households which do not have toilets and 41.88 percent households which have toilets. So there is a need to speed up the process of constructing more toilets and also the process of converting the dysfunctional toilets into functional one. As per the baseline survey 2012 there are about 52594 of total BPL households and 106005 of APL households which were without toilets in the district.

Table 6.3 Baseline Survey 2012 - District Abstract Report -Kheda			
Sr.No.	Category	Percentage	
1	% of Household not having Toilet	58.12	
2	% of Household having Toilet	41.88	
3	% of Household having functional Toilet from HH having Toilet	91.32	
4	% of Household having defunctional Toilet from HH having	8.68	
	Toilet		
5	% of Govt. Anganwadi having Latrine	81.96	
6	% of Govt. Anganwadi having adequate Water Facility	68.89	
7	% of GPs where VWSC formed	99.47	
8	% of GPs where VWSC Functional	99.12	
9	% of GPs where Swachchhata Doot is Posted	85.19	
10	% of Govt School Without Toilet	0.66	
11	% of Govt School Without Water Facility	3.84	
12	% of Private School Without Toilet	21.05	
13	% of Private School Without water Facility	33.33	
14	% of GPs Where other Organisation Involved	92.77	

Note:-1) Report is based on entries done by 567 out of 567 (100 %) GPs as reported by 10 block(s).

Source: DRDA NADIAD KHEDA – BASELINE SURVEY

Progress in NBA (formerly TSC) till the financial year 2013-14 in Kheda district:

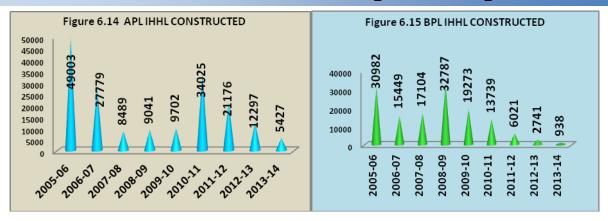
BPL IHHL'S: 139034

APL IHHL'S:176939

■ TOTAL IHHL'S: 315973

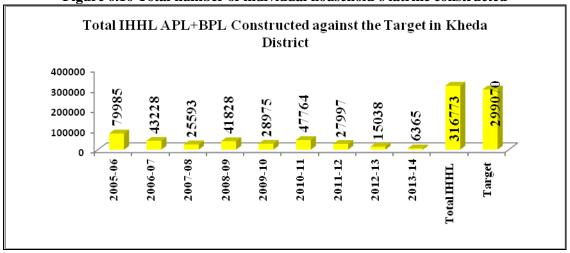
- Total Sanitary Complexes constructed 80
- Anganwadi Toilet Coverage 1606
- GPs where VWSC formed 564 about 562 are functional.

²⁾ Report may get changed because of continuous data entries is being done.



Source: DRDA-Nadiad, Kheda

Figure 6.16 Total number of individual household's latrine constructed



Source: DRDA-Nadiad, Kheda

Challenges faced by the District:

- Usage of IHHL is found to be low in the district, people need to be educated through information education and communication.
- Just 99 Gram Panchayat has become Nirmal the scheme needs to be promoted more in the villages so that more Gram Panchayat can attain the status of "Nirmal".
- Different needs of different places and villages depending on people requirement
- The attitude of people about defecating in the open needs to be changed.

Suggestion under Nirmal Bharat Abhiyan:

- The effectiveness of the scheme can be strong, if the doctors in PHC's communicate the disadvantages of open defecation to the public at large. The message can also be displayed on the wall of PHC centers of the blocks in the district.
- Effective implementation of Bombay Police Act 1993 for maintaining cleanliness in villages of the district
- In case of villages adopted in the district 100 percent of works related to sanitation should be achieved.
- Strict vigilance, supervision and monitoring of sanitation facilities should be done in the villages in collaboration with gram Panchayat and Sarpanch of the villages in the district.
- It should be demand driven, people must understand the importance of toilets and sanitation.

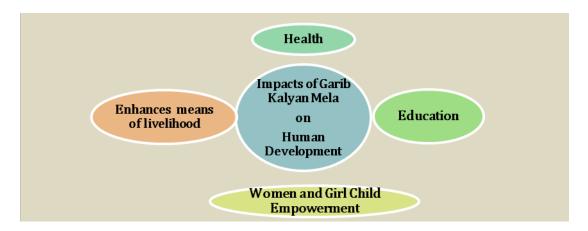
6.5 Garib Kalyan Mela

The objective of the programme is "to empower the state's poor and to set them free from the jaws of the poverty in order to make them live with dignity by bringing utmost transparency in the implementation of different poverty alleviation and pro-poor developmental schemes of the government."

Garib Kalyan Mela has shown a path for eradicating poverty and is making a very positive impact since its inception in 2009. Now the poor beneficiaries are getting the benefits at their doorsteps without any hurdle or delay. Gujarat state has been organizing "Garib Kalyan Melas" to provide poor beneficiaries a variety of services under different poverty alleviation and developmental schemes collectively. Garib Kalyan Melas are organized to eliminate the middlemen usually seen in the implementation of pro-poor projects. Women empowerment is one of the prerequisite for community development and the benefits under various schemes of the government that aims to enhance the role and economic contribution of women are distributed during Garib Kalyan Mela. There is a special focus upon the women in the Garib Kalyan Mela in order to empower them economically.

Every year state government organizes Garib Kalyan Melas in all the talukas of Kheda district. The benefits provided during the Garib Kalyan Mela covers different schemes of the housing, health, education, livelihood sectors, etc. Loans are given to the poor beneficiaries for self-employment, tool-kits to artisans are given under Manav Kalyan Yojana, basic household goods are given to the extreme poor for dignified living under Manav Garima Yojana, cycles are given to girls for easy access to the schools, sewing machine is given in order to enhance livelihood opportunities for the poor women, dairy tool-kits are also given, cheques are given for the construction of house under Sardar Awas Yojana, etc. The benefits under the various state government schemes that focus upon the poverty alleviation are distributed during Garib Kalyan Mela.

Figure: 6.17 Impacts of Garib Kalyan Mela on Human Development

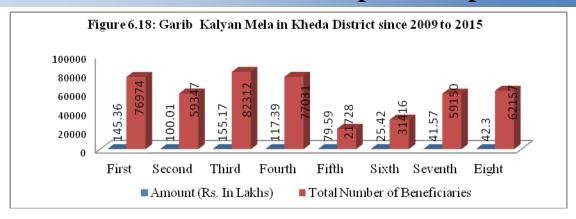








Benefits being distributed under Garib Kalyan Mela in Kheda District, helping poor people to come out of vicious circle of poverty



Source: DRDA-Nadiad, Kheda

Year	Number of Beneficiaries	Amount of financial support provided.
Tear	Training of Beneficial 169	- Rs. in Lakhs
2009-10	26836	51.07
2010-11	4360	15.66
2011-12	26007	57.20
2012-13	7074	11.87
2013-14	17104	17.77
2014-15(upto 31 st	16805	22.26
March 2015)		

Year	Number of beneficiaries	Amount of Financial support provided. Rs. in Lakhs	
2009-10	18021	6.37	
2010-11	6916	18.5	
2011-12	3889	4.54	
2012-13	2609	1.14	
2013-14	1571	1.00	
014-15(upto 31 st March 2015)	2096	0.68	

Year	Number of Beneficiaries	Amount of Financial support provided. Rs. in Lakhs
2009-10	4087	3.42
2010-11	2256	0.77
2011-12	868	0.35
2012-13	2096	0.37
2013-14	252	0.13
014-15(upto 31 st March 2015)	985	0.72

BOX 6.5.1 Success Stories of Garib Kalyan Mela and its impact on Human Development of Kheda District

Health

Beneficiary under Mukhya Mantri Vatsalya Yojana

Name: Shrimati Kashiben Ambalal Parmar

Age: 45 years Taluka : Mahuda

Type of Health Disease: Mouth cancer

Name of hospital where treatment was done: Krishna Hospital and Research Center

The amount of treatment was about 1,10,000 rupees which the beneficiary availed through Mukhya mantri Amrutam vatsalya

yojana.

Beneficiary under Mukhya Mantri Yojana

Name: Govindbhai Balubhai Talpada

Taluka: Nadiad

Type of health disease: Heart disease

Name of hospital where treatment was done: D.D.M.M, Nadiad Kheda

The beneficiary Govindbhai could breath new life after his heart operation, he was suffering from heart disease since last 10 years and his life was blessed through Mukhya mantri Amrutam card through which his treatment was successfully done of about 85,000 rupees.

Housing

During Garib Kalyan Mela the beneficiaries are paid housing installment in advance under SAY-1, SAY -2 and IAY. This help the houseless to own a pakka house, gives them protection against environmental disasters like and give them security.

Sardar Awas Yojana -2

Name of Beneficiary: Malek Pirsabmiya Sardarmiya

Taluka: Mahemdabad

The beneficiary is extremely happy with the financial support of housing installment of about 30,000 rupees that he received during Garib Kalyan Mela under SAY-2.

Sardar Awas Yojana -1

Name of Beneficiary: Kantibhai Becharbhai Chauhan

Taluka: Mahemdabad

The beneficiary has received housing installment worth rupees 45000 rupees during Garib Kalyan Mela and now he owns a pakka house.

Name of Beneficiary: Budhabhai Melabhai Baraiya

Taluka : Vaso

The beneficiary has received housing installment worth rupees 45000 in advance during Garib Kalyan Mela he is extremely happy to live with his family and own a pakka house.

Indira Awas Yojana

Name of beneficiary: Ramsuben Raisinghbhai Devipujak

Taluka : Thasra

The beneficiary has received financial support of housing installment under Indira Awas Yojana, now she owns the house...

Education and Employment

Loan for Foreign Education

Name of Beneficiary: Yogeshwar Pratapsingh.B

Taluka: Kheda

The beneficiary was sanctioned loan of about 15 lakhs with a nominal interest of about 4 percent and has fulfilled his dream of pursuing his education in film production in England at lakeshire university.

Chapter 7 Gender Equity



Women's situations in Kheda District

The status of Health, Education and Female Workers participation related to women is already briefed in the previous chapters of the report, in this chapter crime registered against women and analysis of special schemes related to employment of women like mission Mangalam and pension schemes have been described.

7.1 Introduction:

Gender equality and women empowerment are key to the development of nation, India is signatory to MGD Millennium Development Goals and the eight Millennium Development Goals is the "promotion of gender equality and empowering of women". Gender equality and women empowerment go together and they are recognized as two sides of the same coin we can say that gender equality can be achieved through women empowerment and women empowerment increases gender equality. Therefore it is extremely important to study the gender issues in human development in order to examine the present condition of women, i.e. the position of a woman compared to men with respect to literacy, education, work force participation.

7.2 Population, Sex ratio, Literacy rate, Worker participation rate of women in Kheda district:

The sex ratio of females per thousand males in census 2001 was 923 and now it is 940. Kheda ranked 11th in terms of sex ratio in census 2011. The percentage of decadal growth for females in Kheda district is 14.7 and rural females is 10.9 and for urban females is 29.7. Balasinor taluka ranks highest in terms of sex ratio by 961 females per thousand males. The highest female literacy rate is observed in Nadiad taluka 79.9 percent followed by Kheda taluka 73.5 percent and Kapadwanj taluka with 72.9 percent. The highest female worker participation rate is observed in Virpur taluka 35.5 percent, Kapadwanj 28.6 percent and Mahemdabad taluka with 28.1 percent however the declining worker participation rate for females is a matter of concern in Kheda district. The highest number of women seeking employment under MGNREGP is in Thasra taluka 45.3 percent, followed by Kheda 43.2 percent and Matar taluka 42.63 percent. The highest numbers of women members in self help groups starting economic activities under Mission Mangalam programme are in Nadiad taluka of about 286, followed by Kathlal taluka of about 279 self help groups and Mahemdabad with 262 self help groups.

	Table 7.1 Status of women in Kheda District							
Name of Taluka	Sex Ratio (Census 2011)	Literacy Rate (Census 2011)	Female WPR (Census 2011)	EMP. Provided % (MGNERGP) FY(2013-14)	Number of SHGs started with economic activities			
Balasinor	932	70.9	22.2	40.39	192			
Kapadvanj	947	72.9	28.6	39.21	252			
Kathlal	952	74	29.4	18.68	279			
Kheda	929	73.5	15.7	43.2	230			
Mahudha	941	72.5	23.4	25.6	247			
Matar	929	69.7	15	42.63	196			
Mehmadavad	961	72.5	28.1	26.62	262			
Nadiad	936	79.9	16.3	41.27	286			
Thasra	929	69.5	26.4	45.3	239			
Virpur	938	65.2	35.5	35.86	208			

Source: Census 2011 and District rural development agency Nadiad Kheda(SHG with economic activity since the beginning of the scheme till the year 2014)

7.3 Government Initiatives:

There are many government schemes that are being taken by the government to provide employment and uplift the status of women some of the schemes that covered in the chapter are *Widow Pension Scheme* and *Mission Mangalam*. The details of financial assistance, social category wise paid to widow women under widow pension scheme is given in the table below. About 5306 of widow women have received widow pension in Kheda district.

Table 7.2 Details	Table 7.2 Details of Assistance Provided under widow Pension schemes (Vidhwa Sahay Yojana)						
Name of Taluka		Number of Benef	iciaries				
	Scheduled Caste	Scheduled Tribe	General	Total			
Nadiad	137	129	1251	1517			
Balasinor	80	90	380	550			
Kathlal	35	45	407	487			
Kapadwanj	76	70	452	598			
Thasra	181	110	629	920			
Virpur	25	24	86	135			
Kheda	37	20	63	120			
Matar	37	5	80	122			
Mahemdabad	40	78	456	574			
Mahuda	14	48	221	283			
Total	662	619	4025	5306			
Sour	rce: Department of Social J	ustice and Empowerment o	f Women-Nadiad, Khe	eda			

7.4 Violence against Women in Kheda District

"The most widespread violations of human rights are Violence against women and girls. It includes sexual, physical, psychological, other forms of abuse which is recognized as a major cause of death and disability. The violence against women and girls takes place at home, in schools, on the streets and at workplace. Violence against women and girls leads to negative consequences, harming communities and families. Gender-based violence undermines economic growth, hampers productivity, reduces human capital and violates human rights. Thus it acts as a major hurdle to achieve women empowerment and social security in the country".

The data related to crimes registered against women in Kheda district shows that highest 'crimes against women' were registered under IPC 498 physical and mental harassment. There are also incidences of suicides as well as abduction and kidnapping reported in the district.

	Table 7.3 Crimes Registered against Women in Kheda District (January to December)							
Sr.No	Types of Crime	2010	2011	2012	2013	2014		
1	Murder	10	22	10	12	8		
2	Attempt to Murder	2	1	2	6	3		
3	Grievous Hurt	-	1	10	1	6		
4	Simple hurt	2	9	8	0	8		
5	Rape	16	13	18	14	12		
6	Eve teasing	28	14	23	21	23		
7	Abduction/ Kidnapping	59	48	55	62	70		
8	IPC 509	1	3	0	1	0		
9	Abetment to suicide	19	19	21	27	12		
10	Child Marriage	-	0	0	0	0		
11	Dowry Death	-	0	0	0	0		
12	IPC 498 A Physical and mental	172	159	139	130	24		
	Harassment							
13	IPC 309 Attempt to suicide	-	0	0	0	0		
14	Domestic Violence Act 2005	-	0	0	0	0		
15	Other	5	7	2	5	2		
16	Suicide	23	39	27	44	9		
17	Accidental Death	98	85	78	90	19		
	Total	435	420	393	413	196		
	Source: Superin	tendent of po	olice -Nadiaa	l Kheda				

The cases like domestic violence, cases registered under IPC 309 attempt to suicide, the death reported due to dowry are none as per the list of reported cases in the district. The incidences of child marriage are almost zero.

7.5 Mission Mangalam

The main objective of Mission Mangalam is economic upliftment of rural women by providing them employment opportunities by formation and nurturing of self help group, providing them training, infrastructure facility and credit support. The Self Help Groups formed under this project are popularly known as "SakhiMandals" in rural areas. In Gujarat state in all 2.21 lakhs SakhiMandals have been formed having 24.94 lakh members till March-2014, total savings of Sakhi Mandals is 234.87 crore, 127090 Sakhi Mandals have started taking internal loan. The amount of internal loan is of Rs.182.66 crore. Revolving fund of an amount of Rs. 99.30 crore was given to 178104 SakhiMandals. The table 7.4 depicts the status of SHG in Kheda District.

Name of Taluka	Number of SHGs with bank savings account	Members of Sakhi Mandal	Total savings of SHG	Number of SHG with Internal Loaning	Credit amounts with internal loans	Number of SHGs started with economic activities
Nadiad	2010	24515	67.79	1720	30.79	286
Matar	972	12153	57.17	668	18.78	196
Mehmadavad	1398	15449	55.89	994	18.41	262
Mahudha	801	10279	41.06	552	18.34	247
Kheda	690	9183	37.29	530	15.32	230
Thasra	1930	24747	69.97	1452	28.26	239
Balasinor	777	8978	42.51	594	13.22	192
Kathlal	1189	13996	52.84	856	16.25	279
Kapadvanj	1510	18269	58.18	1058	17.78	252
Virpur	681	7992	39.84	523	16.21	208
TOTAL	11958	145561	522.54	8947	193.36	2391

Sr. No	Taluka	SC	ST	Minority	Others	Total	BPL	Disabled
1	Nadiad	920	209	1018	22368	24515	5450	35
2	Matar	1060	333	1565	9195	12153	2730	29
3	Mehmadavad	826	265	826	13531	15449	3987	40
4	Mahudha	485	336	1179	8279	10279	2705	30
5	Kheda	1402	288	596	6895	9183	2469	33
6	Thasara	1843	736	1692	20446	24747	5721	37
7	Balasinor	702	236	478	7554	8978	2408	23
8	Kathlal	775	341	1196	11684	13996	4473	37
9	Kapadvanj	1794	425	1020	15020	18269	9139	25
10	Virpur	1059	392	413	6128	7992	2448	18
	Total	10866	3561	9983	121100	145561	41530	307

The scheme also has active involvement of women members belonging to SC and ST communities and below poverty line women. There are about 145561 women members and about 41530 women members belonging to below poverty line and 307 women members who are disabled.

Economic Activities of members of Self Help Groups in Kheda District

	Economic Activities till the year 2014							
	Number of members in SHGs	Agriculture	Horticulture	Animal	Cottage	Service		
	III SIIGS			Husbandry	Industries	Sector		
Nadiad	286	4.19	1.39	51.39	28.67	14.33		
Matar	196	4.08	1.53	60.71	19.38	14.28		
Mehmadavad	262	6.87	1.9	56.1	18.32	16.79		
Mahudha	247	5.26	2.02	59.51	20.64	12.55		
Kheda	230	6.52	5.65	50.43	20.86	16.52		
Thasra	239	6.69	4.6	53.55	24.68	10.46		
Balasinor	192	8.33	3.12	55.72	23.43	9.37		
Kathlal	279	9.31	3.94	50.89	24.73	11.11		
Kapadvanj	252	10.31	4.36	60.71	17.85	6.74		
Virpur	208	2.4	0.48	70.19	18.26	8.65		
District Total	2391	6.48	2.92	56.54	21.87	12.17		

Box 7.5.1 Success stories of Self Help Groups formed under Mission Mangalam in Kheda District

The basic aim of formation of self help groups is to unite women belonging to different social background on the basis of their common needs. There are many self help groups in the district who have received cash credit and has started economic activities to earn their livelihood, there were many success stories obtained from district rural development agency Kheda who look after mission Mangalam the study of these success stories were done to find various economic activities that women in the district undertake. Maximum females opted for animal husbandry as a means for livelihood. It is found that women's in Kheda district were extremely innovative about the economic activities that they opt.

The formation of self help groups were done by the support of ICDS and non government organizations, gram sevak and officers under Mission Mangalam. The few of the innovative activities done by members of self help groups are:

- 1. Bead making (manka making): The earnings by these women's were utilized to meetthe education expenses for their children, food expenses and daily household expenses.
- 2. Divyajyoti sakhi Mandal: It is involved in making crystal necklace through which the monthly income of about 2700 Rs is generated therefore an annual income of about 32,400 Rs.is earned.
- 3. Ranmukteshwar mahadev sakhimandal formed by meenaben Rameshbhai parmar who does the business of making home decoration articles like wall pieces ,toran , jhummar.

Training of Self help Groups under Mission Mangalam in Kheda District.....

Skill based training enhances the employment opportunities for female, the DRDA –Kheda actively involves itself in training of female members of SHG in the district. It also provides training through Rural Development and Self Employment Training Institute–Nadiad an institute which offers training in various skills, it has trained about 7183 number of Female Members.

Total number of Sakhi Mandal and number of members provided with primary training:

Primary training provided to total number of				
Sakhi Mandal Female Members				
2019	20154			



Making of Toran and Jhummars by self help groups in Kheda District



Opening of "AMUL" parlor by member of Self Help Group in Kheda District

Chapter 8

Conclusions: The Way Forward

8.1 Conclusion: Findings and Recommendations.

The basic aim of this chapter is to present the principal findings of the DHDR. Based on these findings, some recommendations have been provided at the end of each chapter. An attempt has been made in this chapter to recapitulate the opportunity and challenges the district face in respect of Human Development.

Recommendations and SWOT analysis has been provided at the end of each chapter to overcome the impediments to Human Development in Kheda district. This chapter summarizes a number of challenges that are to be met if the district is to acquire a more progressive status on Human Development. The major challenge is the unavailability of village/taluka level data on regular basis. Thus, basic data pertaining to each village (also taluka/block) and the whole district needs to be collected, up-dated periodically to ensure the better targeting of the government schemes.

Literacy and Education:

The analysis of district shows that the district is comparatively better off than most other districts in the educational status. Among the several positive aspects related to education, a major aspect was that, the district has achieved the overall literacy rate of 82.65 percent, the male literacy rate of 91.31 percent and the gap between male and female literacy rate has been reduced from 29.1 percent to 17.8 percent. However, the gender disparities in the education are clear from the fact that there are still persisting gaps between male and female literacy (17.8%). Improving the literacy rates of the district should be a continued priority in the district.

It is encouraging to note that there has been an increase in the enrollment rate of students in primary and upper primary, secondary and higher secondary schools in past five years. The basic amenities of schools have been worked and the data for upper primary to higher secondary schools shows an improvement in school infrastructure in the whole district. Though school infrastructure in the district has improved significantly and all the schools have separate toilets for girls, most of the schools are electrified, but there is ample opportunity to promote the concept of Smart Classrooms and Smart Schools with computer laboratories and internet.

But the major areas of focus should be on reducing dropout rate among the girls after standard 8th and 10th and focusing more on girl's enrollment as the gender disparity in education, needs to be addressed. As the Gross Enrollment Ratio figures present a good picture of the primary education but the need of the hour is to address the quality of teaching in primary and upper primary schools. Proper training needs to be imparted to the teachers to improve upon the quality of education in the system. Pupil Teacher ratio for primary, upper primary and secondary schools conform to the national standard, but there is still a scope for improving Pupil Teacher ratio for Higher Secondary schools. School monitoring committees need to be strengthened and the PRIs should be involved in monitoring the school education.

Health and Sanitation

The district has recorded significant improvements in terms of health infrastructure and people's reach to various health services. There is visible improvement in various health indicators and the district has made good progress in controlling leprosy and reducing IMR and MMR. However, large number of vacancies of doctors and paramedic staff are a serious challenge and needs to be effectively addressed. There is an urgent need to reduce patient load per doctor by way of appointing and retaining doctors and paramedical staff in remote rural pockets so creating residential clusters and improving facilities for doctors in remote areas of the district is equally important though it requires channelized funds.

Continuous efforts are needed to encourage people to avail public healthcare facilities and particularly pregnant women to resort to institutional delivery. There is a need to improve healthcare facilities in existing health institutions.

Proper nutrition management of newborns remains a matter of concern in the district. Malnutrition is a serious challenge for the district administration because it depends on several factors including bad consumption habit, poor care of the pregnant women, poor breastfeeding practices, poor hygiene and low awareness about the importance of sanitation. There is a need to focus on maternal and child health by developing a holistic approach to proper nutrition management of the children and women.

The district has achieved an impressive growth in other health indicators such as institutional deliveries, ANC & PNC check up, child immunization, family planning and in controlling other major health problems such as leprosy and TB. There is also a need to focus on reducing anemia among female members. It is often observed that the risk of child death is the highest during the first few months of birth, so it is necessary that safe child birth, nutrition and immunization are taken care in order to improve Neonatal Mortality in the district. The mothers also need to be educated about the importance of nutrition and immunization.

The other health hazard observed in the district is prevalence of cancer among female member as tobacco is cultivated on a large scale, since mostly females are involved in the cultivation of tobacco, it leads to a habit of tobacco consumption among them so there is a need to educate the female member about the negative impact of tobacco and the danger of Cancer.

Another health challenge that the district faces is that the rural population is dependent on traditional fuel like firewood and crop residue, these bio fuels are used for cooking inside the house which leads to high concentration of Carbon Monoxide (CO), Nitrogen oxides (NO_x). There is a lot of research done which proves that the prevalence of respiratory complaints such as common cold, cough, breathlessness etc. is higher in households using traditional fuels. It leads to acute respiratory problems such as Pneumonia, other lung Diseases, burning of eyes, Headache, Tiredness, nausea, drowsiness, throat irritation, and discomfort among women and children who spend the longest time inside the house and are exposed to these hazardous gases. Women can also suffer from adverse pregnancy out comes such as still births. Therefore pregnant women should be sensitized toward regular ANC checkups and participation in Mamta Divas.

Sanitation is another challenge that needs to be addressed at the most urgent basis. It is observed that the open defection is still practiced in remote rural areas which is a very unhealthy practice and that is why the State Government as well as the Central Government has brought out the concept of *Toilet for All*. This programme is being implemented in a mission mode approach and positive results are in the offing. Apart from constructing toilets, there is a need to connect water facilities to the toilet. People also need to be sensitized towards the importance of sanitation and the harms associated with open defecation. There is a need to develop a culture of Sanitation, thus every school must organize Sanitation campaigns so that the students can be taught about the importance of hygiene.

In terms of institutions, existing PHCs and CHCs need to be strengthened with proper medical equipments and facilities while there is a need for regular capacity building and motivating ANM and ASHA to make them more effective.

Agriculture and allied agriculture activities

The major strengths related to agriculture in Kheda district are the quality of soil, its agro climatic condition and rainfall, sufficient irrigation facilities and proximity of market to sell the produce. It is also observed that farmers in Kheda district largely depend on traditional methods of agriculture, so there is need to train farmers for modern methods of agriculture i.e. scientific farming which will improve the yield of production in the district. The level of mechanization of agriculture is still quite low in the district.

Though the district has few seed banks, but there is a need for one seed bank in each taluka because the availability of high quality seeds is important for improving yield. The farmers need to be trained to develop and strengthen seed farm and improve upon quality of seed.

Almost 62 percent of the farmers in the district are marginal farmers so there is a need to provide post harvest infrastructures facilities for benefits of farmers in order to reduce the wastage due to the lack of post-harvest infrastructure like rural godowns, warehouses, cold storage and food processing industries which are likely to generate direct employment for people. Focusing more on horticulture production cultivation of fruits and floriculture through green houses will also lead to increase in income of farmers.

Availability of credit in the rural area is another issue for the small and marginal farmers. Easy availability of credit for farmers and others engaged in agro-enterprises is very crucial for the required investment in agriculture. Special efforts should be made for promotion of agricultural credit with achieving universal Kisan Credit Cards. This will help in the promotion and adoption of better agricultural inputs.

Animal Husbandry:

The district is very rich in milch animals. The demand for milk and other animals based produce offers high return to people doing animal husbandry in Kheda district. Major challenge is shrinking of pasture lands for cattle feed in the district. The farmers are facing the shortages in terms of feed and fodder for their animals and it is extremely important to address this problem. The existing Gauchar (pasture) lands should be rejuvenated in order to enable cattle to feed. Unutilized land should be used for fodder production this will also reduce cost of fodder for them.

The district accounts for a large number of buffaloes and goats. So the district has huge potential for dairy development. Special efforts must be given for promoting animal husbandry and poultry through involvement of SHGs. There is a need to provide proper training related to scientific technologies in livestock production and management like artificial insemination.

To do away with the issues relating to the implementation of the schemes, there is a need to involve the grass root level officials and the PRIs and ULBs in the planning process. This also calls for an effective monitoring and evaluation mechanism so that the desired outcomes of different development programmes are better realised.

Women Empowerment in Kheda District......















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SANTRAM TEMPLE - KHEDA





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