



Government of Telangana  
Planning Department

# REINVENTING TELANGANA



## Looking Back and Looking Ahead



# SOCIO ECONOMIC OUTLOOK - 2017

SOCIO ECONOMIC OUTLOOK - 2017



**Government of Telangana**

**R**EINVENTING **T**ELANGANA  
*Looking Back and Looking Ahead*

**SOCIO ECONOMIC OUTLOOK  
2017**

**PLANNING DEPARTMENT**



# CONTENTS

Sl.No.		Page
<b>Section I</b>		
<b>REINVENTING TELANGANA</b>		<b>1</b>
1	Looking Back and Looking Ahead	3
2	Macroeconomic Trends	9
<b>Section II</b>		
<b>FOCUS ON ADMINISTRATIVE REFORMS: TOWARDS MICRO LEVEL PLANNING</b>		<b>19</b>
3	Evolution of Administrative Reforms	21
4	District Reorganization	27
5	Know Your District - Plan Your District	33
<b>Section III</b>		
<b>SECTORAL ANALYSIS</b>		<b>41</b>
6	Revamping Agricultural Sector	43
7	Reviving Rural Economy	57
8	The Industrial Sector	71
9	Economic Infrastructure:	95
10	Services Sector	113
11	Demographic Dividends:	135
<b>Section IV</b>		
<b>FOCUS ON SOCIAL DEVELOPMENT</b>		<b>141</b>
12	Overview of Social Development In Telangana	143
13	Health	153
14	Education	167
15	Towards Sustainable Development Goals	187
<b>Section V</b>		
<b>STATISTICAL PROFILE</b>		<b>197</b>



**Section I**

**REINVENTING TELANGANA**



# Reinventing Telangana

## *Looking Back and Looking Ahead*

CHAPTER  
01

“ “

*A journey may be long or short.  
But it must start at the very spot one finds oneself.*

— Jim Stovall

” ”

### 1.1. Prelude

Thirty-three months have gone by since Telangana emerged as a separate state and the government elected by the people of Telangana was put at the helm of its affairs. The journey through this period and the vicissitudes encountered in the process, shaped the resolve for a prosperous future for the people of the state. The dream of a Golden Telangana (*Bangaru Telangana*) that enshrined the hopes and aspirations of the people of the state provided the rationale for the protracted struggle for a separate statehood, particularly in the context of the legacy of neglect and discrimination in terms of allocation of resources, employment, etc., in the erstwhile combined state. In this context, this report attempts to provide an insight into the phases of progress and consolidation that marked the period from June 2, 2014 until now, while identifying the milestones of this momentous journey.

Midway through a journey is an opportune context to look back and take stock of the progress achieved so far. More importantly, it is also an occasion to look ahead, so as to commit to the path for the future, regarding what needs to be done. Needless to say, the learnings of the recent past would also guide the state and its people, in this long journey.

### 1.2. The First Steps

Let us begin the narrative from the very beginning. In June 2014, the birth pangs of the new state, which marked the culmination of the protracted struggle of six decades, were characterised by several contentious issues between the new State of Telangana and the residuary State of Andhra Pradesh, pertaining to bifurcation of staff, institutions and assets, within the framework of the Andhra Pradesh State Reorganisation Act, 2014. While many of these disputes remain unresolved even after three years, the determination of the State of Telangana to overcome these challenges and to prove the prophets of doom wrong came out loud and clear in the first few months of the formation of the state.

One such bold step was the conduct of the Intensive Household Survey (*Samagra Kutumba Survey*) on August 19, 2014. In the context of non-availability of a reliable database for policy formulation, this was an important fact-finding mission undertaken, in the space of one day, by mobilising over four lakh employees to collect data on the status of each household of the state, pertaining to as many as 94 parameters. This was perhaps the most gigantic exercise of the kind taken up in the country, as acknowledged by the Limca Book of Records. This survey provided a virtual goldmine of data, unprecedented in its reach and depth, which is being used extensively for designing policies and implementing the programmes in the state. While the *Samagra Kutumba Survey* attempted to capture the status of every household in the state, the exercise in Micro Planning, *Mana Vooru Mana Pranalika*, launched barely a month after the formation of the state, in July 2014, attempted to understand and identify the felt needs of the people residing in every habitation of the state.

These two exercises evinced the sincerity of purpose and resolute commitment of the Government not to tread the beaten path but to chart out a distinctive and unique path to *Bangaru Telangana*, by redesigning the existing policies and schemes and by reorienting the priorities required for reinventing Telangana.



Equally important was the urge to proclaim the distinct socio-cultural identity of the people of Telangana, hitherto denied official recognition and State patronage. Towards this end, the festivals of Telangana, such as *Bonalu* and *Bathukamma* were declared as State Festivals and liberal Government grants were released to celebrate these festivals with fervour and grandeur. Telangana Tourism

as a brand has become synonymous with the re-discovery of hitherto unknown tourism spots, such as Kuntala Falls, Kawal Sanctuary, Pandavula *Gutta*, etc. The endeavour to discover its own identity was also reflected in the decision of the Government to unfurl the National Flag on the occasion of Independence Day on August 15, 2014 at the historic Golconda Fort that, in a way, reflects the composite culture of Telangana state, often eloquently described as *Ganga-Jamuni Tehzeeb*.



As the State of Telangana was taking baby steps towards reinventing its identity, the Government initiated concerted measures to redesign the policies and programmes in the context of Telangana by making necessary budgetary provisions. In this background, the task for preparation of the Budget for the residuary period of the Financial Year 2014-15 was indeed a difficult one, because the actual resource base of the state, and receipts and revenue, apart from the devolution of Central funds, were yet to be fully quantified. However, instead of making the Budget a mundane accounting exercise of receipts and expenditure, the new state was

keen to make a bold statement in the first year itself by indicating the broad policy directions, so as to address the needs of the people. This resolve echoed in the first Budget speech of the Hon'ble Finance Minister, presented to the Legislature on November 5, 2014 in the following words:

"This is a profound moment as I rise to present the first Budget of the new State of Telangana. This is also a historic occasion for the four crore people of the State, as they take control of their own resources and fate."

He further added: "The Government is committed and determined, and with active support of the people, all the hurdles in the path of development will be overcome. I am confident that the spirit and dedication, with which separate statehood has been achieved, will continue to drive the State towards realising the goal of *Bangaru Telangana*."

Towards this end, initiatives such as *Aasara* pensions, and a revamped Public Distribution System that significantly enhanced the limit and quantum of benefits, were a mark of the human touch of the Government for the people living on the margins of society. Similarly, an innovative scheme to provide financial assistance to poor families from Scheduled Castes, Scheduled Tribes and Minorities, for performing the weddings of their daughters, was introduced under the *Kalyana Lakshmi* and *Shadi Mubarak* schemes. The schemes aim to alleviate the hardship of poor families in discharging their basic social obligations honourably. The Government also addressed the agrarian distress in the rural economy, by announcing a Loan Waiver Scheme to benefit over 36 lakh farmers, in a phased manner.

In the absence of realistic estimates and receipts and expenditure for the full Financial Year, the Government was not in a position to include all the flagship programmes in the first Budget, which was only for the remaining months of the financial year 2014-15. This was acknowledged by the Hon'ble Finance Minister in the following words:

"When I presented the Budget for ten months, it was baptism by fire. Presenting the Budget for the new State was a daunting task and the Budget for the year 2014-15 was prepared with numerous unknowns with regard to our own revenue potential and assistance from the Centre."

Nonetheless, the Government was keen to indicate the broad policy directions to be adopted in the many important areas, such as revival of tanks (*Mission Kakatiya*), supply of drinking water to each household (*Mission Bhagiratha*), and Minority Welfare, for which provisions were made in the first Budget itself. This set the development narrative to be pursued in the initial years of the state for achieving the dream of '*Bangaru Telangana*'.

### **1.3. Progress and Consolidation**

As the broad policy directions were spelt out in the first budget itself, the State Government embarked upon the daunting task of addressing the key issues on the development agenda. One such crucial challenge was to tide over the energy deficit in the state and also to disprove the prophecies of doom that were spread in the past. At the time of the formation of the state, there was a huge deficit between the generation capacity available in Telangana, as against the average requirement of power. Quite naturally, the attention of the Government was focused on this subject in the initial months by taking a series of strategic steps of power management and procurement. The state made tangible progress towards overcoming power cuts in different sectors by October 2014, which was further improved in the months to come. This was considered a critical input, as power provides the fuel for the engines of growth of the state, such as industries, agriculture, etc. The remarkable achievements of the state in the power sector led to the supply of uninterrupted power



projects were commissioned under Kakatiya Thermal Power Station Stage II (1x600 MW), Lower Jurala Hydel Project (6x40 MW), Pulichintala Hydel Project (1x30 MW), and Singareni Thermal Power Project(2x600 MW). New projects under Bhadradri Thermal Power Plant, Manuguru(4x270 MW), Yadadri Thermal Power Plant (5x800 MW) and Kothagudem Thermal Power Station (1x800 MW), and Pulichintala Hydel Power Project (3x30 MW) are also under progress, apart from significant initiative in the solar energy sector, which is separately highlighted in this report.

Substantial improvements in the power sector, coupled with innovative initiatives in ‘Ease of Doing Business’, under the well-known Telangana State Industrial Project Approval & Self-Certification System (TS-iPASS), attracted many investments in industries and IT/ITES sectors to the state. The T-Hub set up by the Government has become a role model in the country to promote start-ups and to encourage innovation. The state today is poised to make rapid strides as a preferred global destination for investments.

Another area where the state suffered deliberate neglect was the minor irrigation sector, which formed the lifeline of the people of Telangana over centuries. The innovative water management system introduced by the Kakatiya rulers in the Deccan plateau over 700 years ago, by setting up numerous large and small networks of inter-connected tanks, often in the pattern of inverted pyramids, suffered monumental neglect, particularly during the six decades of the combined state.

As a result, 6.48 lakh hectares of land commanded under the tanks and canals in 1956, had shrunk to 5.19 lakh hectares by 2014. The gross figures hide the tragedy of dried-up tanks across the rural hinterland of Telangana, while canal waters reached only limited areas. The consequent agrarian distress is only too well known. The farmers’ fraternity, thanks to their own efforts and sheer dint of courage, have brought nearly 11 lakh hectares of land under bore-well irrigation in the state. Their investment has been associated with fatal risks, as well. This lopsided irrigation map is waiting to undergo a radical change, under the new dispensation of Telangana.

This situation led to the resolve of the Government to launch ‘Mission Kakatiya’ to restore over 46,000 tanks

to industries and also nine hours of daytime power to farmers from September 2015 onwards. With this, the nightmare of power cuts became a thing of the past and the real impact of separate statehood and the benefits thereof truly accrued to every resident of Telangana.

The Government is taking concerted steps to consolidate the achievements in this sector and to make Telangana a power-surplus state in the years to come. Towards this end, new



and water bodies dotting the terrain of the state, in a phased manner and thereby, revive the entire ecosystem in the rural areas. The first two phases of 'Mission Kakatiya' have yielded good results and the enhanced storage capacity proved to be a real boon to the farmers with the favourable monsoon of 2016. This has also brought into focus the immense potential for growth of the fisheries sector in the state, on which a separate study is included in Section III of the report.

With a similar determination, another flagship programme called 'Mission Bhagiratha' was launched for the supply of safe drinking water to each household of the state and the project was taken up under 26 sub-grids. This programme was inaugurated in August 2016 by the Hon'ble Prime Minister and the works are progressing in full swing all over the state. This project is a role model for the entire country and will go a long way in preventing water-borne diseases in the rural areas and will also ameliorate the woes of the fluoride-affected areas.

As highlighted earlier, exclusive economic data for Telangana State, especially for the period after 1956, is hard to come by. However, preliminary studies have not only endorsed the popular perception about the sustained drain of Telangana revenues but also exposed its deleterious socio-economic consequences upon successive generations. The per capita income of Telangana was considerably lower than that of combined Andhra Pradesh State during 1960-1968. Even then, diversion of 4.9 per cent of its annual revenues ensured that the tragedy continued till the mid-seventies. Worst was to follow thereafter. Due to the absence of rural peace, the net sown area nosedived from 49.69 lakh hectares in 1973-74 to 36.21 lakh hectares by 1997-98. Lands left fallow multiplied across Telangana territories. With no significant addition in area under flow irrigation from tanks and canals, technological gains in agricultural production stagnated as late as till the late eighties. It would appear that Telangana land and its produce stagnated in terms of per capita contribution to its GSDP, all the way from 1956 till 1987.

However, per capita income in Telangana started looking up since the early nineties. It was mainly due to the grit and determination of its peasantry, who started sinking bore wells frenetically with their own investment coupled with risk. Around these times, Hyderabad city started attracting technology-related investments in IT/ITES and biotech areas. The rising per capita income only enhanced the volume of diversion of revenues. From 2003 till 2013, the average annual drain climbed to 11 per cent, more than double the percentage during 1960-68. It would appear that the enhanced Telangana income provided more revenues, which in turn ignited the greed and consequent diversion of its resources under the past dispensation. A detailed analysis of the present macro-economic trends is attempted in the next chapter of this section of the report.

Rising social aspirations coupled with exponential expectations demand an equally responsive governmental organisation. District administration, needless to say, is the cutting edge where implementation starts. It is like a mega-junction from where final public delivery is controlled. The sustained democratic process has enhanced mass expectations, but the fossilised district set-up had become a bottleneck. A look at the historical facts may be in order, in this connection. In 1865, Sir Mir Turab Ali Khan, Salar Jung I, initiated administrative reforms by establishing, through *zila bandi*, 16 districts in Hyderabad State, of which eight were a part of Telangana. Then the average area per district was 13,880 sq km, with an average population of 6.92 lakh. But in spite of population growth, the number of districts remained just 10 till recently, with an average area of 11,208 sq km and an average population of 35.1 lakh per district. Only two new districts, viz., Khammam (in 1953) and Ranga Reddy (in 1978) were added in the recent past.

Learning from the rich administrative legacy of the Nizam's period, the Government restructured the state into 31 districts, after an elaborate and extensive consultation process at different levels. The average size of

a district now is a compact 3,608 sq km, with an average population of 10.3 lakh per district. The compact size is bound to sharpen the edge of district administration, with smooth delivery of all public services to all the families. In turn, anyone can reach the new district headquarters well within an hour. Due to the enhanced and easy interaction, these new districts have the potential to evolve as future growth centres. A detailed analysis of the district reorganisation process is included in the next section of the report.

#### 1.4. Layout

The preceding paragraphs attempt to trace the historical and socio-cultural perspective from which the policy framework of the new State of Telangana emerged. The subsequent parts of this report attempt to analyse the socio-economic impact of these policy initiatives during the last thirty-three months, as per the following layout.

While the first section of the report attempts a broad overview of the period before and after the formation of the new State of Telangana, the second chapter of this section traces the macro-economic trends and the growth trajectory achieved by the new state. Section II of the report attempts a detailed analysis on the district reorganisation and the administrative reforms taken up in the past and present. The last part of this section provides an overview on the varied profiles of the new districts, which can provide inputs for the micro-level planning process. Section III of the report attempts sectoral analysis of the primary, secondary and tertiary sectors of the state's economy. The next section extracts a synopsis of the Social Development Report of the Telangana, attempted for the very first time by the Council for Social Development, on the lines of the biennial India Social Development Reports published by the same institution. The last part of the report provides statistical profiles both at the state level and the district level, which can be used for future studies and research projects.



Hyderabad Metro Rail Project

# Macroeconomic Trends



*Economic growth ‘pulls up’ people into gainful employment and places ever-rising purchasing power in their hands. This in turn, cuts poverty and empowers people to access education, health and other amenities provided by the state as well as through private expenditures. Growth alone provides enhanced revenues that the government can use to alleviate poverty and provide education, health and other social services.*

– Prof. Arvind Panagariya  
Vice-Chairman, NITI Aayog



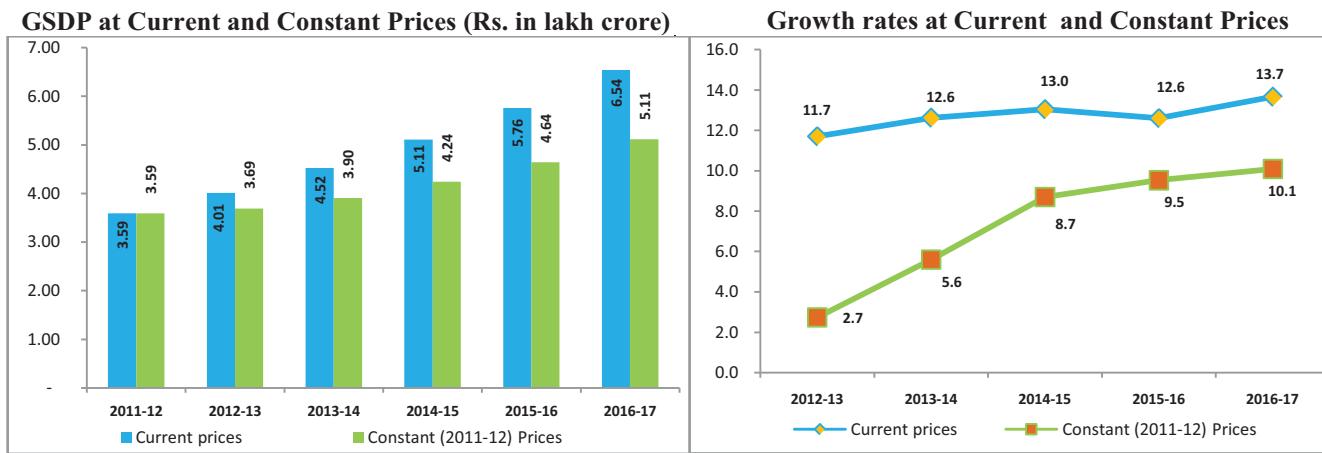
## 2.1. Introduction

Telangana State, since its formation, has made commendable achievements in terms of economic performance. The State economy has turned around since 2014-15 and continued to grow in a higher growth trajectory. The growth of State Domestic Product has surpassed the national growth and poised for a double digit growth in the current financial year, 2016-17. The living standards, as measured by the per capita income (PCI) of the State, are much higher than the national average. Even the growth of PCI has picked up since formation of the State and growing at much faster pace than that of All India average.

## 2.2. GSDP - Outlook for 2016-17

The growth rate of GSDP denotes the performance of the economy and changes in the magnitude and composition of GSDP of the State economy, over a period of time. As per the Advanced Estimates, released by the Directorate of Economics and Statistics, the Gross State Domestic Product (GSDP) at current prices for the year 2016-17 is estimated at Rs. 6.54 lakh crore, as against Rs. 5.76 lakh crore in the previous year, indicating a growth rate of 13.7 per cent. Telangana’s GSDP at constant (2011-12) prices is estimated at Rs. 5.11 lakh crore in 2016-17, compared to the previous year estimates of Rs. 4.64 lakh crore, thereby registering a growth rate of 10.1 per cent (See Figures 2.1).

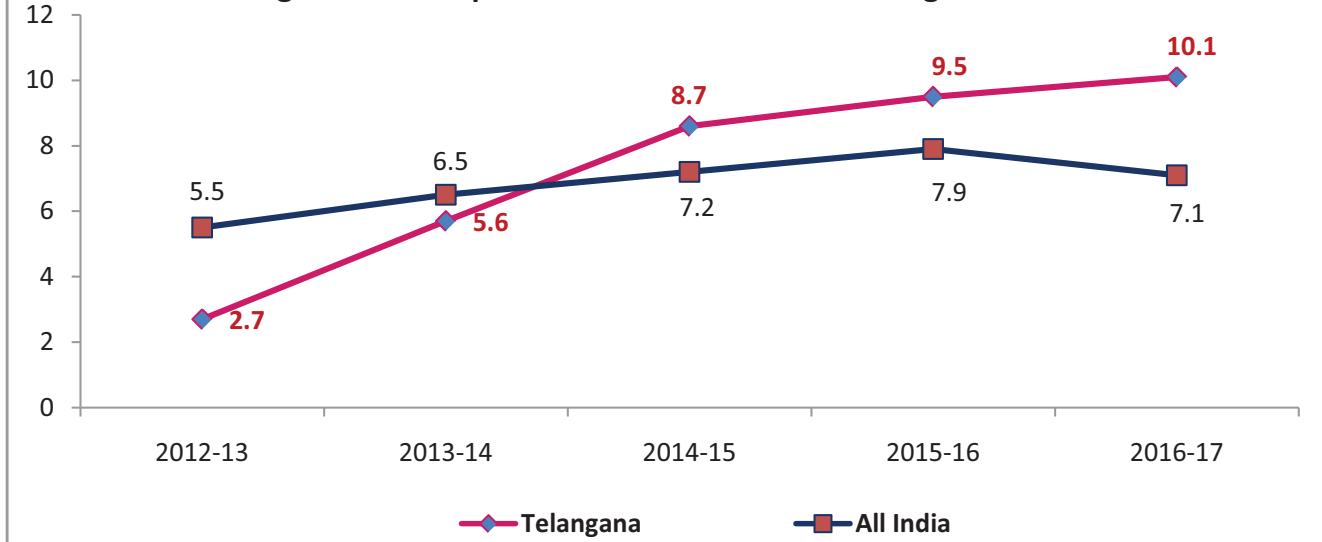
**Figure 2.1: Trends in GSDP and growth rates of Telangana**



### Performance of State's economy in 2016-17

The share of Telangana's economy in National GDP is 4.28 percent in 2016-17, as against 4.21 percent in 2015-16. A comparison of State GSDP growth with that of All India growth reveals that in 2012-13 Telangana grew at 2.7 percent, which is much lower than All India growth rate of 5.5 percent. However, since 2014-15, the growth rate of Telangana has picked up and registered higher growth than All India during subsequent years (See Figure 2.2). This is a clear indication of impact of the proactive measures of the Government to spur economic growth, after formation of the State.

**Figure 2.2: Comparison of Growth rates of Telangana vis-a-vis All-India**



**Table 2.1: Comparison of Growth Rates of Telangana vis-a-vis All India (at Constant Prices)**

Year	Telangana		All India	
	GSDP (Rs. crore)	Growth rate	GDP (Rs. crore)	Growth rate
2011-12	3,59,433	--	87,36,039	--
2012-13	3,69,290	2.7	92,15,125	5.5
2013-14	3,89,882	5.6	98,17,822	6.5
2014-15	4,23,972	8.7	1,05,22,686	7.2
2015-16	4,64,389	9.5	1,13,57,529	7.9
2016-17	5,11,286	10.1	1,21,65,481	7.1

### 2.3. Sectoral growth performance

The economy is broadly classified into three sectors, i.e., primary, secondary and tertiary. The primary sector consists of crops; livestock; forestry & logging; fishing & aquaculture; and mining & quarrying sectors. The secondary sector consists of manufacturing; electricity, gas, water supply & other utility services; and construction sectors. The tertiary sector consists of trade & repair services; hotels & restaurants; transport, including railways, road, water, air & services incidental to transport; storage; communication & services relating to broadcasting; financial services; real estate, ownership of dwellings & professional services; public administration; and other services.

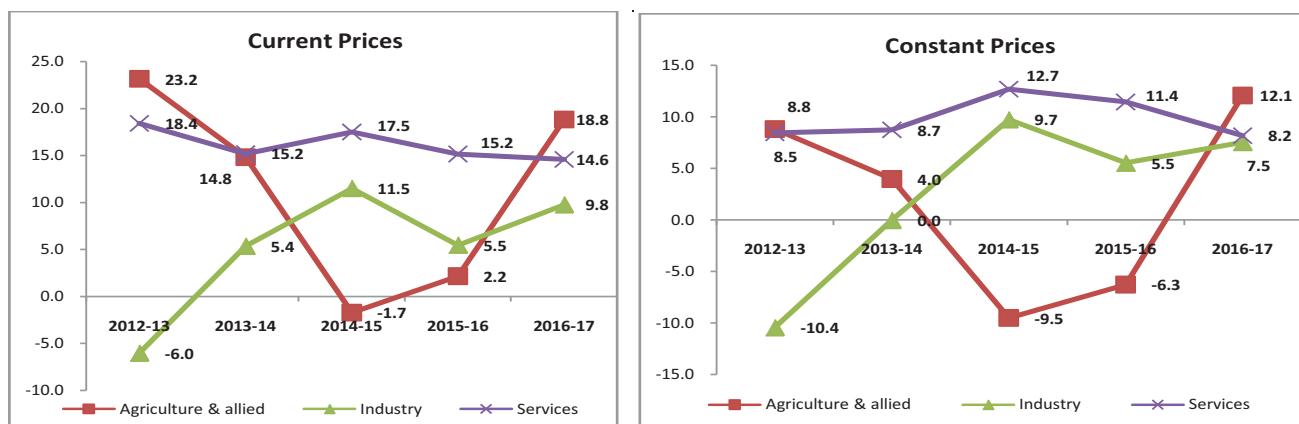
The Gross State Value Added from the Primary sector that includes agriculture and allied activities is likely to register an impressive growth of 17.2% at current prices, due to the good monsoon and proactive measures initiated by the Government to revamp the rural economy. This is significantly higher than the All India growth rate of 9.0% for this sector. The Secondary sector that includes manufacturing, electricity and construction is likely to grow at 9.8%, which is higher than that of All India growth of 8.7%. The Services sector is likely to grow at 14.6%, as compared to All India growth of 11.9% (Figure 2.3).

**Figure 2.3: Comparison of growth rates in 2016-17: Telangana *vis-a-vis* All India**



In terms of constant (2011-12) prices, the Primary sector is likely to grow at 12.8 percent in 2016-17 as compared to (-) 3.4 percent observed in the previous year. The Secondary sector is estimated to grow at 6.2 percent and the tertiary sector is likely to grow at 8.2 per cent during the year 2016-17 over the previous year growth rates of 5.1 percent and 11.4 percent, respectively. Sectoral growth trends have been depicted in the Figures 2.4.

**Figure 2.4: Sectoral growth rates in GSVA of Telangana**



## Sub-sectoral growth rates

Agriculture and allied sector registered a robust growth of 12.1 percent in 2016-17 prices, as against the dismal growth of (-) 6.3 percent observed in 2015-16 at constant (2011-12) prices. The high growth in agriculture and allied sector is attributed to crop sector, which witnessed a growth of 19 percent, because of good monsoon and holistic development of agriculture sector by the Government. Among the agriculture and allied sectors, the livestock and fishing & aquaculture sub-sectors have registered a moderate growth of 6.4 and 4.7 percent, respectively. The forestry and logging sector is likely to register a negative growth in 2016-17.

Industry sector grew at 7.5 percent in 2016-17 as against 5.5 percent registered in last year. The highest growth in industrial sector is observed in mining and quarrying with 15.6 percent, followed by manufacturing sector at 7.1 percent. The construction which is one of the main driver of demand from other sectors with its backward and forward linkages, is recorded a growth of 6 percent during 2016-17. However, ‘the Electricity, gas, water supply & other utility services’ is the only sector which registered a negative growth within the industry sector.

Tertiary sector is the main contributor to the GSVA growth of the State. It has registered a growth of 8.2 percent in 2016-17, as compared to the 11.4 percent recorded in 2015-16. Amongst the sub-sectors of tertiary sector, ‘Transport, storage, communication & services related to broadcasting’ have registered a highest growth of 11.2 percent, followed by ‘Trade, repair, hotels and restaurants’, and ‘Financial Services’. The sectoral growth rates based on GSVA at constant (2011-12) prices are given in Table 2.2.

**Table 2.2: Trends in sectoral growth rates based on GSVA at constant prices**

Sl. No.	Item	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, forestry and fishing	8.8	4.0	-9.5	-6.3	12.1
1.1	Crops	9.8	4.8	-20.6	-15.8	19.0
1.2	Livestock	8.0	2.3	8.1	6.3	6.4
1.3	Forestry and logging	-0.6	-2.5	-2.7	-2.1	-1.4
1.4	Fishing and aquaculture	10.4	14.4	8.5	-11.0	4.7
2.	Mining and quarrying	4.3	-2.3	23.3	8.0	15.6
	<b>Primary</b>	<b>8.1</b>	<b>2.9</b>	<b>-4.4</b>	<b>-3.4</b>	<b>12.8</b>
3.	Manufacturing	-14.8	-0.2	8.2	6.2	7.1
4.	Electricity, gas, water supply & other utility services	-31.9	39.3	-18.8	-11.7	-2.4
5.	Construction	1.6	-7.7	16.2	6.8	6.0
	<b>Secondary</b>	<b>-12.2</b>	<b>0.3</b>	<b>7.9</b>	<b>5.1</b>	<b>6.2</b>
6.	Trade, repair, hotels and restaurants	7.4	8.2	21.1	11.0	9.8
6.1	Trade & repair services	8.1	14.9	22.8	11.7	10.2
6.2	Hotels & restaurants	4.4	-22.0	9.7	5.9	6.3
7.	Transport, storage, communication & services related to broadcasting	10.3	3.9	9.5	12.4	11.2
7.1	Railways	3.8	7.0	-3.5	-1.4	1.5
7.2	Road transport	9.4	5.6	7.8	12.2	12.0
7.3	Water transport	0	0	0	0	0
7.4	Air transport	73.6	-24.3	247.1	30.8	33.4
7.5	Services incidental to transport	21.9	-12.5	0.8	12.3	12.6
7.6	Storage	-20.8	4.9	10.8	17.9	12.6
7.7	Communication & services related to broadcasting	4.4	14.1	11.5	13.5	6.0
8.	Financial services	9.7	10.1	12.6	6.8	9.8
9.	Real estate, ownership of dwelling & professional services	12.8	11.6	9.8	12.1	7.2

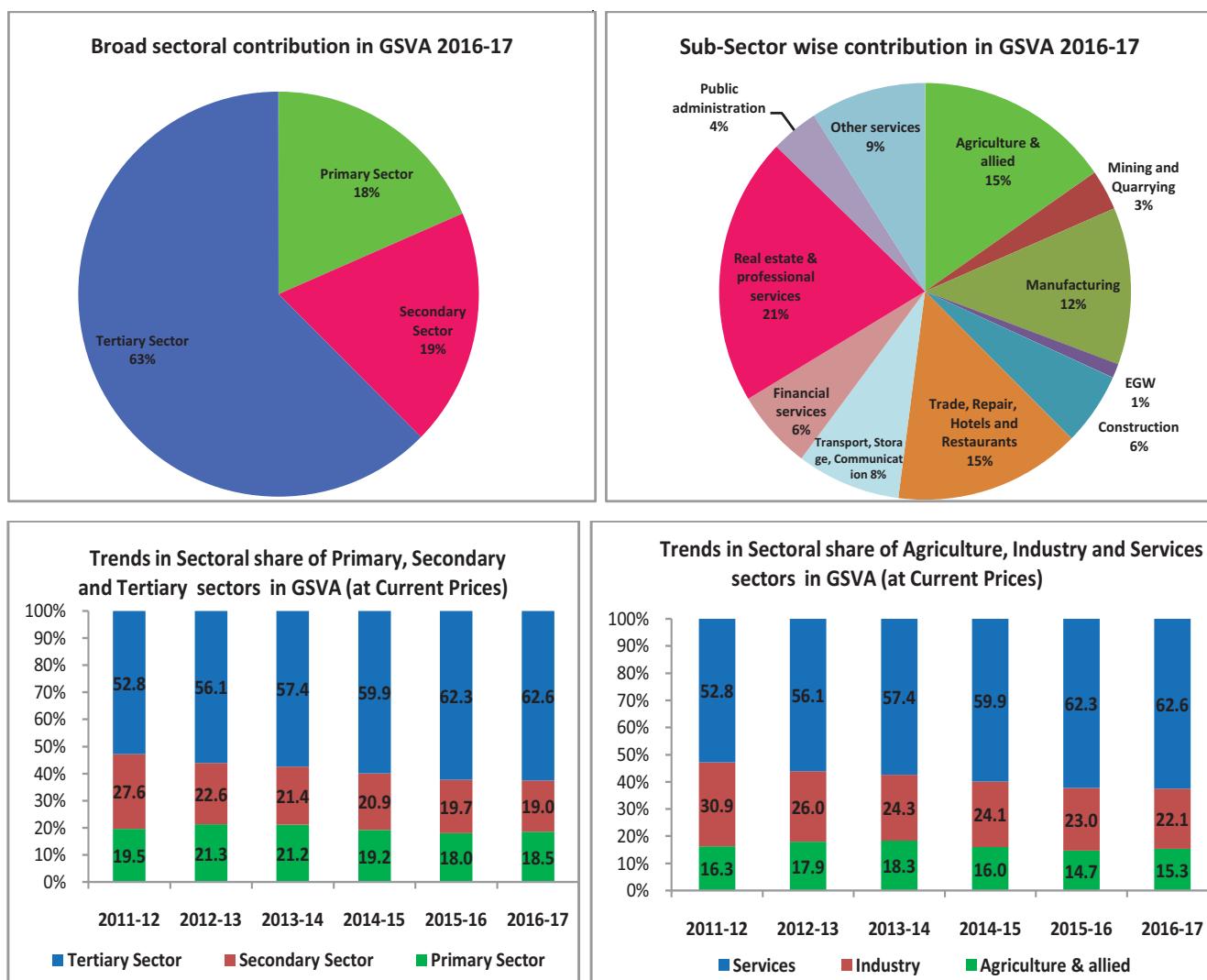
Sl. No.	Item	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
10.	Public administration	1.9	5.2	13.8	16.6	2.6
11.	Other services	1.0	8.2	9.8	11.6	6.2
	<b>Tertiary</b>	<b>8.5</b>	<b>8.7</b>	<b>12.7</b>	<b>11.4</b>	<b>8.2</b>
12.	Total GSVA at basic prices	2.7	5.6	8.2	7.4	8.5
	<b>Total GSDP</b>	<b>2.7</b>	<b>5.6</b>	<b>8.7</b>	<b>9.5</b>	<b>10.1</b>

## 2.4. Sectoral contribution

The sectoral contribution by major three sub-sectors at current prices reveals that the primary sector contributed about 18.5 percent in 2016-17. The major contributors in primary sector are agriculture and allied sector with 15.3 percent share and followed by mining and quarrying at 3.1 percent. The secondary sector consisting of manufacturing, ‘electricity, gas and water supply (EGW)’ and construction contributed 19 percent to the State GSVA in 2016-17. The share of manufacturing sub-sector is estimated to contribute 12.2 percent.

The tertiary sector as a whole accounts for about 63 percent share in GSVA, of which major contributors are ‘real estate ownership of dwellings and professional services (which includes ITC services)’, and ‘trade, repair, hotels and restaurants’ (see Figure 2.5).

**Figure 2.5: Sectoral contribution to GSVA**



Share of broad sectors to GSVA from 2011-12 to 2016-17 is shown in the Figure 2.5. The major observation that can be made is that, there is a decline in the share of agricultural sector to GSVA over the years. At the same time, there is an increase in contribution by the services sector. It is notable that contribution by the services sector has increased from 52.8 percent in 2011-12 to 62.6 percent of GSVA in 2016-17. The sub-sectoral contributions to GSVA are given in the Table 2.3.

**Table 2.3: Sub-Sectoral contribution to GSVA at current prices**

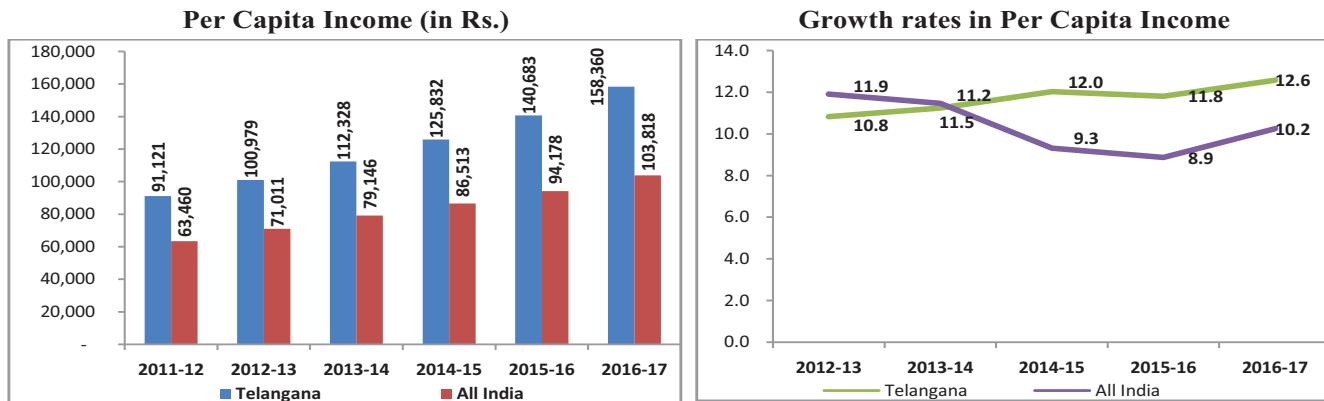
Sl. No.	Item	2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	16.3	17.9	18.3	16.0	14.7	15.3
1.1	Crops	9.6	10.8	11.2	8.8	7.3	8.1
1.2	Livestock	5.6	6.1	6.0	6.2	6.5	6.4
1.3	Forestry and Logging	0.6	0.6	0.5	0.4	0.4	0.4
1.4	Fishing and Aquaculture	0.4	0.5	0.6	0.6	0.5	0.4
2.	Mining and Quarrying	3.3	3.4	2.9	3.2	3.3	3.1
	<b>Primary</b>	<b>19.5</b>	<b>21.3</b>	<b>21.2</b>	<b>19.2</b>	<b>18.0</b>	<b>18.5</b>
3.	Manufacturing	18.5	14.8	13.5	13.4	12.7	12.2
4.	Electricity, Gas, Water supply and Other Utility Services	2.3	1.6	2.1	1.5	1.3	1.1
5.	Construction	6.8	6.3	5.8	6.0	5.8	5.7
	<b>Secondary</b>	<b>27.6</b>	<b>22.6</b>	<b>21.4</b>	<b>20.9</b>	<b>19.7</b>	<b>19.0</b>
6.	Trade, Repair, Hotels and Restaurants	11.2	11.9	12.1	13.7	14.2	14.6
6.1	Trade & repair services	9.1	9.7	10.6	12.0	12.6	13.1
6.2	Hotels and Restaurants	2.1	2.2	1.6	1.6	1.6	1.6
7.	Transport, Storage, Communication & services related to Broadcasting	7.5	8.0	7.6	7.6	7.9	8.1
7.1	Railways	0.5	0.5	0.5	0.4	0.4	0.3
7.2	Road transport	4.3	4.6	4.4	4.3	4.6	4.8
7.3	Water transport	0.0	0.0	0.0	0.0	0.0	0.0
7.4	Air transport	0.1	0.1	0.1	0.3	0.3	0.4
7.5	Services incidental to transport	1.1	1.3	1.1	1.0	1.0	1.0
7.6	Storage	0.1	0.0	0.0	0.0	0.0	0.0
7.7	Communication & services related to broadcasting	1.5	1.5	1.6	1.6	1.6	1.6
8.	Financial services	6.3	6.3	6.3	6.4	6.3	6.2
9.	Real estate, ownership of dwelling & professional services	16.5	18.5	19.5	19.9	20.7	20.8
10.	Public administration	3.4	3.4	3.4	3.6	3.9	3.7
11.	Other services	7.9	8.1	8.4	8.7	9.2	9.1
	<b>Tertiary</b>	<b>52.8</b>	<b>56.1</b>	<b>57.4</b>	<b>59.9</b>	<b>62.3</b>	<b>62.6</b>
12.	Total GSVA at basic prices	100.0	100.0	100.0	100.0	100.0	100.0

## 2.5. Per Capita Income Analysis

Per Capita Income (PCI) is a better indicator to measure the level of economic development and standard of living of the people. As per the advanced estimates 2016-17, the Per Capita Income of the State (at current prices) is estimated at Rs. 1,58,360 as compared to Rs. 1,40,683 of last year, registering a growth of 12.6 percent. The national PCI is estimated to be at Rs. 1,03,818 in 2016-17, as against Rs. 94,178 recorded in 2015-16, registering a growth rate of 10.2 percent.

The PCI of the State has remained consistently higher than the national per capita income throughout the period of 2011-12 to 2016-17. The Telangana PCI as compared to All India average is much higher by Rs. 54,542, (i.e., 52.54 percent). It is also observed that the gap between the State PCI and the National PCI has been widening over the years, indicating better performance of Telangana during these years. This is also collaborated by the growth in PCI, which overtook the national growth in 2013-14 and remained higher during 2014-15 to 2016-17, the period corresponds to formation of the State (see Figure 2.6).

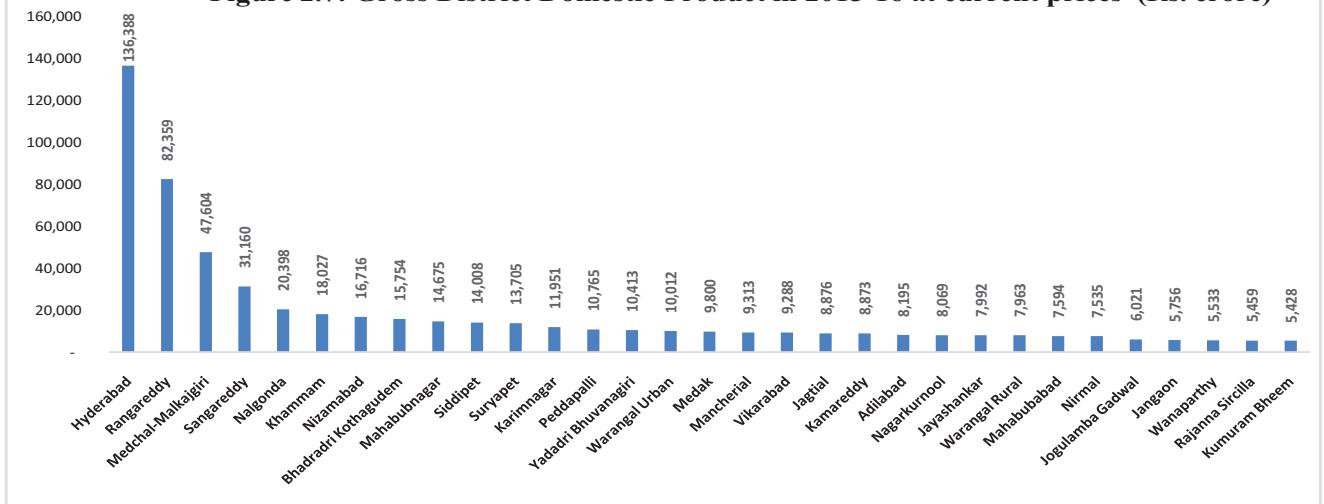
**Figure 2.6: Trends in Per Capita Income: Telangana *vis-à-vis* All India**



#### Gross District Domestic Product:

The Gross District Domestic Product (GDDP) is the main indicator that reflects the level of economic growth of a district. The GDDP is calculated using the sector specific data available for each of the districts. For the remaining sectors, State's GSVA is apportioned using appropriate district indicators. However, in the absence of data pertaining to certain indicators for the newly formed districts, proxy indicators were used for compiling the GDDP estimates for 2015-16. Thus, the GDDP estimates of 2015-16 presented here may undergo change on availability of relevant data.

**Figure 2.7: Gross District Domestic Product in 2015-16 at current prices (Rs. crore)**

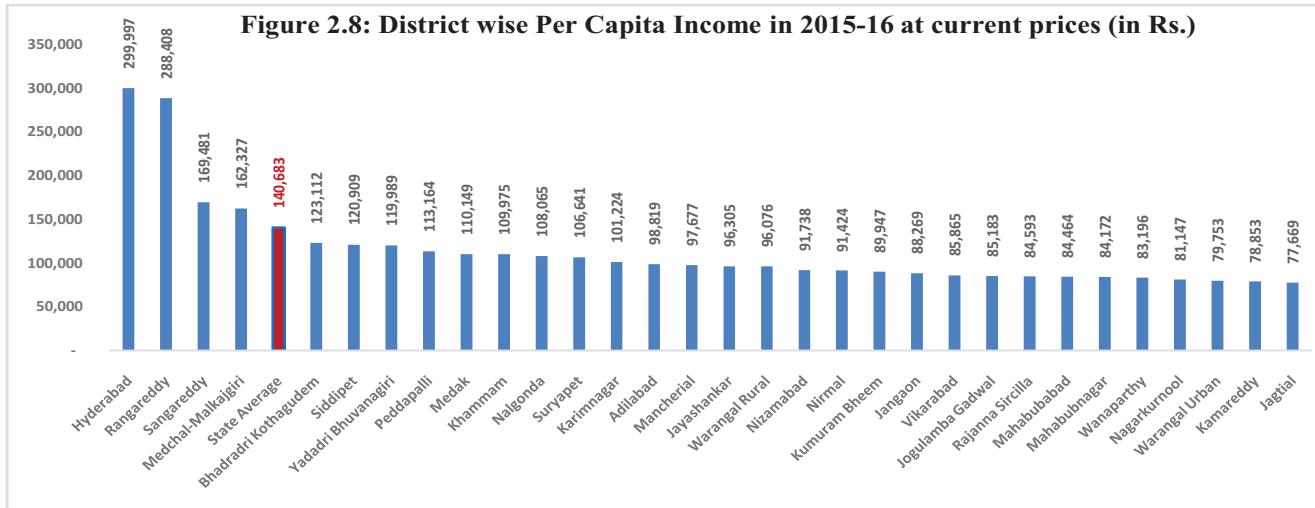


As per the GDDP estimates of 2015-16, Hyderabad, Rangareddy and Medchal-Malkajgiri districts occupies top three positions (See Figure 2.7) with Rs. 1,36,388 crore, Rs. 82,359 crore and Rs. 47,604 crore, respectively. It is also noted that, the top four districts' GDDP (viz., Hyderabad, Rangareddy, Medchal-Malkajgiri and Sangareddy) constitutes about 52 per cent of Telangana's GSDP, indicating concentration of economic activities in and around the State capital city.

## District wise Per Capita Income:

As seen from the Figure 2.8, there is a wide variation in the PCI across 31 districts in the State. While the State average PCI is about 1,40,683, only four districts have higher PCI than the State in 2015-16. In terms of district wise PCI, Hyderabad stood first with Rs. 2,99,997, followed by Rangareddy with Rs. 2,88,408, Sangareddy with Rs. 1,69,481 and Medchal-Malkajgiri with Rs. 1,62,327. It is also noted that 18 districts have PCI less than Rs. 1 lakh and 14 districts have PCI less than national PCI of Rs. 94,178 in the year 2015-16.

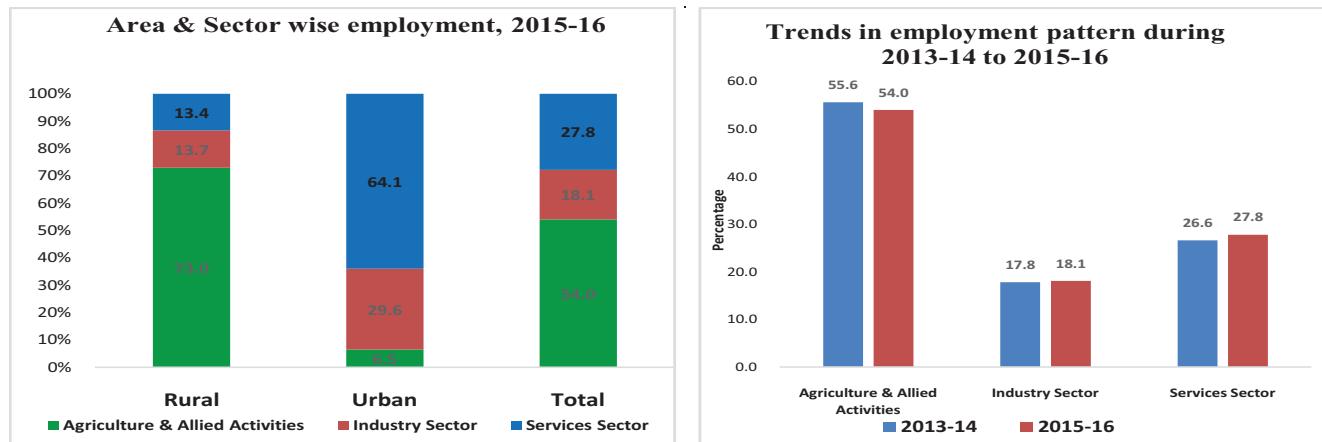
**Figure 2.8: District wise Per Capita Income in 2015-16 at current prices (in Rs.)**



## 2.6. Employment pattern in Telangana

As per the ‘Annual Employment - Unemployment Survey (2015-16)’ published by the Labour Bureau, ‘agriculture & allied sector’ is the source of employment for majority of the workers in Telangana, followed by ‘services sector’ and ‘industry sector’. While the GSDP contribution by the agriculture sector is only 14.7 percent in 2015-16, but about 54 percent of the workers are depending on this sector for employment. Similarly, 28 percent of total workers in the State are employed in ‘services sector’, while its contribution to the State GSDP is about 62 percent. It also observed that, the dependency on agriculture sector is higher in rural areas as 73 percent of rural workers are engaged in this sector. Services sector has been emerging as the major employment provider in urban areas by providing employment to 64 percent of urban workers in 2015-16 (See Figure 2.9).

**Figure 2.9: Employment pattern in Telangana**



Source: Report on Fifth Annual Employment - Unemployment Survey (2015-16), Labour Bureau, Chandigarh, Ministry of Labour and Employment, Government of India.

Note: Figure in 2015-16 do not add up to 100 due to rounding off.

A disaggregated analysis of rural and urban employment pattern reveals that there is a change in employment pattern, both in rural and urban areas of Telangana. Workers employed in agriculture sector in rural areas reduced by 1.8 percentage points in 2015-16 over 2013-14, while there has been corresponding increase in industry and services sectors also. Notably in urban areas, there has been reduction in employment in industry and agriculture sectors and there is a corresponding increase in services sector during the period (see Table 2.4).

**Table 2.4: Employment pattern in Telangana: Rural and Urban categorization**

Sector	Rural		Urban		Total	
	2013-14	2015-16	2013-14	2015-16	2013-14	2015-16
Agriculture & Allied Activities	74.2	73.0	6.9	6.5	55.6	54.0
Industry Sector	12.9	13.7	30.8	29.6	17.8	18.1
Services Sector	12.9	13.4	62.3	64.1	26.6	27.8

Source: Report on Fifth Annual Employment - Unemployment Survey (2015-16), Labour Bureau, Chandigarh, Ministry of Labour and Employment, Government of India.

Note: Figure in 2015-16 do not add up to 100 due to rounding off.

### Unemployment Rate

Labor Force Participation Rate for persons aged 15 years and above according to usual principal and subsidiary status approach (PS+SS) (LFPR) in Telangana State is 63 percent in rural areas, 49.1 percent in urban areas and 58.1 percent State as a whole. Worker population ratio for persons aged 15 years and above according to usual principal and subsidiary status approach (PS+SS) (WPR) in the State is 62.2 percent in rural areas, 46.1 percent in urban areas and State as a whole is 56.6 percent. Unemployment rate for persons aged 15 years and above according to usual principal and subsidiary status approach (PS+SS) is 1.2 percent in rural areas, 6.1 percent in urban areas and 2.7 percent State as a whole during 2015-16 (see Table 2.4.).

**Table 2.4: Workforce details and unemployment rate in Telangana, 2015-16**

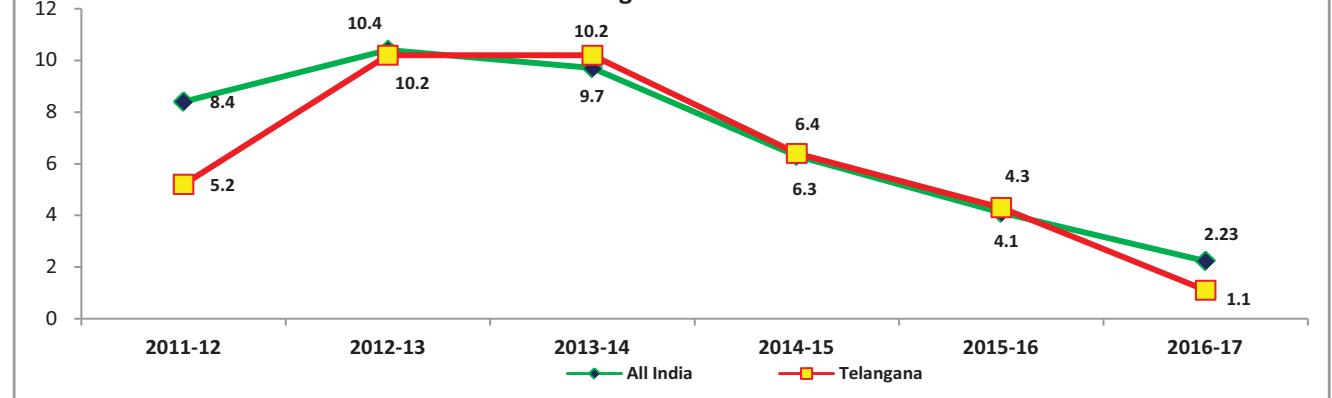
Indicator	Rural (%)	Urban (%)	Total (%)
LFPR	63.0	49.1	58.1
WPR	62.2	46.1	56.6
Unemployment rate	1.2	6.1	2.7

Source: Report on Fifth Annual Employment - Unemployment Survey (2015-16), Labour Bureau, Chandigarh, Ministry of Labour and Employment, Government of India.

### 2.7. Trends in Inflation

Inflation measured by Consumer Price Index (Industrial Workers) reveals that, inflation in Telangana during 2011-12 to 2016-17 has been on decline. Trends in Consumer Price Index (IW) indicates that, the inflation in Telangana is moving in same line as that of All India during the period (see Figure 2.10).

**Figure 2.10: Comparison of Consumer Price Index (Industrial Workers) inflation in Telangana and All India**



High inflation was observed during the years 2012-13 and 2013-14 and exhibited a downward trend in the subsequent years and reached comparatively lowest in 2016-17. Consumer Price Index (IW) inflation came down to 2.23 in 2015-16 from 10.2 recorded in 2013-14, giving a sign of relief to the consumers.

#### **Box 2.1: Telangana is the first State to compile District Specific Consumer Price Indices**

Consumer Price Indices (CPI) measure changes in general level of prices of goods and services over time that households acquire for the purpose of consumption. Consumer Price Index is widely used as a macroeconomic indicator of inflation, price stability, and also used as deflator in compilation of national accounts/State GSDP estimates Consumer Price Index is also used for indexing dearness allowance to employees for increase in prices.

Consumer Price Index numbers currently compiled and released at national level do not include all segments of population and as such, do not reflect true picture of the price behavior in the country. Presently compiling index is based on six centres which do not reflect the price trends of the entire State. To overcome this, the Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation has started compiling new series of Consumer Price Index for the entire urban population,viz. Consumer Price Index (Urban) and Consumer Price Index for the entire rural population viz., Consumer Price Index (Rural) which would reflect the changes in the price levels of various goods and services consumed by the urban and rural population.

The Directorate of Economics and Statistics, Government of Telangana has decided to compile Consumer Price Index numbers for Rural, Urban and Combined at district level duly collecting the information from 140 centers in Rural areas and 55 Centers in Urban areas, in the State. Thus, Telangana State will be the first State in India to compile Consumer Price Indices (Rural, Urban and Combined).

### **2.8. Outlook**

The macroeconomic fundamentals of the State economy in terms of growth rate, tax collections, inflation and employment are stronger than ever before. There has been an upward trend in GSDP growth rates since formation of the State. One of the positive features of the State economy for the year 2016-17 has been double-digit growth prompted by the robust growth in the agriculture sector. There has been a higher buoyancy in State's own tax resources. Telangana is one of the few states to maintain revenue surplus status during two consecutive years since the State formation. The inflation levels in the State have been low and below the national average. The unemployment rate in the state is about 2.7 percent, as against the national average of 3.7 percent.

Initiatives of the Government over the two and half years have been positive. The proactive and holistic policy initiatives undertaken by the Government have paved the way for the accelerated development of the State. The prospects for the State economy look much better and the growth rebound that happened in 2016-17 is expected to sustain in the coming years also, as the fruits of the ongoing programmes are unleashed. The details relating to sectoral policies are analysed in the subsequent chapters.

## **Section II**

### **FOCUS ON ADMINISTRATIVE REFORMS: TOWARDS MICRO LEVEL PLANNING**



# Evolution of Administrative Reforms



*The sublimity of administration consists in knowing the proper degree of power that should be exerted on different occasions.*

– Charles de Montesquieu



## 3.1. Reforms in Hyderabad State: A Precursor to Modernization in Telangana

While tracing the evolution of administrative reforms in Telangana, it is imperative to analyse the socio-economic development process that took place in Hyderabad state during the period 1853 to 1948. The period 1853-1883 is crucial, as it marks the beginning of reforms undertaken by Salar Jung I, the Prime Minister to three Nizams. The period between 1853 and 1948 is crucial for understanding this transformation. The distinctiveness of Hyderabadi culture and its ethos formed a basis for the demand of separate statehood both during the pre and post-independence period.

The modern period has been pre-eminently a time for searching the hitherto forgotten or neglected aspects, records and sources as well as to bring out the new sources of information by delving into archival records and critically analyzing the contradictory interpretations. This analysis of ‘looking back’ will help the state in ‘looking ahead’ for future administrative reforms.

## 3.2. Salient Features of Salar Jung reforms

The year 1853 signifies the beginning of Salar Jung’s reforms which led to the fundamental changes in the administrative and socio-economic-cultural fields in the Nizam’s Dominions. The administration of the Nizam’s government was carried by the Prime Minister/*Diwan* advised by the British Resident in important matters, and assisted by a *Peshkar* or deputy minister and four departmental ministers or heads of the department. Sir Mir Turab Ali Khan, popularly known as Salar Jung I, assumed the Office of *Diwan* (Prime Minister) under the Nizam IV in 1853. He has served as the Prime Minister to three Nizams for 30 years (1853-1883).

As the Prime Minister of Hyderabad, Salar Jung I was responsible for the restructuring of administrative system and the socio-economic relations. The land tenure, agrarian reforms, fiscal and taxation policies,

encouragement for the growth of trade, commerce and modern industries, etc., have played a crucial role in the process of modernization and socio-economic transformation.



Sir Mir Turab Ali Khan - Salar Jung I

Mir Mahboob Ali Khan was two years and seven months old, when he became the Monarch-VI Nizam in 1869. During his period Salar Jung I also served as the Regent of the Hyderabad state. The personality and noble life of Sir Salar Jung had a great influence on Asaf Jah VI, who became a popular ruler and “beloved of the people”.

The reign of the sixth Nizam, Mir Mahaboob Ali Pasha 1869-1911 was also significant in bringing about major changes in the political, administrative, socio-economic and cultural fields. He was a popular ruler of Hyderabad who became the “beloved of the people”. He was liberal and a visionary.

The multi-faceted progress in the fields of administration, industries, trade and commerce and education ushered in the transition of the Hyderabad State from medievalism to modernity. The reforms of Salar Jung and the sixth Nizam were carried forward by the last Nizam, Mir Osman Ali Khan, 1911-1948.

### 3.3. Administrative and Revenue Reforms

The major characteristics of Salar Jung's reforms include the centralization of authority in the Taluqdar at the district level, the institutionalization of the revenue functions, and the concentration of administrative control in the Prime Minister at State level.

The first phase of Salar Jung's reform (1853-64) began with an attempt to mitigate some of the most blatant evils of the former administration. To begin with, the area under *Diwani* or *Khalsa* administration was gradually enlarged by resuming the *Tankhab Jagirs*. In 1855 paid *Talukdars* (Collectors) were appointed in place of revenue contractors/farmers/guttedars.

Salar Jung I found it necessary to re-distribute the Hyderabad State into well-defined and regular districts called *Zillas*, subdivided into a fixed number of *Taluks* with definite areas and boundaries administered by a regular establishment working under the direct control of the government. Accordingly, the Hyderabad State was divided into five regional divisions (*Subas*) and fourteen *Zillas* or districts. Later in 1877-78 Nagarkurnool and in 1879-80 Gulbarga districts were created and the total number of districts in the *Diwani* area went up to sixteen.



Each Zilla was headed by an *Awwal Talukdar* or District Collector who was assisted by *Doyum* and *Suvvam Talugdars*. For each regional division, a *Sardar Talukdar* was appointed. The districts were classified into three grades with reference to the approximate amount of their annual revenue. The first revenue survey was undertaken in the entire district of Aurangabad on an experimental basis in 1874-75. These administrative reforms led to the growth of a new professional bureaucracy based on merit and efficiency.

The other important reform introduced by Salar Jung was the stabilization of currency. A central mint was established at Hyderabad and the district mints were abolished. He issued *Hali Sikka* rupees and this became the standard currency for all monetary transactions. As per the Salar Jung's reforms the system of farming out the taxes on imports and exports was abolished. The government treasury was established in the city, and the customs department was taken over by the government. In the year 1861 a Stamp paper office was established and in 1863 the first judicial secretariat was established under the Prime Minister. Thus by 1864, the basic revenue and regulatory functions had been firmly set up by Salar Jung.



The main objective of Salar Jung's revenue reforms was to provide economic stability of the state. He had abolished tax farming system, and appointed *Talukdars*, who were paid salaries by the state. Thus, the peasant was brought in direct touch with the state, and relieved from the exploitation of the revenue farmers.

The success of Salar Jung's revenue policy was evident from the fact that the total tax revenue collected increased between 1853 and 1880 by nearly three and half times.

### **3.4. Education and Administrative Reforms**

During the time of Salar Jung I, a number educational institutions were established. Salar Jung took a keen interest in the development of modern education and the decade 1871 - 1880 witness progress in Education. The very first step taken towards the formation of a state educational system was opening of Oriental college as Dar-ul-Ulum by Salar Jung at Hyderabad in 1853-54; with 130-160 pupils on roll. This college imparted knowledge of oriental lore in the Deccan and taste of learning through two classical languages, viz., Arabic and Persian. Provision was also made for instruction in four modern languages – Urdu, Telugu, English, and Marathi. Subjects like Physics, Chemistry, Mathematics and Astronomy formed part of the curriculum. In 1860, a school was opened in each district headquarters and *Taluk* headquarters.

A School of Engineering was established in 1870 to produce the required technical staff to public work department. In the year 1876, students were awarded foreign scholarships to go abroad for advanced study. They were also promised employment in government services on completion of their studies in such advance courses.

To improve administrative standards Salar Jung recruited talented people from all over the country, mainly from north India. In the first phase of reforms from 1853 to 1883 the efforts of Salar Jung to modernize the administration required officials trained in British India.

### **3.5. Police and Judicial Reforms**

The law and order was separated from Revenue department and a separate Police Department called *Mahakma-i-Kotwali* was established. A Police force called *Nizamat* was created. Salar Jung contemplated a reorganization of the judiciary with a separation of civil and criminal powers, increased powers to the High Court, the appointment of a legal Secretary, and the creation of Supreme Judicial Council over the High Court. A number of Judicial officers called *Munsifs* and *Mir Adils* were appointed and they exercised judicial powers in civil and criminal cases respectively.

### **3.6. Public Works**

During the late 19th century the Nizams government began medium and major irrigation projects under the supervision of the public works department. The government evolved a definite policy of preserving and maintaining the tanks, wells, channels and other minor irrigation works. During the reign of Mir Osman Ali Khan, especially in the 1920's, a number of medium and major irrigation projects were built. The Ghanpur Anicut was the first scheme constructed across Manjira river in 1904. Nizamsagar was the largest irrigation project in the erstwhile Hyderabad state. The construction of Nizamsagar dam began in 1923 and completed by the year. The Wyara and Palair projects in the Warangal district were completed in 1927. These irrigation projects not only afforded protection against famine but also yielded a handsome income and profits to the farmers.

### **3.7. Growth of Industries**

The Salar Jung's reforms, in terms of reorganization of administrative structure, infrastructural development, changes in socio-economic system, innovative policies played a crucial role for the development of modern industry. Initiatives taken in some of the major industries are discussed below.

**Railways:** The beginning of modern railway system in the Hyderabad State can be traced back to the year 1862, when the Government of India ordered the construction of a railroad from Sholapur to Hyderabad. The Nizam's Government were prepared to construct the line as a 'State affair' or in financial partnership with the Government of India.

In 1869 a line was surveyed from Gulbarga to Hyderabad by the Great Indian Peninsula (GIP) Railway Company and a year later Salar Jung, sanctioned the construction of a railway line from Gulbarga to Hyderabad. The Nizam's Government agreed to give the land free, grant jurisdiction over the line to officers appointed by the British Government. The Railway was regarded as the property of the Nizam Government, which provided funds for construction and received profits derived from its working. The first section of the line from Wadi to Secunderabad, 115.75 miles, was opened on 9th October 1874. The GIP Railway Company managed the line from 1874-1878 with its own rolling stock.

**Communication:** Hyderabad was connected through the electric telegraph system for the first time with Bombay and Kurnool in 1856-57 and Salar Jung made use of the device for official purpose. Telegraphic lines were opened by the Government of India according to the Agreement of 1870. A regular postal communication between the capital city of Hyderabad and the districts was established. In 1869, the Postal Department was reorganized and the office of Post Master General was established in the metropolis to supervise, direct and control the postal arrangement in the entire *Divani* territory.

**Cotton Industry:** It was the most important industry in the Hyderabad State after agriculture. By 1908 there were three spinning and weaving mills at Hyderabad, Gulburga and Aurangabad. The first cotton mill was opened in 1875 and later in 1886 and 1889, two more mills with a capital of Rs.31,00,000 were started. The cotton ginning and pressing factories were established in Aurangabad, Raichur, Bidar, Warangal, Nizamabad (Indur), Parbhani and Nanded districts. Cotton was the chief article of export in Hyderabad State and it accounted for 50 per cent of the total exports.

**Weaving and other Industries:** It was a major industry in the rural areas, where men and women were employed. The cotton fabrics of Hyderabad like saris, dhotis, cadhis, rumals, etc, were famous all over India and abroad. Blankets and carpets were also produced in Mahabubnagar, Nalgonda and Warangal. Warangal was famous for its carpet industry. During the late 19th century Hyderabad was the biggest exporter of carpets to European countries. The wood industry, the metal industry and the making of iron implements as well as basket making, oil pressing and liquor making were also active in Hyderabad.

### 3.8. The Legacy of Reforms

All the above-mentioned reforms undertaken by the Salar Jung I have played a crucial role in the process of modernization and socio-economic transformation. Hence, as a visionary administrator, Sir Salar Jung was rightly described as “the architect and modernizer of Hyderabad State”. The reign of the sixth Nizam, Mir Mahaboob Ali Pasha 1869-1911, which got the benefit of Salar Jung’s reforms, continued the legacy and built on those reforms. The sixth Nizam, with his liberal and visionary administration, became a popular ruler and ‘beloved of the people’. The reforms of Salar Jung and the sixth Nizam were carried forward by the last Nizam, Mir Osman Ali Khan, 1911–1948 which forms part of the rich legacy of administrative reforms inherited by Telangana, despite the aberrations during the period of combined statehood from 1956 to 2014.



Secunderabad Railway Station



Begumpet Airport, Hyderabad



# District Reorganization

“

*Reorganization of the districts will enable the district administration to keep track of individual families and their progress. It reflects the government's efforts to take the governance to the doorsteps of the people.*

– ESL Narasimhan  
Hon'ble Governor of Telangana

”

## 4.1. The context

Historically, the district remained as the most important unit of administration. With the increased State engagement with people as democracy got deep roots, the administrative tasks performed by the district administration continue to expand. The interaction between the government and the citizen is more frequent today. Further the work pressure on the district administration has multiplied many folds due to constant increase in the population over the years. For instance, the average population size in Telangana districts has increased from around 7 lakh in 1901 to about 35 lakh in 2011.

Andhra state and Hyderabad State were merged to form Andhra Pradesh on 1 November 1956. Administratively, Andhra Pradesh State was made up of twenty districts, grouped into three regions- Coastal Andhra, Rayalseema, and Telangana.

In 1978, Rangareddy district was formed, when it was split from Hyderabad district. Originally named Hyderabad (Rural) district, it was renamed after Konda Venkat Rangareddy, a freedom fighter, who fought for the independence of Telangana from Nizams and who went on to become the deputy Chief Minister of Andhra Pradesh.

In the erstwhile State of Andhra Pradesh, the Telangana region was divided into districts and mandals as under:

District	Area in Sq Km	No: of Mandals	Towns	Villages	Population in Lakhs 2011	Sq Km per Village	Population per Sq Km
Hyderabad	217	16	3		39.43		18,171
Adilabad	16,105	52	22	1,725	27.41	9	170
Nizamabad	7,956	36	8	912	25.52	9	321
Karimnagar	11,823	57	13	1,079	37.76	11	319
Medak	9,699	46	24	1,231	30.32	8	313
Rangareddy	7,493	37	24	870	52.96	9	707
Mahboobnagar	18,432	64	18	1,537	40.53	12	220
Nalgonda	14,240	59	17	1,135	34.88	13	245
Warangal	12,846	51	15	1,049	35.12	12	273
Khammam	13,266	46	14	1,233	26.07	11	197

Source: Directorate of Economics and Statistics

However, under the control of Andhra rulers much of the departmental budgets allocated to Telangana districts were not spent fully there but were re-allocated to the Andhra districts. This resulted in the slow and poor development of Telangana districts in comparison with that of the Andhra districts. As indicated in the Economic Survey 2015-16 revenues collected in Telangana always exceeded those collected in Andhra and the drain of resources continued along with the skewed allocation of development expenditure.

Reorganization of districts and reforms in the districts' governance were neglected in the combined Andhra Pradesh for a very long period. Since the early 1950s, the number of districts has more than doubled in India, precisely an increase of 135 per cent. At the same time the number of districts in the combined Andhra Pradesh has increased from 20 to 23, i.e. by 15 per cent. In case of Telangana region, in the combined state, the number of districts has increased from 9 to 10, i.e. just 11 per cent during about 60 years. During the prolonged agitation for separate statehood, it was promised to take the administration closer and responsive by reorganisation of the districts, that was given shape in October, 2016, by increasing the total number of districts in the state to 31.

#### 4.2. Reorganization of districts

After the bifurcation, the state had faced many challenges, including uncertainties about revenues and shortage of senior officials, among others. After consolidation of state revenues and resources and sanction of all India services officers from the Government of India, the state has initiated the process of district reorganization in the middle of 2016. The Government has constituted a cabinet sub-committee, to facilitate the reorganisation of districts. The sub-committee originally recommended for the formation of 17 new districts in its report. Based on the report a draft notification for the formation of 17 new districts was prepared and placed in the public domain. The government has encouraged wide ranging consultations on the draft notification and sought the public opinion in the form of suggestions and objections.

A dedicated website was launched to receive the suggestions from the people. People could also lodge objections on the draft proposals within 30 days. Public response was overwhelming. Tens of thousands of suggestions, feedback and objections were received. The government has given utmost respect and response to the public feedback and made appropriate changes in the draft proposal. The proposed number of new districts has been increased to 21 from 17. Respecting the public sentiment, the government has dropped the proposed bifurcation of twin towns of Warangal and Hanumakonda into separate districts of the same name. Finally, the government has formed 21 new districts, 25 new revenue divisions, 125 new mandals, thus, taking the total number of districts to 31. Total number revenue divisions was increased to 68 and total number of revenue mandals became 584. In addition to this, 5 new Police Commissionerates, 23 new police sub divisions, 28 circle offices and 94 new police stations were started. However, due to the statutory tenure

of Panchayati Raj Institutions, Zilla Praja Parishads, Mandal Praja Parishads and Gram Panchayats remained unchanged. All the new districts were inaugurated on the auspicious Dasara Day on October 11, 2016.

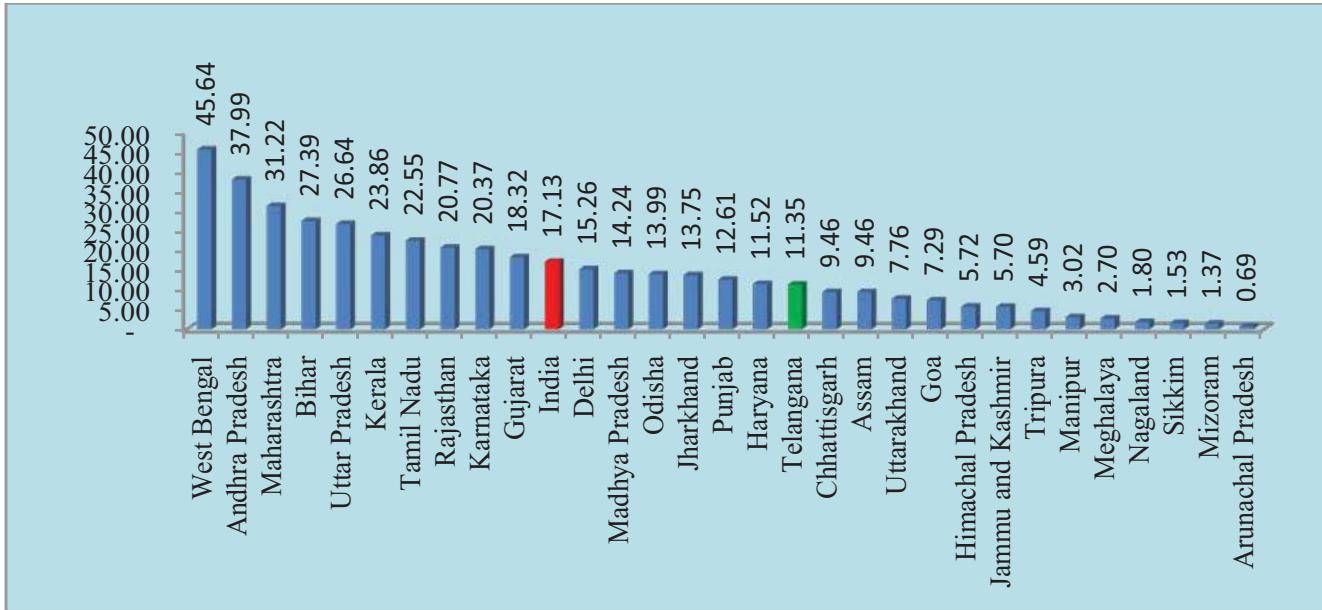
With creation of 21 new districts, Telangana map was redrawn, containing 31 districts, the details of which are given below:

S.L No	Name	Area Sq. Km	Mandals	Towns	Villages	Population Lakhs 2011	Sq Km per village	Population per Sq Km
1	Hyderabad	217	16	1	67	39.43	3	18,171
2	Adilabad	4,153	18	1	508	7.09	8	171
3	Bhadradri Kothagudem	7,483	23	4	377	10.69	20	143
4	Jagtial	2,419	18	3	287	9.85	8	407
5	Jangaon	2,188	13	1	191	5.66	11	259
6	Jayashankar	6,175	20	1	559	7.11	11	115
7	Jogulamba Gadwal	2,928	12	2	199	6.10	15	208
8	Kamareddy	3,652	22	1	478	9.73	8	266
9	Karimnagar	2,128	16	3	210	10.06	10	473
10	Khammam	4,361	21	3	379	14.02	12	321
11	Kumuram Bheem	4,878	15	1	431	5.16	11	106
12	Mahabubabad	2,877	16	1	285	7.75	10	269
13	Mahabubnagar	5,285	26	3	545	14.87	10	281
14	Mancherial	4,016	18	3	382	8.07	11	201
15	Medak	2,786	20	1	381	7.67	7	275
16	Medchal	1,084	14	3	163	24.40	7	2,251
17	Nagarkurnool	6,924	20	4	349	8.62	20	124
18	Nalgonda	7,122	31	3	565	16.18	13	227
19	Nirmal	3,845	19	2	420	7.09	9	185
20	Nizamabad	4,288	27	3	443	15.71	9.7	366
21	Peddapalli	2,236	14	2	215	7.95	10.4	356
22	Rajanna Sircilla	2,019	13	2	171	5.52	11.8	273
23	Rangareddy	5,031	27	7	604	24.46	8.3	486
24	Sangareddy	4,403	26	4	601	15.28	7.3	347
25	Siddipet	3,632	22	4	397	10.12	9.1	279
26	Suryapet	3,607	23	3	279	11.00	12.9	305
27	Vikarabad	3,386	18	2	501	9.27	6.8	274
28	Wanaparthy	2,152	14	1	223	5.78	9.7	268
29	Warangal Rural	2,175	15	2	225	7.19	9.7	330
30	Warangal Urban	1,309	11	1	124	10.81	10.6	826
31	Yadadri Bhuvanagiri	3,092	16	1	300	7.39	10.3	239

Source: Directorate of Economics and Statistics

Prior to the reorganisation of districts, the state had unusually large-sized districts in terms of average population and average geographical area. Before reorganisation, the average size of population per district in the state was 35 lakh. Compared to other states, it was third-highest after West Bengal (45.63 lakh) and Andhra Pradesh (37.99 lakh). Very high population per district in West Bengal is inevitable due to its high population density of over 1,000 persons per sqkm. With one-third of West Bengal's population density, the combined Andhra Pradesh had a relatively very high population per district. In other words, the districts were kept unusually large, which undermined good and effective governance for a long period. After reorganisation, the state rank in terms of population per district is 17th among Indian states (Figure 4.1).

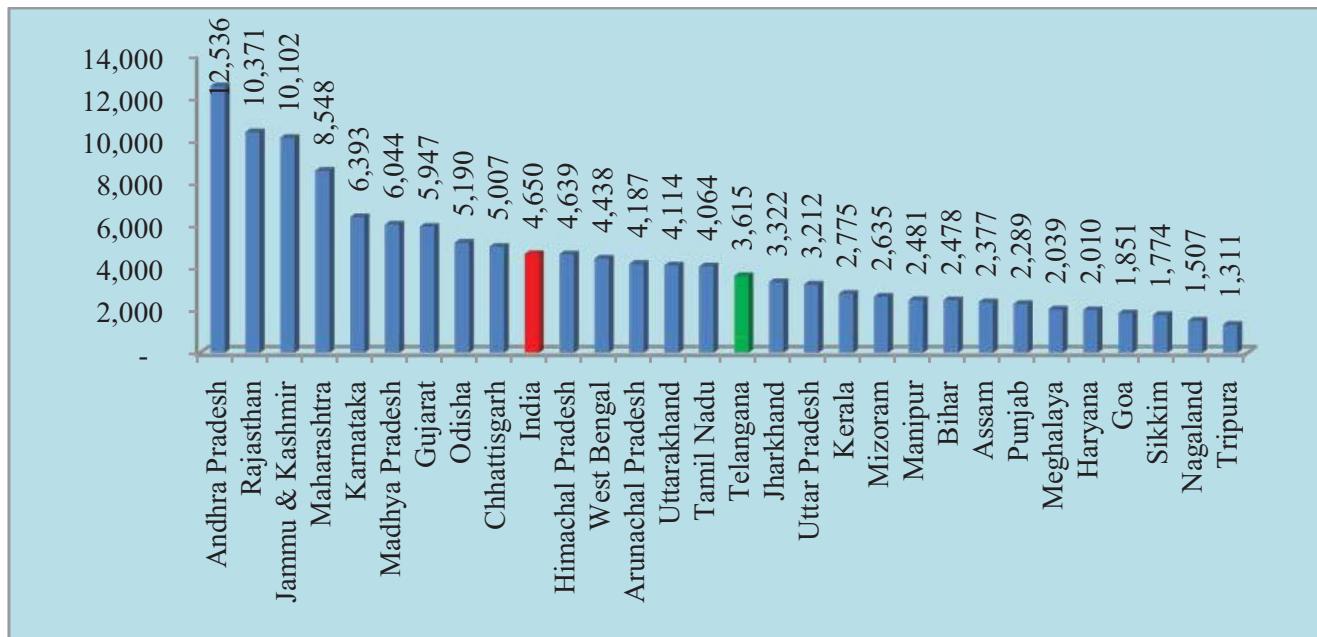
**Figure 4.1: State-wise average population in lakh per district**



Source: Compiled from states' official websites

Before the reorganisation of districts, the average area per districts was 11,208 sq. km. It was second-highest in the country after Andhra Pradesh. The average size of the erstwhile districts was even larger than those of Rajasthan and Jammu and Kashmir, the hot and cold desert states respectively. Incidentally, these two states are in second and third position in terms of average size of districts. It may be worth noting that the total number of districts in the country has increased from 300 in 1952 to 706 (including 21 new Telanga districts) in 2016, i.e., more than doubled. In terms of average area of districts, the state's position is 15th among the states (Figure 4.2). Even after reorganisation the districts are not too small, either in terms of population or geographical area. It implies that the reorganization of districts in the state is overdue.

**Figure 4.2: State-wise average size of districts in sq. km**



Source: Compiled from states' official websites

After reorganization, the number of mandals has gone up to 584, however the average number of mandals per district has come down to 19 from 46. Highest number of mandals (31) is in Nalgonda district and least number of mandals (11) is in Warangal (U) district. Out of total 8,695 Gram Panchayats (GPs) in the state, highest number of GPs (502) is in Nalgonda. With 475 GPs Sangareddy is second. Hyderabad district does not have any GP and Medchal has second least number of GPs (77). Out of 31 districts, one district-Rangareddy has seven municipalities, each of four districts, viz. Bhadravati, Nagarkurnool, Sangareddy and Siddipet have four municipalities. Nine districts have three municipalities each; another six districts have two municipalities each and each of remaining 11 districts has one municipality.

The focused approach will witness the development of revenue divisions and mandals along with the district headquarters for faster rapid growth and it will change the perception of the people towards governance and boost confidence in them because of having access to the administration and they will feel that they are primary stakeholders of the development. Further, the government is in the process of building integrated administrative buildings in all new districts. People will not only get access to all departments and services at one place, but also ample place and facilities for their comfort during their interface with the district officials.



**Integrated Collectorate Complex, Sangareddy**

To bring government closer to the public, the government is constructing a functional office-*cum*-residential accommodation for all MLAs, with an outlay of Rupees one crore in each Assembly Constituency. This enables public to have informed access to their MLAs.



**MLA Office-*cum*-Residence, Parkal**

#### **4.3. Advantages**

As the reorganization of districts is overdue, it will reduce drudgery of the district administration and galvanize them. Underutilization of budgetary allocations, which was common in combined state, would become a thing of past. It will also help in effective implementation of the government's ambitious programmes and to achieve the desired outcomes. With a focused approach on sectors – irrigation, industry, power, infrastructure, education, health and welfare, etc, the state would progress rapidly towards '*Bangaru Telangana*'.

Reorganization of districts would kick-start the development and new districts headquarters will become growth centres. With new districts, new infrastructure and new avenues of enterprise, the employment opportunities will increase.

Creation of smaller districts, with 20 or more mandals, could enable the district collectors to cover the district in two or three days to monitor the government programmes effectively, with a focused approach for better administration and public convenience. The new districts will also change the people's 'sense of alienation', which they had in the large districts, towards governance, and give them confidence that the administration is accessible to them.

With more even distribution of resources and infrastructure, the poor and marginalized sections, especially in the interior areas will get access to quality infrastructure such as schools, colleges, hospitals, roads, transport, communications, etc.

As the strength of the police force is increased and evenly deployed, the anti-social activities would reduce drastically. Similarly, the government employment will increase gradually in other departments and the quality of their service will increase significantly. Youth would welcome whole heartedly such increase in the government employment.

It will also lead to the uplift of culture, as small social groups will have less hindrance to their cultural practices. The development will be of a more inclusive nature, since it will include every section of society.

New districts will enable the state to access more funding from the central government. For example, the state may get more Krishi Vignan Kendra (KVKs), Kendriya Vidyalayas, Navodaya Schools etc., soon.

#### **4.4. Outlook**

Reorganization of districts, which was overdue, was accomplished successfully with widest possible consultations. After reorganisation the districts became more homogeneous, hence focused action would be feasible. Now the state has more number of district headquarters, which can evolve as the growth centres to unleash the potentials of the large number of people and areas. These issues are discussed in the next chapter.

# Know Your District - Plan Your District



*True progress lies in the direction of decentralization, both territorial and functional, in the development of the spirit of local and personal initiative, and of free federation from the simple to the compound, in lieu of the present hierarchy from the centre to the periphery.*

– Peter Kropotkin



## 5.1. Towards Decentralized Planning

In order to fulfill the dreams and aspirations of the people of Telangana, there was an imperative need to strive for a paradigm shift in the planning process, so as to reflect the felt needs of the people in the policies and programmes. Towards this end, an endeavour was made to shift the existing top down bureaucratic model of planning to more democratic “bottom up model”, through the people’s participation in the planning process was initiated in Telangana State, under nomenclature ‘*Mana Vooru – Mana Pranalika*’(Our Village – Our Plan).

‘*Mana Vooru – Mana Pranalika*’ programmes is the humble beginning under ‘Micro- level Planning’, to put the people at the centre of planning process and to achieve the real goals of democratic decentralization. This was followed up by the motto ‘Know Your District - Plan Your District’ which was an important agenda for the district reorganization.

The concept of ‘Know Your District - Plan Your District’ is a part of micro level planning, enables the district administration to identify and map all the resources available within the district. Based on the resources identified, comprehensive plans would be prepared duly reflecting the local requirements and felt needs of the people, at village, mandal and district levels.

As part of this, the district administration is provided with district profiles to understand the strengths and weaknesses, and to plan for the development of the district. The district administration is also provided with the household information collected under ‘Samagra Kutumba Survey’ (SKS). This will help the district administration to identify the eligible beneficiaries and extend the government welfare programmes to the needy people. The services of the experts, from UNICEF, Center for Good Governance (CGG) and Telangana Remote Sensing Application Center (TRAC) are provided to the districts to enable them in identifying the resources, issues, and challenges and to suggest appropriate plans for overall development of the districts.

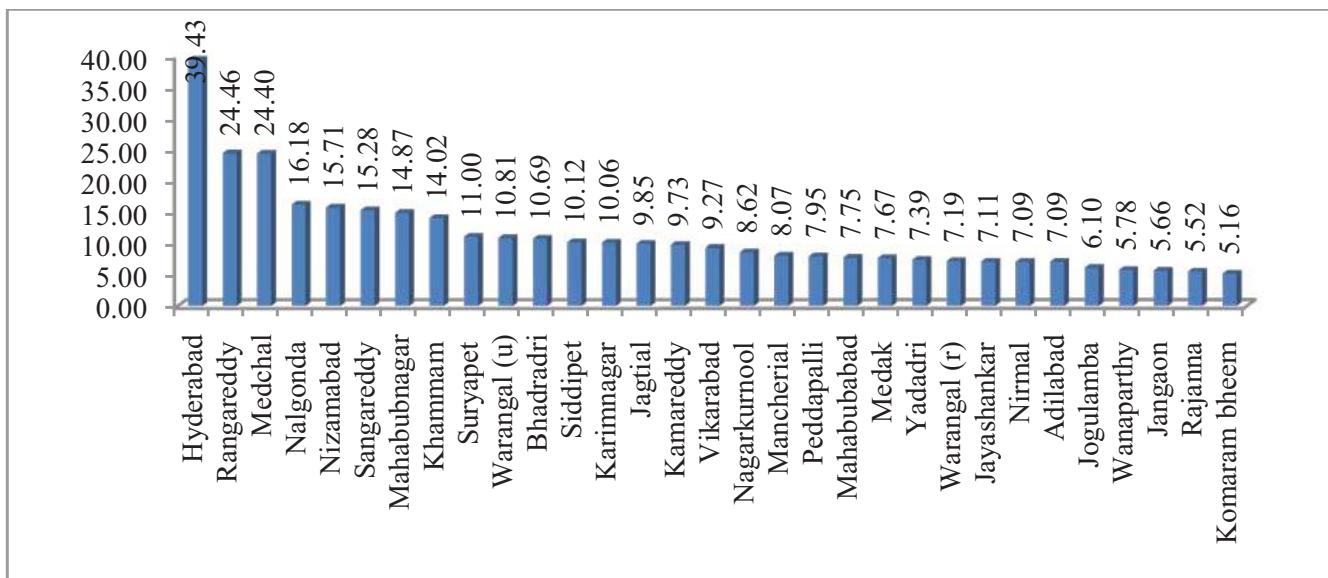
The new district wise data revealed that, the small and more numerous districts have three distinct advantages, viz. (1) administration is closer to the people; (2) more homogeneous districts, which enables focused action; and (3) a greater number of growth centres.

## 5.2. Administration Closer to the People

The average size of each of the 31 districts would be around 3,600 sq. kms with an average dimension of 60 km by 60 km. People travel time is reduced considerably to reach the administration. As the district administration moves closer, the people can also directly approach the district officials, thus reducing their dependency on middlemen/ service agents. This way, small districts can be the game changers.

Even the average population per district has come down to 11.35 lakh as against 35 lakh population before reorganisation. In the new scenario, as many as 18 districts have population less than 10 lakh and only 8 districts have population more than the state average. District wise population is given in Figure 5.1.

**Figure 5.1: District-wise population in lakh**



Source: Directorate of Economics and Statistics

## 5.3. Homogeneous Districts

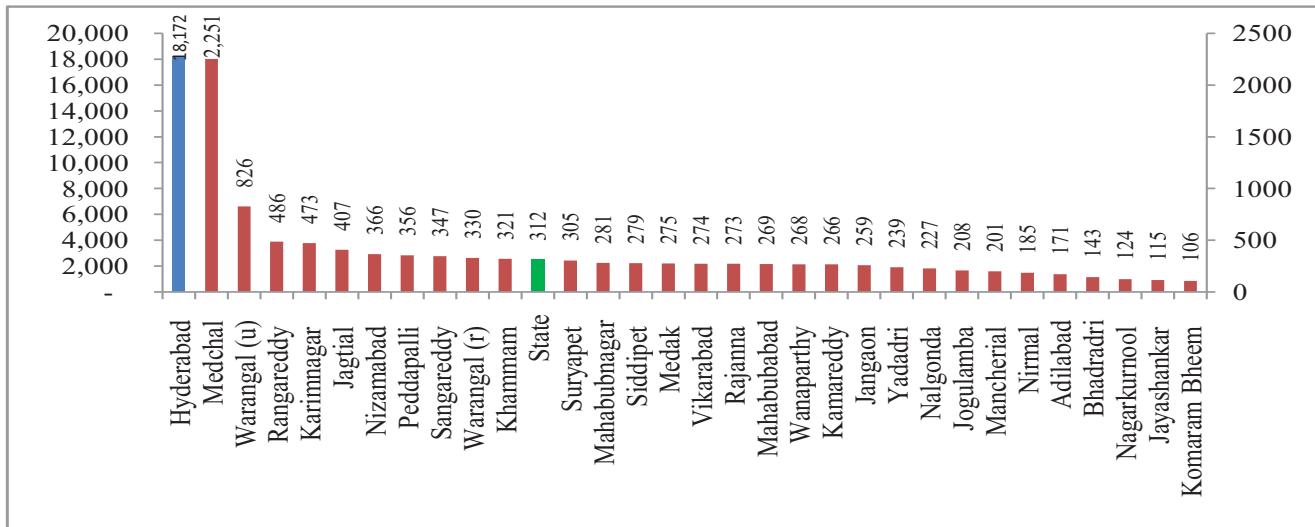
The erstwhile districts were not only large, but also agglomerations of diverse regions with different levels of development and endowed with different kinds of resources, issues and challenges. For example, the erstwhile Rangareddy district had world-class urban infrastructure and corporations in one part and least-developed pockets in another part. The same is the case of the erstwhile Medak district. Similarly, erstwhile Adilabad district had pockets of industrial and urban centres as well as inaccessible and underdeveloped tribal areas. Likewise, erstwhile Mahabubnagar had widely diverse pockets of literacy levels. Because of huge variations and inequalities within the erstwhile districts, they could not experience any significant improvement. However, after reorganization, each district has become more homogeneous, with distinctive resource base, strengths, opportunities, issues and challenges. In this scenario, focused action is possible for micro level planning. Different districts' position on a few indicators is shown below as an illustration.

### Population density

The high population density is considered as a development indicator, as the population normally moves from areas with low work and earning opportunities to areas with more remunerative work and earning opportunities.

Increase in inter-district economic inequality after reorganisation can be gauged through the changes in population density across the districts. Leaving aside Hyderabad, the population density in the erstwhile districts varied between 170 in Adilabad to 707 in Rangareddy. After reorganisation the population density across the districts vary from 106 in Kumarambheem to 2,251 in Medchal. The district wise population density details are given in figure 5.2.

**Figure 5.2: Population density across the districts.**

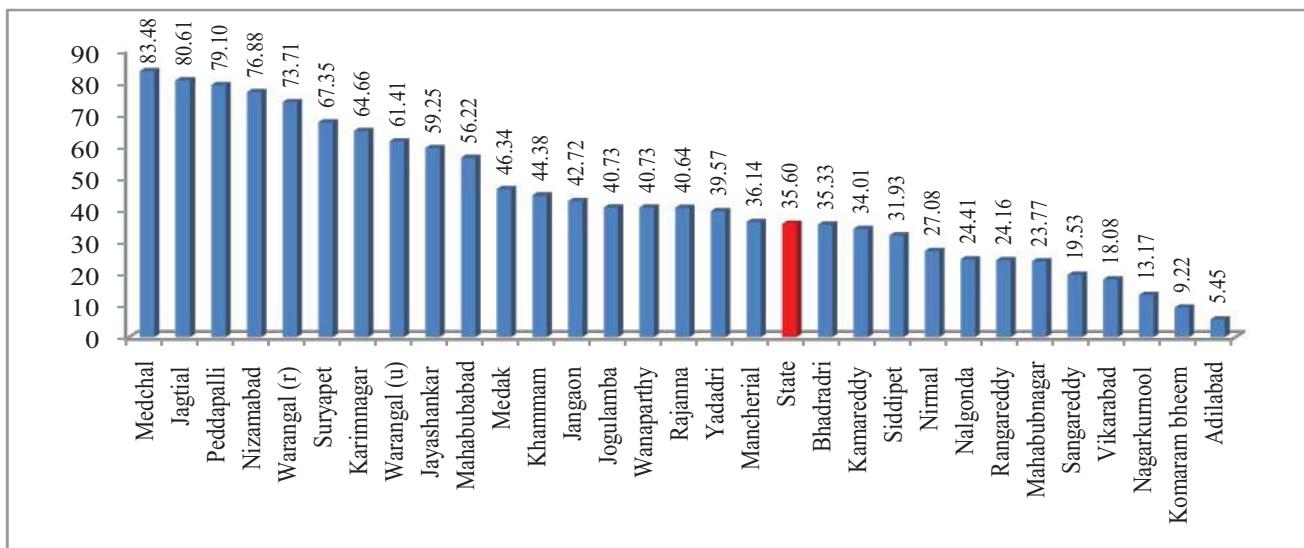


Source: Directorate of Economics and Statistics

### Irrigation

In erstwhile districts net irrigated area as percentage of net sown area varied from 14.59 per cent in Adilabad to 61.77 per cent in Karimnagar. After reorganization Medchal is leading district with 83.48 per cent irrigated area, followed by Jagtial (80.61 per cent), Peddapalli (79.10 per cent) and Nizamabad (76.88 per cent). Adilabad with 5.45 per cent irrigated area is the least irrigated district in the state, preceded by Komarambheem (9.22 per cent), Nagarkurnool (13.17 per cent), Vikarabad (18.08 per cent) and Sangareddy (19.53 per cent) (Figure 5.3).

**Figure 5.3: District-wise net irrigated area as percentage of net sown area**



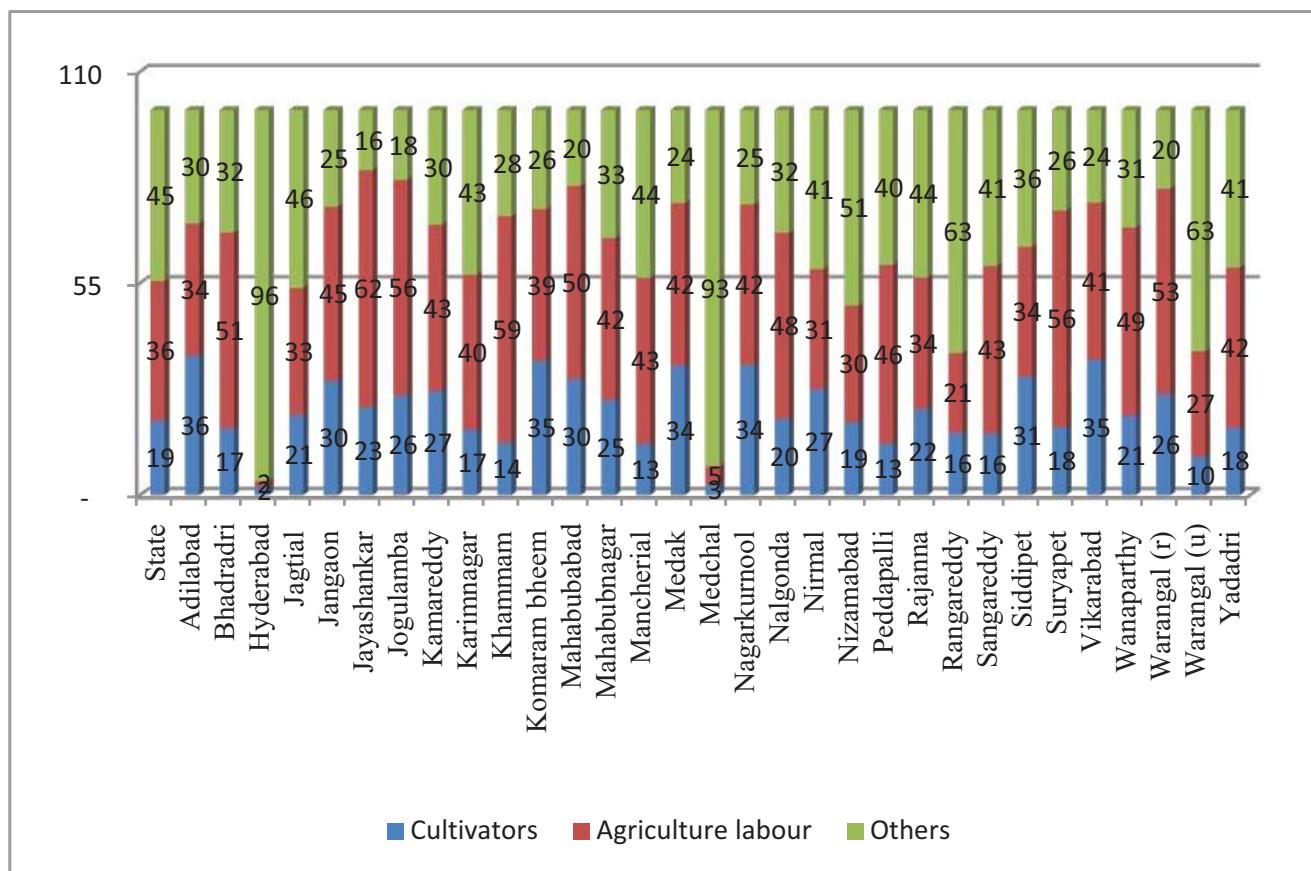
Source: Directorate of Economics and Statistics

## Employment Transition

The share of agriculture in the gross state domestic production (GSDP) has come down to about 15 per cent. However, the share of agriculture in terms of employment remained large at about 55 per cent. The workers' dependence on agriculture is significantly higher in about 25 districts than the state average (55 per cent). The workers' dependence on agriculture is very high in Jayashankar (84 per cent), Jogulamba (82 per cent), Warangal (R) (80 per cent), Mahbubabad (80 per cent), Vikarabad (76 per cent), Medak (76 per cent), Nagarkurnool (75 per cent), Jangaon (75 per cent), Kumarambheem (74 per cent), and so on (Figure 5.5). Apart from encouraging private investment, the Government may establish some institutions such as universities, residential schools and colleges, residential training institutions, etc. in these districts.

Agriculture-dependent workers include cultivators and agricultural labourers. Agricultural labour is the most vulnerable occupation. But, for every one cultivator, there are two agricultural labourers in the state. About 36 per cent of the total workers in the state are agricultural labourers. The same is 62 per cent in Jayashankar, 59 per cent in Khammam, 56 per cent in Suryapet and Jogulamba, 53 per cent in Warangal (R), 51 per cent in Bhadravati, 50 per cent in Mahbubabad, and so on (Figure 5.5). Employment transition is even more disturbing in case of women workers. For example, in Khammam district, as many as 85 per cent female workers are engaged in agriculture; 75 per cent of the total female workers in Khammam are agriculture labourers. These districts need (1) employment transition from agriculture to non-agriculture sectors, (2) increase in the productivity and wages in agriculture, and (3) social security measures for agricultural labourers and farmers.

**Figure 5.5: District-wise distribution of workers as cultivators, agriculture labour and others in %**



Source: Directorate of Economics and Statistics

## 5.4. Growth Centres

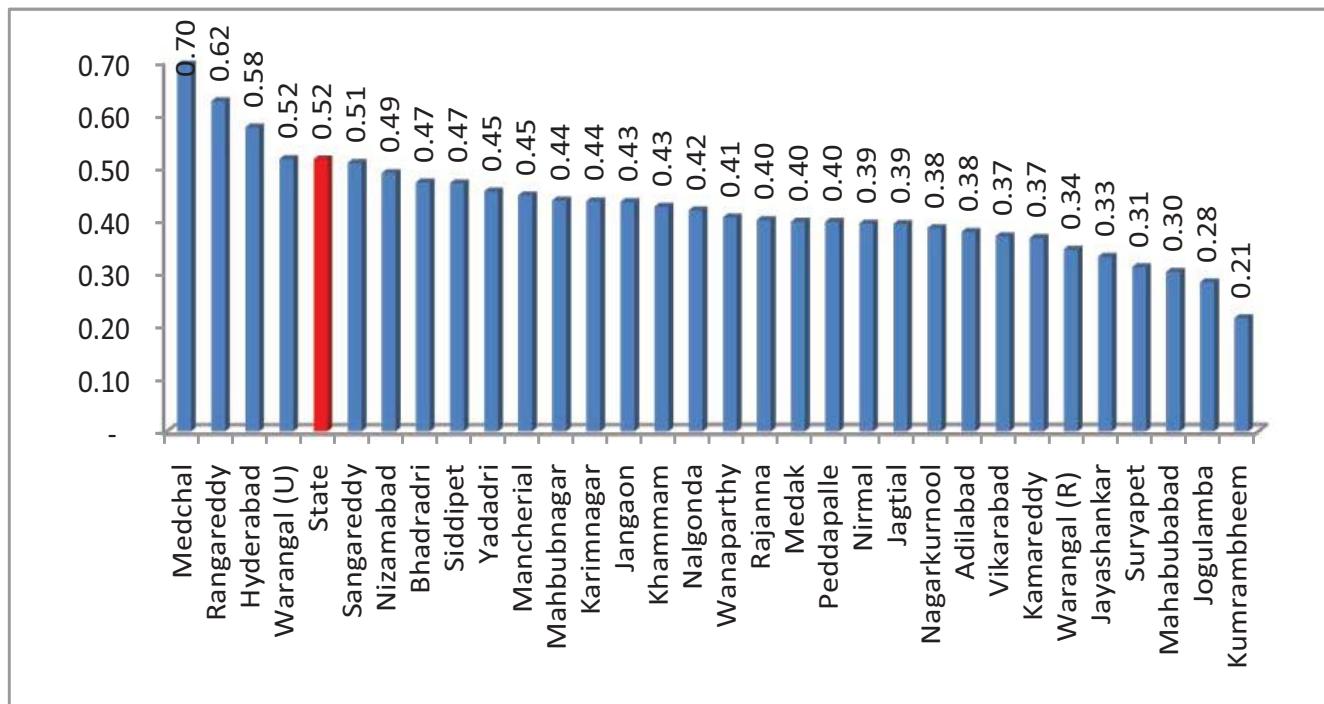
The greatest benefit of districts' reorganisation would be the emergence of the urban/growth centres, in the form of the district headquarters, in most of the districts, especially in the interior and backward districts. Urbanisation, which is a proxy for economic development, is highly skewed in the state and across the districts. Out of total urban population of 1.36 crore, over 70 per cent people live in the GHMC area. On the other hand, the bottom 10 districts, viz., Warangal (R) (0.37 per cent), Jayashakar (0.40 per cent), Medak (0.43 per cent), Jangaon (0.52 per cent), Mahabubabad (0.56 per cent), Kumarambheem (0.56 per cent), Nagarkurnool (0.65 per cent), Wanaparthy (0.68 per cent) and Rajanna (0.86 per cent) together have only 5.57 per cent of the total urban population in the state.

The district headquarters may become growth centres and catalysts for unleashing the development potential of the area and people in their vicinity. The Government would provide the basic infrastructure to all the new district headquarters, including state-of-art connectivity to the state capital. These infrastructures and the demand generated by the official machinery will have a multiplier effect on investment in the sectors such as real estate, education, health, transport, communications, trade and commerce, services, etc. It is noticed a momentum in the real estate in almost all the new district headquarters. In other sectors, the progress is uneven at the moment, but inevitable.

## 5.5. District Development Index

An attempt has been made to estimate the District Development Index (DDI), consisting of five dimensional indices, viz. Livelihood opportunities index, Households' amenities and assets index, Knowledge index, Long and healthy living index and Child rights index. The DDI is the geometric-mean of all the five indices. The methodology used is derived from Global Human Development Index. This index may give useful insights for districts' development plans and focused actions. District wise DDI is given in figure 5.6

Figure 5.6: District wise District Development Index

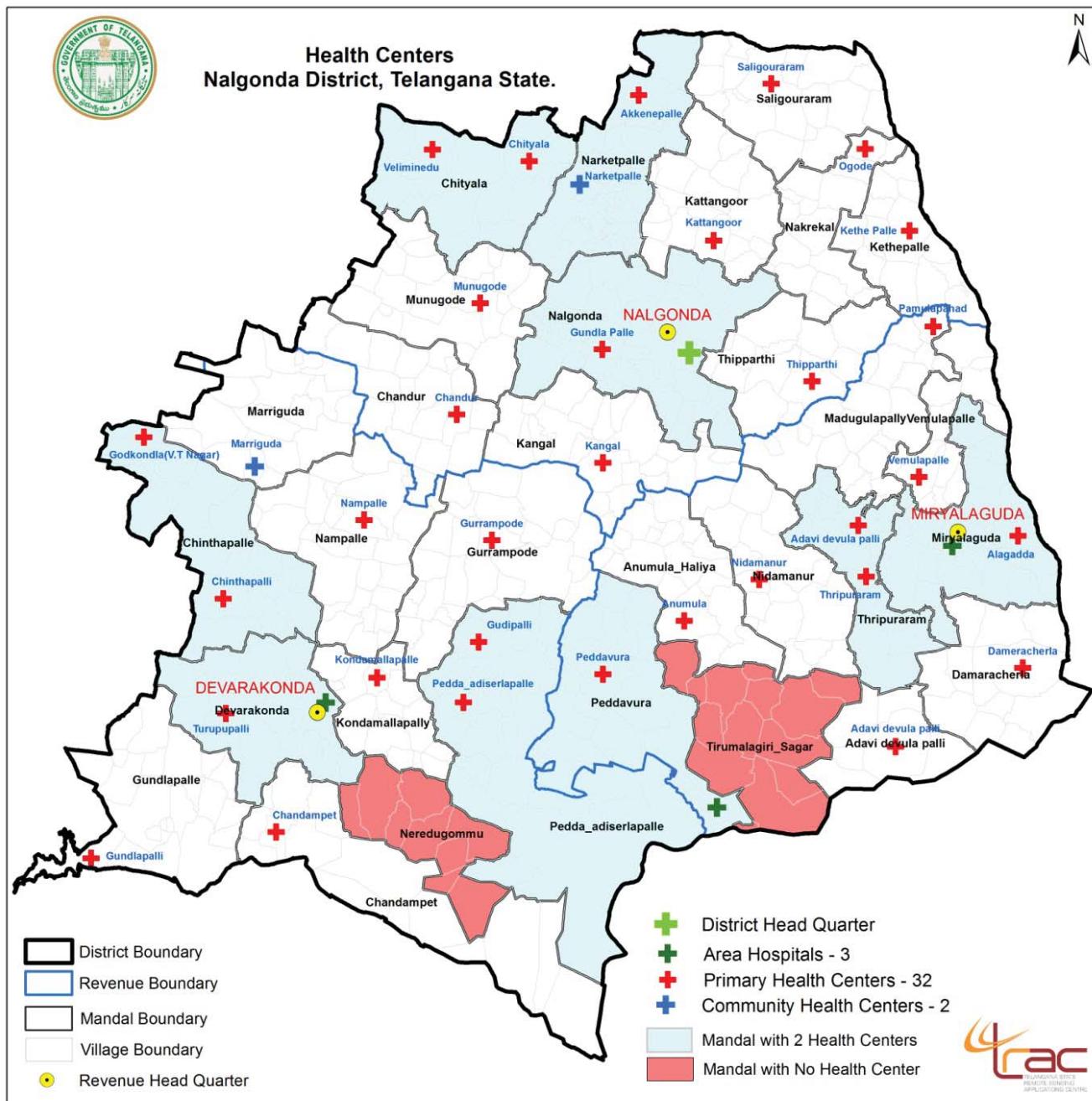


Source: Prepared from SKS data

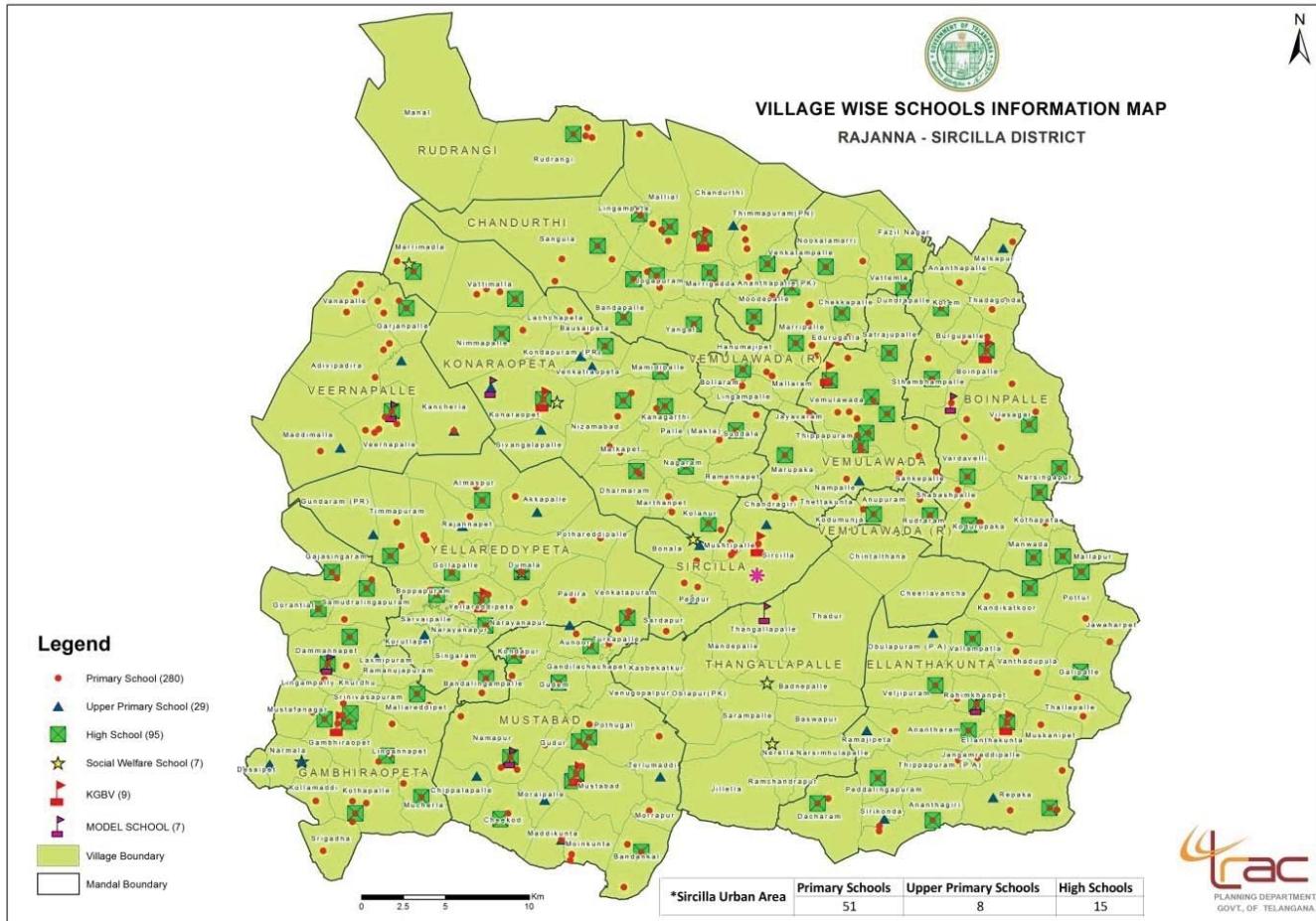
## 5.6. Mapping of the Resources

The mapping of all resources available in the districts is facilitated by Remote Sensing Resource Centres. The centres are supporting the district user departments, in formulation and execution of projects using Geospatial Technologies. The centres have trained the officials, on data collection through Mobile Application for Asset Mapping and monitoring the Telangana Ku Haritha Haram programme and are providing technical guidance for execution of these activities. Asset mapping of 134 villages have been completed till date, which include all the villages of Huzurabad Constituency. For instance, the locations of health centers in Nalgonda district map and locations of village schools in Rajanna-Sircilla districts are shown at map 5.1 and 5.2.

### **Map 5.1: Location of health centres in Nalgonda district**



**Figure 5.2: Location of village wise schools in Rajanna-Sircilla district**



A total of 644 maps covering different themes and sectors were provided for effective district administration. The following are some of the maps: District Administration, Cadastral, Landuse, Wasteland, Soils, Groundwater Prospects Groundwater Level Fluctuations, Groundwater Exploitation Status, Contour, Urban Development Authority, Village wise Major Crops in Kharif 2016-17 for a Mandal, Major & Medium Irrigation Projects, Village Cluster, Minor Irrigation Ayacut, Canal Network, Drainage Network, Forest Cover, Urban Area, Scheduled and Non-scheduled Villages, Parliament Constituency, Assembly Constituency, Demography, Ratio of Population and Household, SC/ST Population, Urban/Rural Population, Ratio of Population to Employment, Road Network, Health Centres, Raingauge Stations, AWS Stations, Existing/Proposed Industries, NABARD Godowns, School Education, Post-metric Education, Sand Reaches, Fluoride Levels upto Habitation, Market Yards, Primary Health Centres, Pulse Polio Distribution, Mandal wise Number of Habitations having Bank & Post Office Facilities and Prajavani Grievances, to name a few. A web based application is developed for Suryapet district to query, visualise and summarise all the government and assigned lands in the district. A mobile application is developed for Wanaparthy district, to collect the stage and health information of all the pregnant women and the foetus in the district.

## 5.7. Outlook

The district administration is supported in identification of available resources, issues and challenges in each district. The support will continue for districts for the generation and management of knowledge, grassroots level planning and implementation and monitoring of welfare and development programmes at village, mandal and district levels. Grassroots level learning would be incorporated in the state level planning and policy making.

This screenshot shows the SISDP platform interface. The top navigation bar includes links for Home, SISDP, Area Selection, Area Profile Report, Asset Mapping, Activity Planning, Implementation & Monitoring, Mobile App v2.0, Welcome VIJAYA, My Profile, Logout, Help, Full View, and Select Language. The main content area features a map viewer with satellite imagery of a rural area in Nalgonda District, India. A yellow arrow points from the map to a photograph of a white building with a blue signboard. To the left is a sidebar with 'Layers' and 'Assets' sections. The 'Assets' section lists various categories such as ATM, Aanganwadi, Agriculture, Air Transport Facilities, Bank, College/University, Commercial, Credit Society, Dairy Unit, Data Collection Centre, Drainage and Hydrology, Drains or Naala, Electric Assets, Electricity and Usage, Fauna, Fauna Manufacturing Unit, Fishery/Aquaculture, Flora, and Frontier Strategic Facilities. Below the map is a caption: "Asset Mapping of Zilla Parishad School in Nalgonda District with Geo-Tagging".

Asset Mapping of Zilla Parishad School in Nalgonda District with Geo-Tagging

This screenshot shows the SISDP platform interface. The top navigation bar includes links for Home, SISDP, Area Selection, Area Profile Report, Asset Mapping, Activity Planning, Implementation & Monitoring, Mobile App v2.0, Welcome VIJAYA, My Profile, Logout, Help, Full View, and Select Language. The main content area features a map viewer with satellite imagery of Kamalapur Village in Warangal Urban District, India. A blue arrow points from the map to a photograph of a red building with a blue signboard. To the left is a sidebar with 'Layers' and 'Assets' sections. The 'Assets' section lists various categories such as ATM, Aanganwadi, Agriculture, Air Transport Facilities, Bank, College/University, Commercial, Credit Society, Dairy Unit, Data Collection Centre, Drainage and Hydrology, Drains or Naala, Electric Assets, Electricity and Usage, Fauna, Fauna Manufacturing Unit, Fishery/Aquaculture, Flora, and Frontier Strategic Facilities. Below the map is a caption: "Asset Mapping of Kamalapur Village, Warangal Urban District with Geo-Tagging".

Asset Mapping of Kamalapur Village, Warangal Urban District with Geo-Tagging

**Section III**

**SECTORAL ANALYSIS**



# Revamping Agricultural Sector:

*Enhancing farmers' income and building drought-proof agriculture*



*The farmer has to be an optimist or he wouldn't still be a farmer.*

— Will Rogers

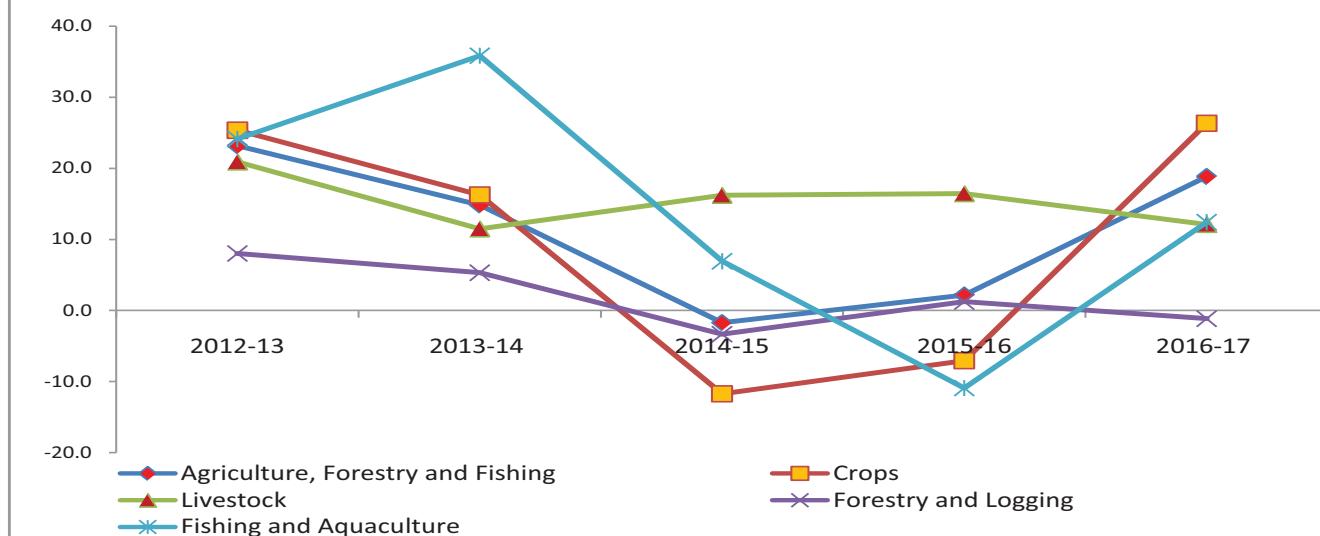


## 6.1. Introduction

The agricultural season of 2016 has been a year of hope for the sector, as it has seen above-normal rainfall in the monsoon season after two consecutive years of drought. As a result, there has been an increase in the area under cultivation and a corresponding increase in crop production.

Agriculture & allied activities consist of four sub-sectors viz., crop sector, livestock, forestry & logging and fishing & aquaculture. The Crop sector is the largest contributors to the agriculture & allied sector with a share of 53 percent, followed by livestock (42 percent), fishing & aquaculture (3 percent) and forestry & logging (2 percent) in 2016-17. The crop sector, which experienced negative growth for last two consecutive years, is projected to grow at a high growth of 26.3 percent, the highest ever since 2012-13. Growth trends in agriculture and allied sector during last five years is shown in Figure 6.1. While the spurt in agriculture sector growth directly benefit the about half of State's population, it will enhance the income of the other half of the population by augmenting the demand in rest of the economy.

**Figure 6.1: Growth trends in agriculture & allied sectors**

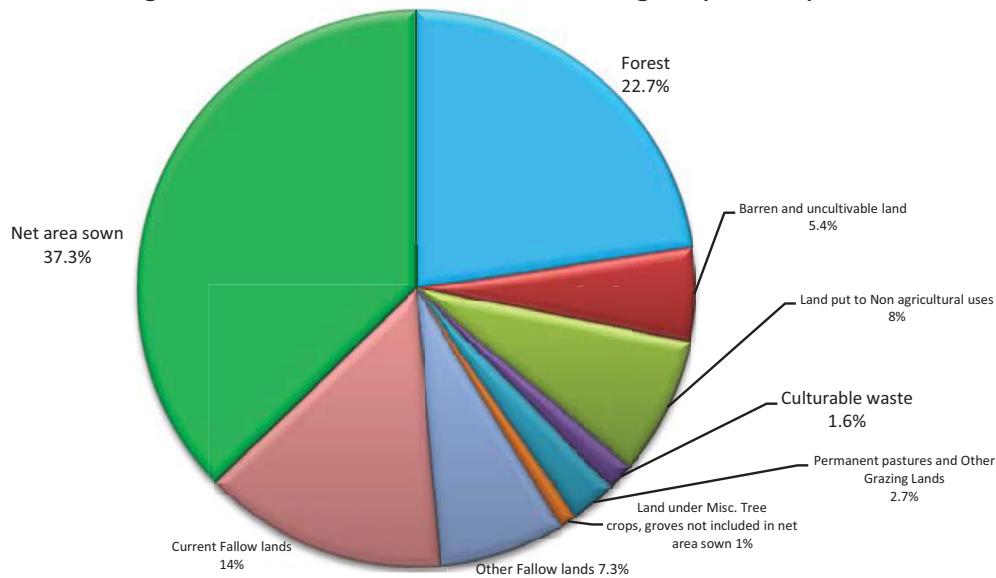


Though the impact of the monsoon is perennial, there are some structural challenges faced by the sector in the state. Some important ones include the high and rising cost of cultivation, high fluctuation in prices and meagre growth in farmers' income, etc. Revival of the agricultural sector from these structural challenges has been the priority of the present government since the formation of Telangana. This chapter discusses the recent trends in rainfall, area under cultivation, production, productivity, cost of cultivation etc. The major focus is laid on initiatives of the government aimed at reducing cost of cultivation and measures targeted for drought-proofing of agriculture in the State to achieve the ultimate objective of doubling the farmers' income.

### **Land utilisation pattern**

The total geographical area of Telangana is 112.08 lakh hectares. Of this, 37.3 per cent is under cultivation (2015-16 figures) and around 23 per cent is under forest cover. Land put to non-agriculture uses is around 8 per cent. Details of land utilisation pattern are given in the Figure 6.2

**Figure 6.2: Land Utilisation Pattern in Telangana (2015-16)**



*Source: Agricultural statistics at a glance 2015-16, Directorate of Economic and Statistics, Government of Telangana*

### **Average size of operational holdings**

The average size of holdings in the state was 1.30 hectares in 2005-06 and it declined to 1.12 hectares in 2010-11. This indicates that there has been a decline in the average size of landholdings by 14.49 percent. The decrease in the average size of holdings is observed in all categories except marginal and small groups, during the period 2005-06 to 2010-11.

### **Rainfall**

The monsoon rainfall has been favourable this year. Rainfall received during the Southwest monsoon was 912.0 mm as against the normal seasonal rainfall of 713.5 mm and the previous year's (2015-16) rainfall of 611.2 mm. Rainfall received during the Southwest monsoon was 28 per cent above normal and 49 per cent higher than the previous year's rainfall. As a result, area, production and yield of most of the Kharif and Rabi crops in 2016-17 are expected to be higher than the previous two years (Table 6.1).

**Table 6.1: Month-wise rainfall during Southwest monsoon (Rainfall in mm)**

S . No.	Month	Normal	Actual Rainfall		Current Year Deviation over Normal Rainfall (in %)	Current Year Deviation over Previous Year (in % )
			Current Year (2016–17)	Previous Year (2015–16)		
1	June	127.6	190.9	220.3	50	-13
2	July	238	231.5	80.3	-3	188
3	August	218.7	128.0	151.2	-41	-15
4	September	129.2	361.6	159.4	180	127
	Total	713.5	912.0	611.2	28	49

Source: Directorate of Economics and Statistics, Government of Telangana

## 6.2. Gross and Net Area Irrigated

The gross area irrigated in the State during 2015-16 has decreased to 20.27 lakh hectares as compared to 25.29 lakh hectares in 2014-15, showing a decrease of 19.85%. Similarly the net area irrigated has decreased to 14.86 lakh hectares in 2015-16 as against 17.26 lakh hectares in 2014-15, showing a decrease of 13.90%.

### Source-wise irrigation:

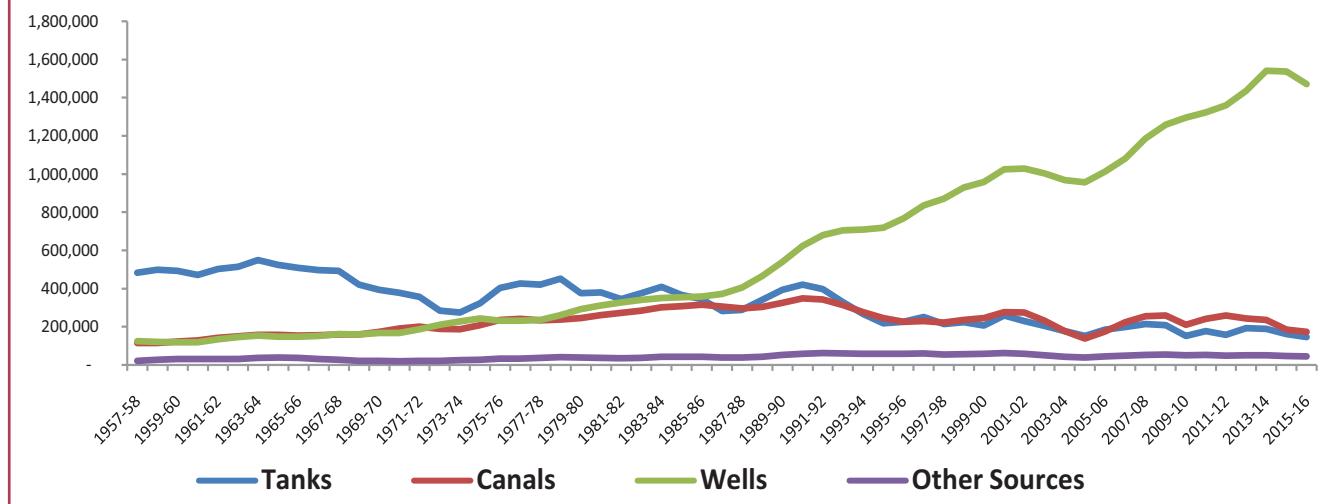
Source wise distribution reveals that wells are main source of irrigation in the State, irrigating about 84% of the total net irrigated area in 2014-15. The share of canal and tank irrigation is confined to mere 10 percent and 4 percent respectively.

**Table 6.2: Source-wise gross irrigated areas during 2014-15 and 2015-16**

Sl. No.	Source of Irrigation	Gross irrigated area (in lakh hectares)			
		2015-16		2014-15	
		Area	% of gross area irrigated	Area	% of gross area irrigated
1	Canals	0.61	3.01	2.43	9.61
2	Tanks	1.21	5.96	1.13	4.47
3	Tube Wells	11.93	58.83	14.19	56.11
4	Other Wells	6.12	30.18	6.97	27.56
5	Other Sources	0.41	2.02	0.57	2.25
	<b>Total</b>	<b>20.28</b>	<b>100</b>	<b>25.29</b>	<b>100.00</b>

Looking at trends of irrigation in Figure 6.3 (with triennium average) over a period of 60 years in Telangana reveals that there is a significant change in the usage pattern of major source of irrigation. While the tank and canal irrigation shows a declining trend over the years, the well irrigation shows a faster growth rate since 1985-86. The well irrigation which was 16 percent in 1955-56 was increased to 37% in 1985-86 and further increased to 81% in 2015-16. The tank irrigation was three times higher than the well and canal irrigation in 1955-56. Over a period of time, it has declined significantly. In the year 1955-56 the percentage share of tank irrigation was 64% which declined to 28% in 1985-86 and further to 8% in 2012-13. This is a clear indicator of deliberate neglect of thousands of tanks. High dependency on wells has adverse effect on cost of cultivation and groundwater levels; therefore there is a need to increase tank and canal irrigation sources in the State. Hence, the Government has launched “Mission Kakatiya” to revive and rejuvenate tank irrigation. Government has also proposed to re-engineer the canal irrigation projects and allocating substantial portion of budget to canal irrigation (Details are discussed in Chapter on Economic Infrastructure).

**Figure 6.3: Trends in Area under irrigation according to Sources in Telangana:  
Triennium Average**



### Credit to Agriculture

Credit occupies an important place in agricultural development strategy. As per the Annual Credit Plan (2016-17) released by the State Level Bankers' Committee, Telangana, a total of Rs. 90,776 crore is estimated as annual credit plan for 2016-17. An amount of Rs. 29,101 crore was projected target in 2016-17 towards crop loans, whereas for 2015-16 it was about Rs. 27,800 crore, register a mere growth of 5 per cent over previous year. An amount of Rs. 60,613 crore was the projected target towards priority sector in 2016-17 as against previous years of Rs. 57,320 crore (see Table 6.3 and Figure 6.4).

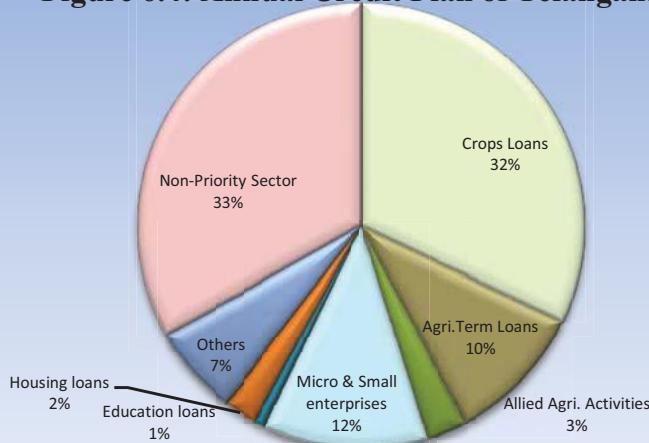
However, in 2015-16, credit flow to agriculture fell short of targeted projections, whereas non-priority sector received more credit than what is targeted. A total of Rs. 78,776 crore was the total annual credit plan for the State in 2015-16. Of which, about 47.8 per cent is allocated for agriculture sector, 14 per cent for SME sector, 10.9 per cent for other priority sector and 27.2 for non-priority sector. Out of the total crop loans target of Rs. 27,800 crore in 2015-16, Rs. 23,400 crore was disbursed, registering a 16% decrease from the projected target. For agriculture sector (consisting of crop loans, agriculture term loans and loans to allied activities) an amount of Rs. 34,187.5 crore was disbursed as against the projected target of Rs.37,652 crore, indicating a decline of 9 per cent. However, it may be noted that Rs. 21,456 crore was targeted for non-priority sector and its achievement was about Rs. 80,533 crore indicating an increase of about 375 percent.

**Table 6.3: Telangana State Credit Plan for 2015-16 and 2016-17: Targets & Achievements (Rs. Crore)**

Sl. No.	Segments	2015-16			2016-17
		Targets	Achievements	% of Achievements	Targets
1	Crops Loans	27,800.2	23,400.3	84	29,101.4
2	Agri. Term Loans	7,494.3	8,791.5	117	9,202.8
3	Allied Agri. Activities	2,357.8	1,995.7	85	2,708.4
4	Total Agricultural (1+2+3)	37,652.2	34,187.5	91	41,012.6
5	Micro & Small Enterprises	11,020.3	17,006.9	154	10,807.5
6	Other Priority (education, housing and others)	8,647.7	5,128.0	59	8,793.3
7	Total Priority Sector (4+5+6)	57,320.2	56,322.3	98	60,613.4
8	Non-Priority Sector	21,456.1	80,533.3	375	30,163.4
	<b>Total Advances (7+8)</b>	<b>78,776.4</b>	<b>1,36,855.7</b>		<b>90,776.7</b>

Source: Annual Credit Plan of Telangana, 2016-17, State-Level Bankers' Committee.

**Figure 6.4: Annual Credit Plan of Telangana, 2016-17**



Source: Annual Credit Plan of Telangana, 2016-17, State-Level Bankers' Committee

### Crop Loan Waiver Scheme

Indebtedness is one of the major problems that farmers face in the State. As per the “All India Debt and Investment Survey” by National Sample Survey (70th Round), about 74 per cent of the total cultivators in the State are in indebtedness. The Government of Telangana has announced a one-time crop loan waiver to end the perpetual indebtedness of farmers through the Crop Loan Waiver Scheme. Under the scheme, short term crops loans (including crop loans against gold) taken by farmers from scheduled commercial banks, cooperative credit institutions and regional rural banks and outstanding as on 31.03.2014 are eligible for waiver. The eligible amount for debt waiver is up to Rs.1 lakh, including loan amount and interest up to 31.08.2014. The waiver is scheduled to be paid in four instalments. Three instalments, amounting to Rs.12,105 crore were adjusted into the accounts of 35.30 lakh farmers till the financial year 2016-17.

### 6.3. Current Year Trends in Area, Production and Yield

The production of food grains, including cereals and millets and pulses, has been estimated to be about 77.93 lakh tonnes in the current (2016-17) agricultural year as against 51.45 lakh tonnes last year. The sharp increase in the production of pulses, cereals and millets has resulted in increased food-grain production in the State. It is also encouraging to note that there is an increase in both area and yield in food grains in 2016-17, mainly due to abundant rainfall. The oilseeds production is likely to be 6.6 lakh tonnes as against 5.79 lakh tonnes last year.

Due to the delayed monsoon in the State, cotton, which is one of the main non-food crops, has seen negative growth in terms of area, production and yield. The details of area and production of food and non-food crops in 2015-16 and 2016-17 are given in the Table 6.4.

**Table 6.4: Area, production and yield of major crops during 2015-16 and 2016-17 in Telangana**

S. No.	Name of the Crop	Area (lakh hectares)			Production (lakh tonnes)			Yield (kg/hectare)		
		2015-16	2016-17*	% Dev.	2015-16	2016-17*	% Dev.	2015-16	2016-17*	% Dev.
1	Rice	10.46	13.84	32	30.47	45.73	50	2913	3304	13
2	Maize	5.73	7.55	32	17.51	27.35	56	3057	3623	19
3	Cereals & millets	17.08	22.39	31	48.98	73.95	51	2867	3303	15
4	Total pulses	4.72	6.5	38	2.47	3.98	61	524	612	17
5	Total food grains	21.8	28.89	33	51.45	77.93	51	2360	2697	14

S. No.	Name of the Crop	Area (lakh hectares)			Production (lakh tonnes)			Yield (kg/hectare)		
6	Groundnut	1.28	1.5	17	2.06	2.71	32	1611	1807	12
7	Soya bean	2.43	2.77	14	2.52	3.43	36	1036	1238	19
8	Total oil seeds	4.54	5.01	10	5.79	6.6	14	1276	1317	3
9	Sugarcane	0.35	0.31	-11	24.05	25.7	7	68911	82894	20
10	Cotton	17.73	14.08	-21	37.33	29.32	-21	358	354	-1

Source: Agricultural Statistics at a Glance 2015-16, Directorate of Economic and Statistics, Government of Telangana

Note: \*includes both Kharif and Rabi. Figures for Rabi season (2016-17) are based on advanced estimates.

#### 6.4. Cost of cultivation

Cost estimates<sup>1</sup> for the principal major crops viz., paddy, maize, arhar (red gram) and cotton, which account for about three-fourth of gross cropped area, in Telangana are analysed in the present section. There are different approaches to calculate the cost of cultivation based on inclusion of the actual paid price and imputed value of the family labour and other inputs. The following analysis uses concept of C2, i.e.; the Cost<sup>2</sup> inclusive of all the paid out costs, and imputed values for inputs used in crop production. The cost analysis is presented in terms of cost of production per quintal and cost of cultivation per hectare.

#### Cost estimates of principal crops in Telangana: Per quintal analysis

Cost estimates of principal crops (in current prices) viz., paddy, maize, arhar (red gram) and cotton, which account for about 75 per cent of the total gross cropped area in the State, reveals that there has been a rise in per quintal cost for all four major crops in the State. Per quintal production cost of paddy, maize, arhar and cotton has increased by over 69 per cent, 19 per cent, 42 per cent and 18 per cent respectively from 2008-09 to 2014-15. Trend in these costs reveals that (see Table 6.5), (i) there had been a high fluctuation in per quintal cost of production for major crops over a period of time and (ii) production cost incurred per quintal of paddy and arhar experienced steep increase as compared to maize and cotton in a period of seven years.

**Table 6.5: Per quintal cost for major crops in Telangana (Rs)**

Crops	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Paddy	1,229	1,313	1,237	1,854	1,474	1,531	2,083
Maize	1,302	1,419	1,129	1,560	1,435	1,377	1,550
Arhar	6,923	4,290	6,526	NA	9,022	8,784	9,805
Cotton	5,319	NA	NA	4,094	7,429	NA	6,299

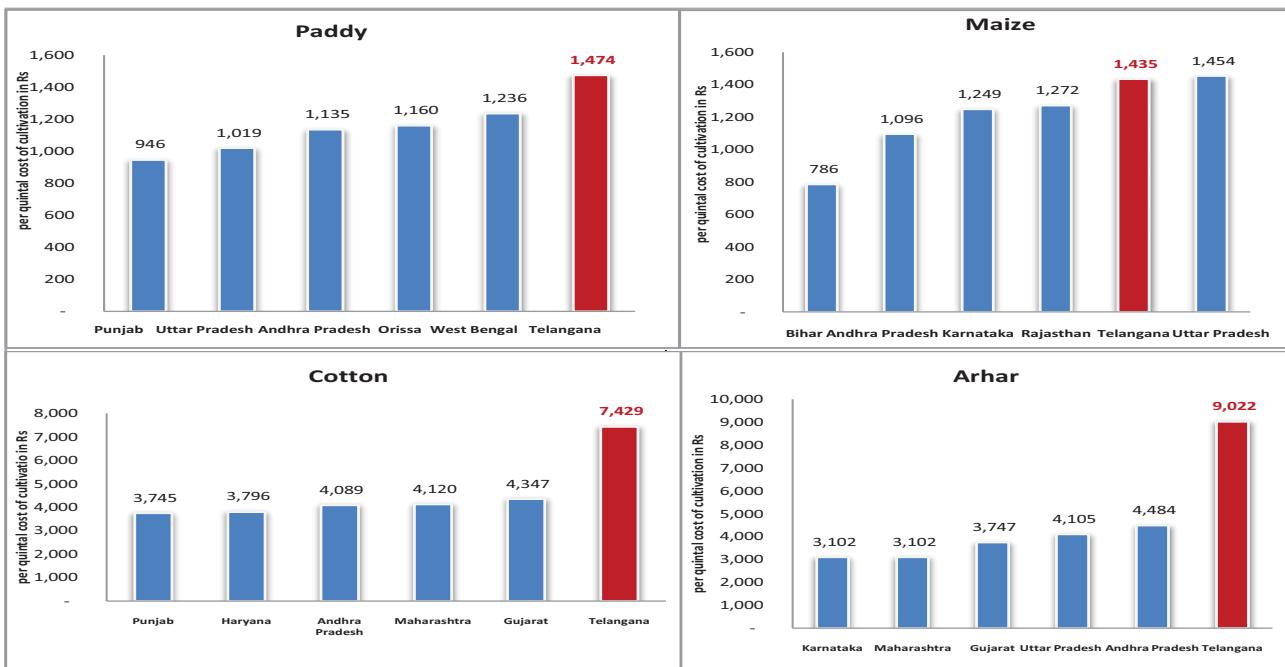
Note: Figures (costs) are at current prices. NA stands for Not Available.

#### Per quintal cost for principal crops: Telangana vis-à-vis other major States

Cost incurred for producing (per quintal) in Telangana vis-à-vis other major producing states in 2013-14 reveals that per quintal cost of production for all major crops stood higher than the other major producing States. In case of paddy, cotton and arhar production costs are the highest in Telangana compared to six major producing states of these crops in India. While Rs 1,474 spent to produce a quintal of paddy in Telangana, the same is produced at Rs 946 in Punjab, indicating cost of production in the State is 55 per cent higher. Similarly per quintal cost for maize, arhar and cotton are higher by 82 per cent, 190 per cent and 98 percent over the state with a least cost (see Figure 6.5).

- The data relating to Telangana State is obtained from the “Comprehensive Scheme for studying the Cost of Cultivation of Principle crops in India – Andhra Pradesh and Telangana, Prof. Jayashankar Telangana State Agricultural University, Hyderabad. The study was done for the Ministry of Agriculture, Government of India for estimating cost of cultivation and Minimum Support Price.
- The C2 cost includes all actual expenses in cash and kind incurred in production by owner operator + interest on value of owned capital assets (excluding land) + rental value of owned land + rent paid for leased-in-land + imputed value of family labour.

**Figure 6.5: Per quintal cost of principal crops in Telangana vis-à-vis other major states in 2012-13 (Figures in Rs)**

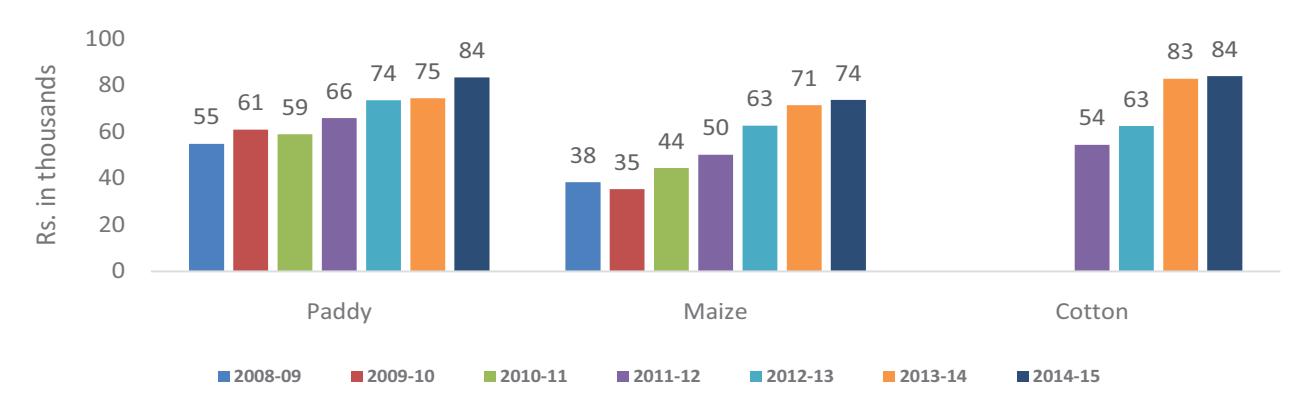


Note: Figures (costs) are at current prices.

#### Cost estimates of principal crops in Telangana: per hectare analysis

Cost estimates of principal crops, viz. paddy, maize and cotton, reveals that there has been a steep rise in the cost of cultivation per hectare in the state. The per hectare cultivation cost of paddy, maize and cotton has increased by more than 52 per cent, 92 per cent and 150 per cent respectively from 2008-09 to 2014-15. The cost of cultivation of paddy increased from Rs. 54,932 to Rs. 83,515 from 2008-09 to 2014-15. The cost of cultivation of maize per hectare has seen a steep increase from Rs. 38,405 in 2008-09 to Rs. 73,767 in 2014-15, registering a growth of 92 per cent. Similarly, the cost per hectare in cotton has increased by 150 per cent from Rs. 33,574 to Rs. 84,045 over a period of seven years from 2008-09 to 2014-15. This indicates that during this period of seven years under consideration, there has been a steep increase in the cost of cultivation in Telangana (see Figure 6.5A)

**Figure 6.5A: Trends in Cost of Cultivation of Major Crops in Telangana: Per hectare analysis (Rs. in 1000's)**

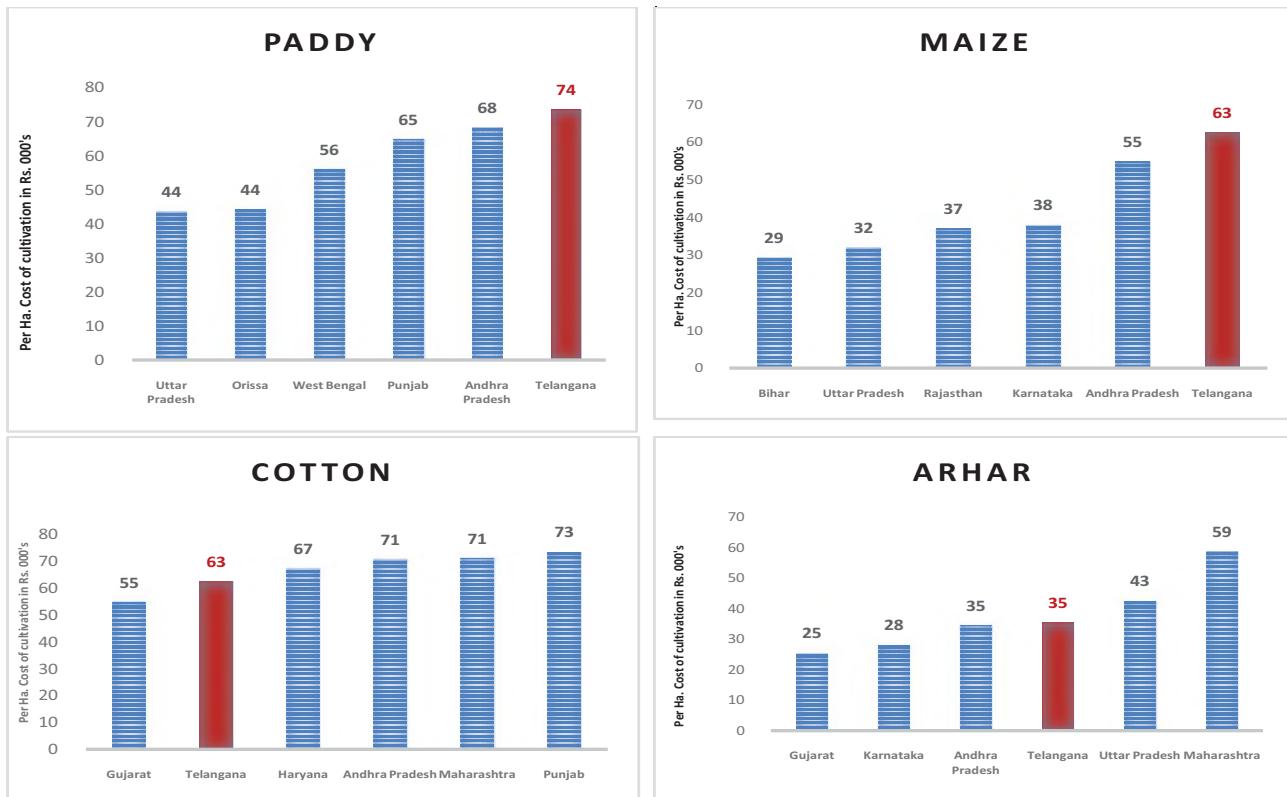


Note: Figures (costs) are at current prices.

## Per hectare Cost of principal crops: Telangana *vis-à-vis* other major States

A comparative analysis of cost of cultivation of principal crops in Telangana with other major states reveals that per hectare cost of cultivation in Telangana is much higher than the other States. In the year 2013-14, the cost of cultivation for paddy and maize was the highest among the six major paddy-producing states in India. While Uttar Pradesh incurred a cost of Rs. 43,621 per hectare of paddy in 2012-13, per hectare cost for paddy in Telangana was about Rs. 73,641.

**Figure 6.6: Per hectare Cost of principal crops in Telangana *vis-à-vis* other major states in 2012-13 (Rs in 1000's)**



Note: Figures (costs) are at current prices.

Two conclusions can be drawn from the above analysis: firstly, there has been a steep increase in the cost of cultivation of principle crops in Telangana which account for about 75 per cent of gross cropped area in the state; and most importantly cost of cultivation in Telangana is much higher than the other State. Further, high cost of cultivation in the State is possibly due to (i) high use of modern inputs such fertiliser and pesticides and (ii) high dependency on well irrigation, which entails both high fixed investment and maintenance costs.

### 6.5. Revamping of Agriculture

Agricultural sector of Telangana has been undergoing a crucial phase during the past few years. Fluctuating growth, decline in share of agriculture sector contribution, degradation and depletion of soil fertility, low and occasional dampening of produce prices are some of the critical challenging issues faced by the agriculture sector. The Government of Telangana is implementing a comprehensive agenda through various interventions to address these issues and stabilise agriculture growth and double the farmers' income. These initiatives are discussed below:

## A. Initiatives targeted towards reducing cost of cultivation

The State government is implementing a multi-pronged strategy to reduce cost of cultivation in the State. A brief about these initiatives is provided below.

**(i) Soil testing:** Soil testing is done to evaluate the fertility status of the soil to identify nutrients available and the problems (salinity/sodicity) of the farmland. In the absence of this information, either farmers end up applying too much fertiliser, which increases cost of cultivation in addition to damaging the environment, or end up applying too little fertiliser, which results in low yields and returns. Based on soil testing, the farmers can improve fertility of the land by applying appropriate fertilisers/micro-nutrients.

The Soil Health Card Scheme is being implemented to create awareness among farmers regarding the importance of soil testing and judicious and integrated use of fertilisers based on soil test data, thereby reducing the cost of cultivation. The scheme promotes soil health by reclamation of acidic/alkaline soils and productivity by balanced and integrated use of fertilisers.

**Table 6.6: Soil testing labs in Telangana**

S. No	Type of Soil Testing Lab	Number
1	Regional Soil Testing Labs	1
2	District Soil Testing Lab	11
3	Mobile Labs	4
4	Agricultural Market Committee Level Labs	28
<b>Total</b>		<b>44</b>

The Telangana Government has established 44 soil testing labs and plans to issue Soil Health Cards to all the farmers in the state over a period of two years (See Table 6.6 for details). Under the Soil Health Card Scheme, the target is to collect one sample for every 10 ha and 2.5 ha for rain-fed and irrigated areas, respectively. During 2015-16, 5 lakh soil samples were collected and analysed, and about 21.6 lakh soil health cards were distributed. For 2016-17, the target for collection and analysis of soil samples is 5.34 lakh. As on 21 January 2017, about 4.23 lakhs soil samples have been collected and 3.64 lakh samples analysed.

**Box. 6.1: Success Story: Soil Health Card Scheme**

Village, District	Konapur, Ramayampet, Medak
Crop cultivated	Paddy
Dosages (per acre) before SHC was received	N P K Micronutrients
	100 kg 40 kg 30 kg
Dosages (per acre) after receipt of soil information through SHC	N P K Micronutrients
	52 kg 20 kg 12 kg 20 kg
Change in fertiliser usage (kg/acre)	N P K Micronutrients
	48 kg 20 kg 18 kg 20 kg
<b>N:P:K before SHC received</b>	<b>2:1:0.50</b>
<b>N:P:K after SHC received</b>	<b>1:0.50:0.25</b>
<b>Increase in production (kg/acre)</b>	<b>20 %</b>
<b>Additional increase in farmer's income (Rs/ acre)</b>	<b>Rs 10,500</b>

**(ii) Micro-irrigation:** A special project on micro-irrigation has been under implementation in Telangana. The major objectives of the scheme include (i) enhance productivity, (ii) improve efficiency of water and fertiliser use, (iii) improve energy and labour efficiency and (iv) increase agricultural yield with less water. Recognising the importance of micro-irrigation, the subsidy was extended to cover up to 5ha. for all categories of farmers, without limitation on unit cost subsidy as compared to the earlier limitation of Rs. 1 lakh subsidy per family, with coverage of 1 ha only.

**(iii) Integrated pest management:** To reduce the indiscriminate use of pesticides, the extension staff organised demonstrations pertaining to Integrated Pest Management (IPM). Farmers were trained in seed treatment, trap crops and border crops, erecting bird perches, etc. (i.e., biological, cultural, mechanical and chemical methods). Use of silt from tanks through renovation of tanks under the Mission Kakatiya, is helping farmers in reducing fertiliser consumption.

## B. Initiatives targeted towards enhancing farmers' income

Increasing productivity and better prices for the farmers has been a top priority for the government. The government has taken a number of measures to enhance farmers' income. Some of them are described below.

**(i) Farm mechanisation:** Mechanisation of agriculture will help in increasing productivity and reduce the cost of cultivation, and also enable the farmer to complete farming operations in time. Farm mechanisation in the state has gained importance because of the shortage in agriculture labour due to increased migration of rural workers to urban areas. However, most of the farming in the state is carried out on small holdings, which continue to utilise manual power.

The Farm Mechanisation Scheme is being implemented in the state to encourage mechanisation of farming by supplying various types of farm machinery and implements, i.e., animal-drawn machinery, tractor-drawn machinery, high-cost machinery, mini tractors, post-harvest equipment, plant protection equipment, inter-cultivation equipment and HDPE tarpaulins, and the establishment of Custom Hiring Centres (CHCs) for paddy land preparation package, CHCs for cotton, maize, paddy harvesting and the mini sugarcane package. Depending on the types of crops grown, soil conditions, local situations and requirements in the districts, the government is contemplating distributing various kinds of farm machinery and implements on subsidy. The subsidy proposed under this scheme is 50 percent and the maximum permissible limit varies depending on the type of machinery.

Apart from this, the Rashtriya Krishi Vikas Yojana (RKVY) and the Sub-Mission on Agricultural Mechanisation are also being implemented to advance farm mechanisation.

**(ii) National Agriculture Market:** The National Agriculture Market (NAM) is envisaged as a pan-India electronic trading portal, which seeks to network the existing Agricultural Marketing Committees (AMCs) and other market yards as part of a unified national market for agricultural commodities. Current APMC-regulated market yards limit the scope of trading in agricultural commodities to the first point of sale (i.e., where farmers offer produce after the harvest) in the local mandi, typically at the level of taluka/tahsil or at best the district.

The National Agriculture Market is not a parallel marketing structure but rather a device to create a national network of physical mandis that can be accessed online. It seeks to leverage the physical infrastructure of the mandis through an online trading portal, enabling buyers situated even outside the state to participate in trading at the local level. NAM seeks to address and reverse this process of fragmentation of markets, ultimately lowering intermediation costs, wastage and prices for the final consumer. It builds on the strength

of the local mandi and allows it to offer the produce at the national level.

The NAM electronic trading platform was created with an investment by the Government of India (through the Ministry of Agriculture). It will offer a “plug-in” to any market yard existing in a state (whether regulated or private). The special software developed for NAM will be offered free of cost to each mandi that agrees to join the national network and necessary customisation will be undertaken to conform to the regulations of each state’s Mandi Act.

There are three basic criteria for a state to propose mandis for a “plug-in” to NAM, viz., (i) the state APMC Act must have a specific provision for electronic trading, (ii) the state APMC Act must provide for issue of licences to anyone in India to trade through the NAM in the local mandis and (iii) there must be one single licence for each state to facilitate trading in all the mandis of that state and a single-point levy of transaction fee. For the local trader in the mandi, NAM offers the opportunity to access a larger national market for secondary trading. Bulk buyers, processors, exporters and others benefit from being able to participate directly in trading at the local mandi level through the NAM platform, thereby reducing their intermediation costs.

The Government of Telangana has amended the APMC Act in tune with NAM to avoid complications and problems in implementation. Five Agricultural Market Committees were selected for the pilot launch on 14<sup>th</sup> April 2016, and successfully implemented in Agricultural Market Committees at Nizamabad, Warangal, Badepally, Hyderabad (Malakpet Yard), and Thirmalgiri. To date, 44 markets have gone online and are functioning. As on January 2017, a total trade of about 4,17,928 tonnes of produce worth Rs 724.64 crore has taken place on the e-NAM platform.

**(iii) Rythu Bazaars and Mana Kuragayalu:** Adding to the existing 27 Rythu Bazaars in Telangana, the State Government launched ‘Mana Kuragayalu’ programme as an alternate marketing system to cater to the increasing demand for fresh fruit and vegetables due to the continuous increase in population and spread of the twin cities. Mana Kuragayalu is an extension of the Rythu Bazaar concept and the only difference is that it attempts to link distant farmers to market their fresh produce through shortening the supply chain by establishing Farmer Interests Groups (FIGs)/ Farmer Producer Organisations (FPOs) and Societies in the production clusters by the Horticulture Department.

**(iv) Creation of Additional Storage/Godowns:** There were 176 small godowns (storage facilities) in Telangana at the time of State formation, with 4.1 lakh capacity for storage of agricultural commodities. Realizing that there is an acute shortage of storage facilities in the State, Government has taken up construction of godowns with storage capacity of 17,057 lakh metric tonnes at 330 locations with assistance of NABARD and so far 138 godowns have been completed. These godowns are specifically designed in such a way that each godown will have three compartments, for purposes such as Rythu Bandhu Padhakam, MSP Operations, storing of PDS rice or seeds.

**(v) Purchase of perishable commodities under Market Intervention Scheme:** Prices of onions and tomatoes have crashed in the year 2016-17. The prices of onions have fallen below economic levels due to heavy production in states like Maharashtra, Karnataka, Gujarat and other states. Further, continuous rains during September–October 2016 led to deterioration of quality, resulting in a fall in the prices of onions; farmers could not get more than Rs 200 per quintal, which is less than the cost of production. The prices of tomatoes fell drastically due to a bumper crop and increased supplies from Ananthapur, Madanapalli, Karnataka and other states to Rs. 1–3 per kg. In order to prevent distress sales by the farmers, the government procured onions at Rs. 8 per kg and tomatoes at Rs. 5 per kg directly from the farmers under the Market Intervention Scheme, duly providing transportation from field to Malakpet Market, at Hyderabad. Under this scheme, 2,11,447 quintals of onions were procured from 3,225 farmers.

### C. Encouraging farmers towards horticultural crops

Horticultural crops, consisting of fruits, vegetables, flowers, plantation crops and spices, have emerged as a significant contributor to the economy by generating employment to the unskilled and semi-skilled rural poor. With rising incomes and urbanisation, demands for these products have increased manifold, fetching higher income to horticultural farmers. Horticultural crops are being grown in an area of 6.73 lakh ha with a production of 81.65 lakh metric tonnes in Telangana in 2015-16. Telangana ranks third in area and eighth in production of fruits and ranks first in turmeric cultivation.

The government has been taking a number of initiatives to increase area and production of horticultural crops in the state. Major interventions include (i) bringing horticultural crops under micro-irrigation, (ii) promoting cultivation of high-value vegetables and flowers in greenhouses/poly-houses, (iii) distribution of quality seed to increase productivity, (iv) establishing of a 'Turmeric Spice Park' at Padgal village in Nizamabad district for the comprehensive development of turmeric farming, (v) creation of two centres of excellence – one in Jeedimetla, Ranga Reddy district (for vegetables and flowers) and other in Mulugu, Medak district (for fruits) to demonstrate the latest methods and to supply quality plant material, (vi) building up of 399 crop colonies to promote horticulture crops across the state, (vii) establishment of 'Telangana State Horticulture Development Corporation Limited' to promote procurement, storage, processing and marketing of good-quality horticultural crops and to facilitate implementation of schemes related to horticultural crops.

#### Box-6.2: Success stories of floriculture

##### Horticulture cultivation: Success story of rose cultivation

Village	:	Mallaram
Mandal	:	Shamshabad
District	:	Ranga Reddy
Area	:	1 Acre
Crop	:	Rose
Variety	:	Top Secret (Dutch Roses)
Cost of each flower	:	Rs 2/-
No. Of flowers per acre per year	:	8 Lakhs
Total gross income	:	16 Lakhs
Expenditure	:	8 Lakhs (Beds, plants, fertilizers, pesticides and labour charges)
Net Income	:	43 lakhs per year for from 3 Acres i.e., 14.3 Lakhs per ac



### D. Initiatives targeted towards building drought-proof agriculture

Agriculture in Telangana is prone to frequent and prolonged drought conditions. A number of government initiatives have been targeted towards building drought-proof agriculture.

- (i) Crop insurance: About half of the agriculture in Telangana is dependent on the vagaries of monsoon. Crop insurance protects the farmers' income. Government of India launched Pradhan MantriFasalBimaYojana (PMFBY), which has following three components:
  - a) PMFBY for Standing Crops: The crops covered under this component during the Kharif 2016

season in Telangana were: rice, groundnut, maize, soyabean, red gram, turmeric, green gram, red chilli (irrigated), and jowar, groundnut, black gram, and red chilli (un-irrigated).

- b) Weather Based Crop Insurance Scheme: Under this weather parameters such as rainfall deficit, excessive rainfall, humidity are used as proxy parameters to assess the yield losses. Crops covered under this component are cotton, red chilli, oil palm, mango and sweet lime.
- c) Unified Package Insurance Scheme (UPIS): Under this component, farmers are covered for accident insurance, life insurance, dwelling insurance, students' safety insurance, agricultural pump-set insurance, tractor insurance. Nizamabad district has been selected to implement the scheme on pilot basis.

#### **Box-6.3: Innovation in Conducting of Crop Cutting Experiments in Telangana**

The Crop Cutting Experiment (CCE) is conducted for assessing the crop yield. This information used by the Central and State Agriculture Departments for estimating agriculture production. Traditionally 'balance and weights' measurement system was followed for weighment of produce in the Crop Cutting Experiments. In order to improve the measurement system in terms of reliability and accuracy, the Telangana Government has provided Tablet PCs with Internet connection and Electronic Weighing Machines (EWMs) to all the Mandal Planning and Statistical Officers, who is responsible for conducting CCEs. The use of EWMs and real time passage of data will ensure accurate assessment and online transmission of CCE data to the user organisation.

With this initiative, the State is in a position to effectively implement the Pradhan Mantri Fasal Bhima Yojana (PMFBY) and ensure timely payment of insurance claims. The Government developed a web portal (i.e., [www.ecostat.telangana.gov.in](http://www.ecostat.telangana.gov.in)) for quick transmission of village and crop wise area sown particulars and yields. Simultaneously the data is updated on crop insurance app (i.e., [www.agri-insurance.gov.in](http://www.agri-insurance.gov.in)) of the Ministry of Agriculture, Government of India, along with GPS location and information on experimental plot.



Photos: Crop cutting experiments of Bengal gram and groundnut

- (ii) Animal husbandry is also seen as a source to fetch additional income to farmers, especially in times of drought. The State government is giving high priority to promote animal husbandry in the State. Initiatives in this regard are discussed in the following chapter.

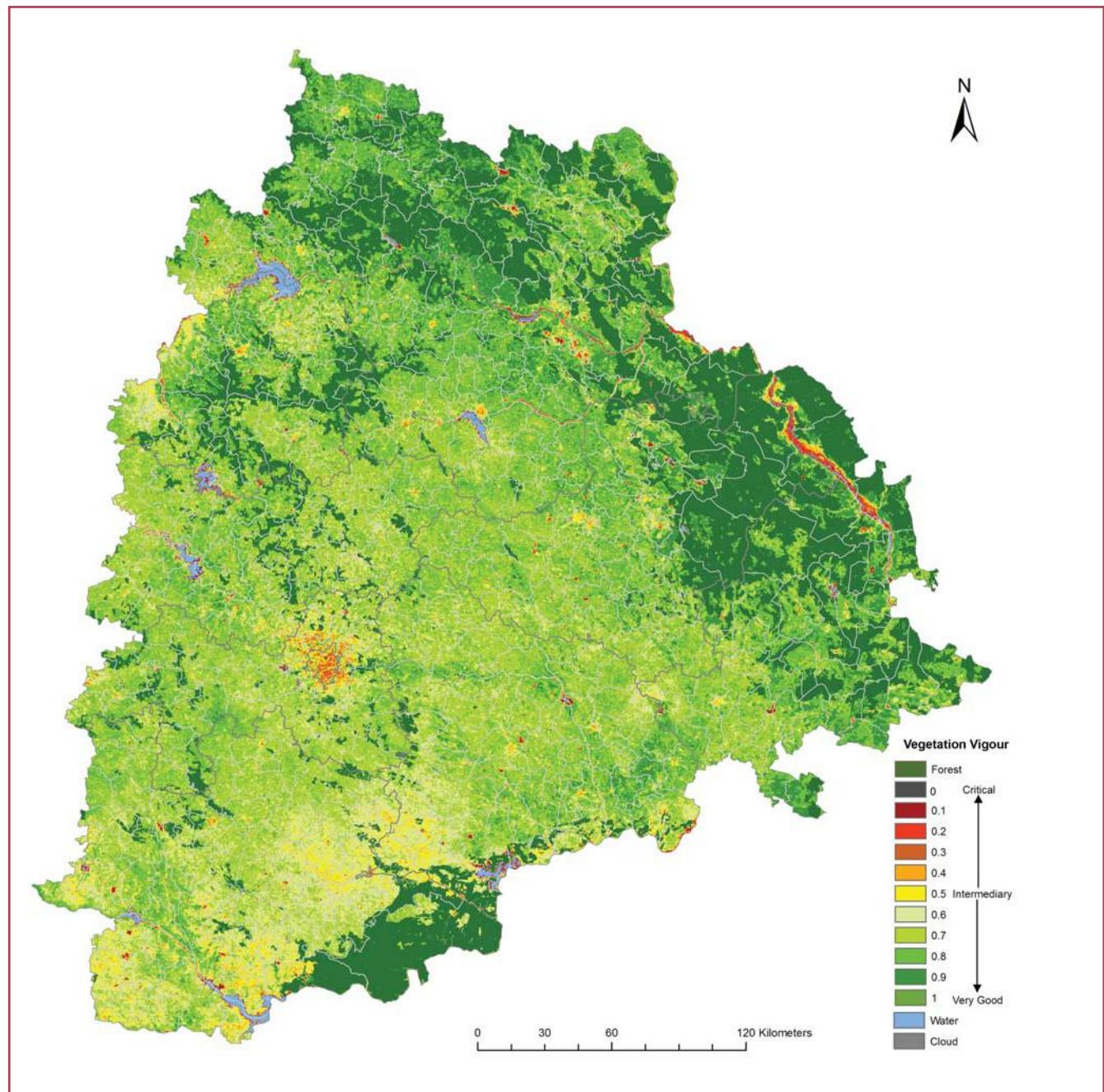
#### **6.6. Outlook for the Agriculture Sector**

This year has been a good year for the agriculture sector, which is likely to grow at double digit, thanks to the bounty of rainfall in the state. The comprehensive set of programmes to address different issues faced by the agriculture sector such as integrated pest management, soil testing, farm mechanisation, e-NAM for improving marketing institutions for agricultural produces, purchase of perishable commodities under

market intervention schemes, creation of additional godowns, encouraging farmers towards horticultural crops, crop insurance and other schemes are expected to enhance farmers' income.

Increasing irrigation facilities is critical for ensuring drought-proofing of agriculture sector. Government gave highest budgetary allocations for the irrigation sector and making all efforts to fast finishing of the projects. Renovation of tanks through the Mission Kakatiya had positive impact on increasing water availability in the State (details of Irrigation projects and Mission Kakatiya are given in the Economic Infrastructure Chapter).

#### Normalised Difference Vegetation Index (NDVI) after monsoon season, 2016



Source: Telangana State Remote Sensing Applications Centre - TRAC

# Reviving Rural Economy:

*Promoting Animal Husbandry and Fisheries*

CHAPTER

07

*Husbandry is the name of all practices that sustain life by conserving, connecting us to our places and our world; it is the art of keeping tied all the strands in the living network that sustains us*

– Wendell Berry

Revamping of rural economy is critical for the livelihood of majority people in Telangana. Of the 3.5 crore population in the State, about 2.13 crore population lives in rural areas. While agriculture has been the mainstay of rural folk in Telangana, non-farm activities fetch additional income apart from providing direct livelihood to many.

Non-farm activities in rural economy include animal husbandry i.e., production of milk, meat, poultry, fishing, agro-processing industries and storage etc. Sizable population also depend on traditional occupations and are engaged as blacksmith, bronze-smith, carpenter, goldsmith, potter, tailor, toddy tappers, washerman and weavers etc., for their livelihood. The present chapter delineates the status of agricultural allied activities in the State along with initiatives undertaken by the Government on livestock, animal husbandry and fisheries.

## 7.1 Livestock and Animal Husbandry

Livestock sector, as an integral part of agriculture and rural economy, is one of the potential and regular income-generating activities to the rural and semi-urban community. The nutritional security provided by livestock rearing is enormous. In the last few decades, there has been a paradigm shift from the agricultural farming to the livestock farming, due to uncertainty of returns from agricultural farming. The net output from the unit of investment is comparatively high in livestock farming even under adverse seasonal conditions like severe droughts. Telangana is blessed with rich livestock resources, especially cattle and sheep population accounting for 5.52 percent of country's livestock population. The state stands 10<sup>th</sup> in livestock population, 2<sup>nd</sup> in sheep population, 13<sup>th</sup> in goat population, 4<sup>th</sup> in poultry, 13<sup>th</sup> in bovine population and 15<sup>th</sup> in pig population in the country, as per the Livestock Census, 2012. About 29 lakh families are engaged in livestock sector for their livelihood.

**Table 7.1: Livestock population in Telangana (As per 2012 census)**

Category	No. in Lakh	Percentage
Cattle	44.8	4
Buffaloes	41.6	4
Sheep	128.35	12
Goat	45.77	4
Pigs	2.37	0
Poultry	807.51	75
<b>TOTAL</b>	<b>1070.4</b>	<b>100</b>

## 7.2 Cattle & Dairy Development

### 7.2.1 Animal health

The Department has taken up strengthening of existing institutions to improve quality of animal health services by providing facilities for surgery, disease investigation and treatment. Polyclinics were established at district headquarters to address this issue. Every Mandal has been provided with a veterinary graduate to effectively render animal health services, support production program and for prevention and control of livestock diseases. In this regard, nine Animal Disease Diagnostic Laboratories (ADDLs) were made functional. So far, 445.05 lakh cases have been treated, 1.74 lakh castrations done and 348.78 lakh vaccinations given by these institutions during the year 2016-17 (up to 30 November 2016).

**Table 7.2: Number of Veterinary Health Institutions in Telangana**

Sl. No.	Particulars	Numbers
1	Super Specialty Veterinary Hospitals	1
2	Veterinary Poly Clinics	8
3	Veterinary Hospitals	99
4	Veterinary Dispensaries	907
5	Rural Livestock Units	1102
6	Mobile Veterinary Clinics	37
7	Private AI Practitioners	1322

The Veterinary Biological Research Institute, Hyderabad, has been producing bacterial (HS, ET&BQ) and viral (Sheep pox, Goat pox and PPR) vaccines after obtaining drug license. During the year 2015-16 (up to November 2016), 578.66 lakh doses of various types of vaccines (mainly Sheep Pox, ET and PPR) were produced and supplied to various states by the institute.

World Organisation for Animal Health, Paris has approved and recognized on 26th May, 2015 that India has official control programme for Foot and Mouth Disease (FMD) and endorsed that the FMD control programme is in accordance with OIE Terrestrial Animal Health Code, 2014. The Government of Telangana has issued a notification declaring the state as an FMD free zone and also submitted a dossier for active consideration by OIE, Paris.

**Table 7.3: Vaccinations conducted in Telangana State during 2016-17 (till Dec' 2016 )**

Sl. No	Name of the Vaccinations	Target Population	Total Vaccinations Done	Percentage of Coverage
1	Haemorrhagic septicaemia	22,43,787	21,68,630	97
2	Black quarter	11,13,238	10,79,065	97
3	Enterotoxaemia	65,24,653	61,86,022	95
4	First round of FMD vaccinations	75,61,918	69,46,424	92
5	PPR control programme	60,61,607	54,95,234	94
6	Sheep pox	1,26,05,544	1,08,99,427	86
7	Goat pox	45,57,161	38,77,520	85
8	Second round of FMD vaccinations	75,57,399	70,85,232	94

The department organises Infertility-cum-Total-Veterinary health care camps in the state. Under this programme, the animals having infertility problems are identified at the village level and special camps are arranged with wide publicity.

Apart from this, various other activities like health care of livestock, disease preventive measures like vaccination against endemic diseases, deworming, castration, artificial insemination and pregnancy verification are carried out free of cost.

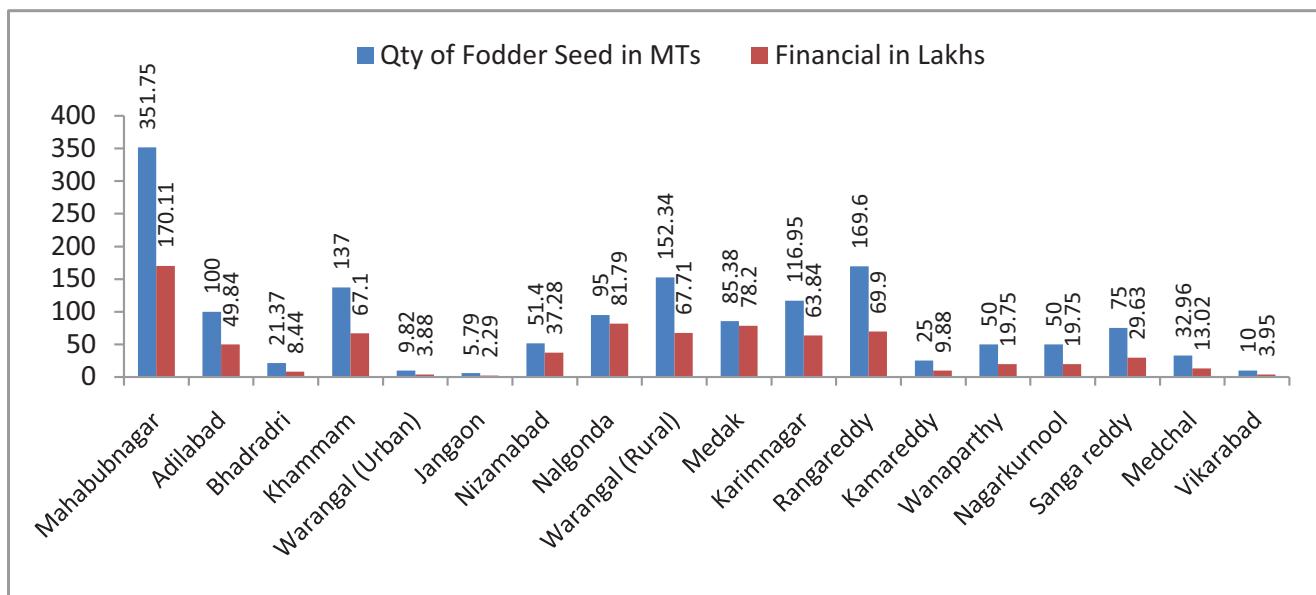
### 7.2.2 Feed and Fodder development

The state has 115.45 lakh cattle units and the requirement of fodder from July 2016 to December 2016 is 96.86 lakh metric tonnes (LMT) and availability from all sources is estimated as 100.44 LMT.

The department has taken up advance action for production of fodder through supply of fodder seed on subsidy to all the farmers to raise the fodder from January 2016 onwards. So far, the department has supplied 1540 tonnes of fodder seed under various schemes and programmes in Telangana for the year 2016-17 (up to November 2016). A total of 77,000 acres were brought under fodder cultivation which has yielded 3.08 LMTs of dry fodder matter. The department has supplied 3419 chaff cutters at 50 percent subsidy under various programme like Rashtriya Krishi Vikas Yojana (RKVY) and Accelerated Fodder Development Programme (AFDP).

In order to meet fodder scarcity, 490 MTs of silage bales were supplied to Mahabubnagar and Medak districts. In Mahabubnagar, three cattle camps were organised for distribution of 305 MTs of fodder silage bales. In Medak district, a cattle camp at Narayankhed constituency was organised to distribute 185 MTs of fodder silage bales.

**Figure 7.1: Fodder seed supplied under all schemes for the year 2016-17 (Up to Dec' 2016)**



In order to ensure shelter, fodder and health services, cattle camps are organised as a last resort in the needy districts. The animals are registered in the camps and dry fodder, water and health care are provided. As per the latest norms by GoI, Rs.70 per day for each large animal and Rs.35 per day for each small animal is being provided. Under “Sunandini” - female calf feed subsidy programme, an elite female calves born out of artificial insemination / natural breeding were enrolled at the age of 4-5 months during the year 2015-16 and calf feed was provided on subsidy, while insurance and health care were provided at free of cost.

### 7.3 Sheep Rearing

Small ruminants play a vital role in the rural economy, especially of poor and backward class people. About 5.12 lakh families are dependent on small ruminant production in Telangana. Sheep breeding and rearing has the potential to offer employment to the landless labourers, small and marginal farmers, nomadic and semi-nomadic people etc., with little investment and a potential to generate quick returns. The products like skin, wool, various organs, intestines and almost all parts are value generating, if properly collected and used.

The human population of Telangana state is 3.68 crore (as per SKS 2014), 98.7 percent of whom are non-vegetarians (NSSO 2014 Food habits). With an annual meat production of 5.42 lakh tonnes, the state stands sixth place in the country. The people of Telangana prefer meat from sheep over goat unlike north Indians who prefer goat meat. The state of Telangana and Hyderabad in particular, are the places of highest consumption of meat in the country. However, the per capita meat consumption in India is 5.5 kg per year, which is much lower than 10.8 kg per year as recommended by the Indian Council of Medical Research (ICMR).

Although Telangana stands at 2<sup>nd</sup> position in sheep population, it is not self-sufficient in catering to the meat demand. In the twin cities alone, there is a shortage of 60 tonnes of meat everyday being met by import of 5,000-6,000 live animals from other states. The demand for ‘mutton’ may be as high as 12,000 - 15,000 animals on Sundays / festive days which are met by import of sheep from other states.

Telangana is blessed with primarily three breeds of sheep viz., 1) Deccani breed (yields coarse wool, meat is tasty, highly drought and disease resistant); 2) Nellore Brown (yields no wool, but has better carcass weight); 3) Jodipi (yields no wool and has good meat yield). The popular coarse wool black Deccani sheep was preferred by the shepherds of Deccan over years for its tolerance to drought, fodder scarcity, its capacity to migrate long distances and an ability to endure the large diurnal temperatures and seasonal variations. The wool protects the breed from sun, wind, cold and rain. Deccani wool was once in great demand from a vibrant local market and the Indian Army, to whom coarse blankets were supplied. Unfortunately, gradually the Deccani breed was discriminated since its wool is not fine, international dumping of wool in the Indian market, preference for synthetic substitutes and the meat production is lower than ‘mutton’ breeds of India.<sup>1</sup>



Deccani Breed



Nellore Brown



Jodipi

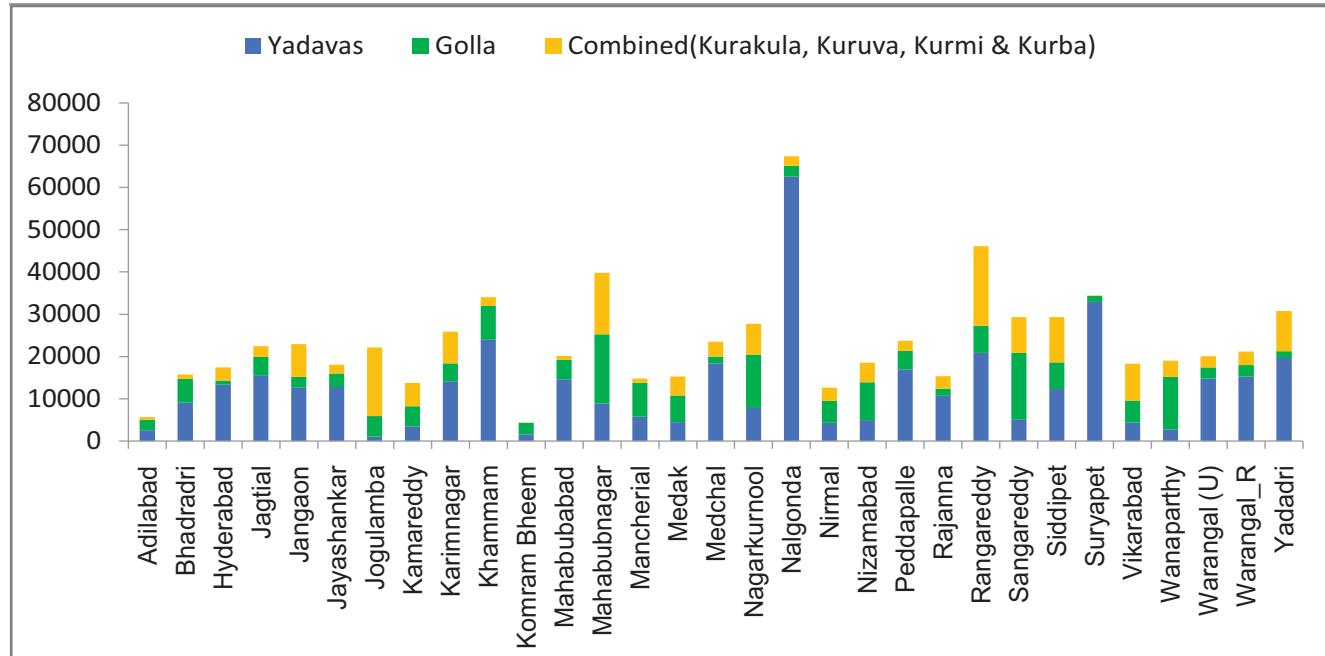
1. Black sheep and gray wolves by Nitya Gotge and Sagari Ramdass, 2010

**Table 7.4: Population of sheep rearing community in Telangana**

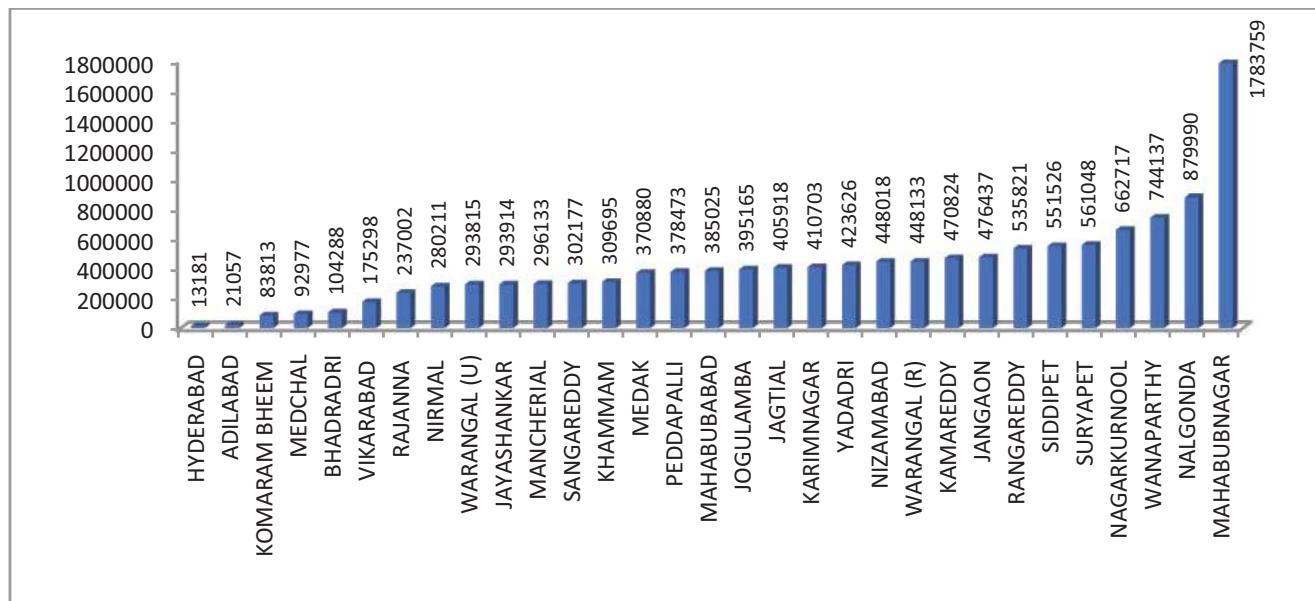
Sl. No.	Community	Population	Households
1	Yadavas	13,49,048	3,97,409
2	Golla	6,28,320	1,70,942
3	Kurakula	27,960	7,742
4	Kuruva	4,80,562	1,25,626
5	Kurmi	25,627	7,061
6	Kurba	75,550	21,119
	<b>TOTAL</b>	<b>25,87,067</b>	<b>7,29,899</b>

Source: Intensive Household Survey (SKS) 2014.

**Figure 7.2: District-wise sheep rearing households in Telangana (as per SKS, 2014)**



**Figure 7.3: District wise distribution of sheep in Telangana as per SKS, 2014**



At State level, Telangana State Sheep and Goat Development Cooperative Federation Limited (TSSGDCFL) has been established to look after the activities of small ruminant development and marketing in cooperative structure and registered on 11<sup>th</sup> August 2014. The cooperatives of sheep and goat breeders have a well-structured three-tier system. The State Federation is the Apex body at state level, District Sheep Breeders Cooperative Unions (DSBCU) at district level and the Primary Sheep Breeders Cooperative Societies (PSBCS) are at village level. There are 4179 Primary Sheep Breeders Cooperative Societies functioning at village level with a membership of 2,57,057.

**Table 7.5: Number of existing PSBC and members in the societies**

Sl. No	Districts	Number of existing PSBCS	No. of members in the Societies				
			SC	ST	BC	OC	Total
1	Ranga Reddy	187	4925	2709	14734	3954	26322
2	Nizamabad	395	741	1596	9319	392	12048
3	Medak	594	14	16	23851	12	23893
4	Mahabubnagar	949	21	542	59341	0	59904
5	Nalgonda	465	165	293	13321	161	13940
6	Warangal	584	0	910	39124	986	41020
7	Khammam	141	1	1	6944	0	6946
8	Karimnagar	702	0	0	68140	0	68140
9	Adilabad	162	75	163	4520	86	4844
<b>TOTAL</b>		<b>4179</b>	<b>5942</b>	<b>6230</b>	<b>239294</b>	<b>5591</b>	<b>257057</b>

### 7.3.1. Current interventions carried out by AHD and TSSGDCFL

#### A) NCDC scheme in Mahabubnagar district

The outlay of the first spell of assistance was Rs. 21.82 crore including 20 percent beneficiary contribution. A total of 1672 sheep units were procured, 44,496 sheep were distributed and 1672 members representing from 142 PSBCSs got benefited from the scheme. The outlay of the 2nd spell of assistance is Rs. 41.50 crores including 20 percent beneficiary contribution. A total of 82363 sheep will be distributed to 3305 beneficiaries.

#### B) NCDC scheme in eight districts

The NCDC, New Delhi has sanctioned an amount of Rs. 398.88 crore to the Government of Telangana for implementation of NCDC programme in the remaining erstwhile eight districts excluding Hyderabad. The scheme is phased into three years. By utilizing Rs. 398.88 crore, 33824 Primary Sheep Breeders Cooperative Societies members will be benefited. The sheep stock added to the erstwhile nine nodal Districts (27 new Districts) is 8,90,921. This results to addition of 7.12 lakh lambs worth of Rs. 338.20 crore every year. In addition, 6,764 tonnes of meat will be produced every year.



**Shelter for Sheep pen**

The outlay of first spell of assistance for eight other districts is Rs.79.78 crores including 20 percent beneficiary contribution. A total of 6,774 Primary Sheep Breeders Cooperative Societies (PSBCSs) members will be benefited through 2,44,305 sheep distribution.

## C) Sheep health

At present, Department of Animal Husbandry has been conducting three rounds of deworming, although shepherds are requesting to provide four rounds of deworming per year. The department is also conducting free vaccinations against ET, Sheep Pox, Goat Pox and PPR diseases. It is proposed to cover sheep against Blue Tongue also. During the first round of mass free sheep and goat deworming programme, 157.90 lakh sheep and goat were dewormed and 2.25 lakh sheep rearers were

benefited. For close monitoring of animal health activities, it is necessary to bring all the veterinary institutions & Gopalamitras under the administrative and technical control of Assistant Director in charge of Area Veterinary hospital.

Disease diagnostic facilities are not available in any of the new districts. The department has taken up construction of buildings for constituency-level Animal Disease Diagnostic Labs. It is planned to introduce 100 mobile Veterinary clinics in the state to provide services at farmers' door step. It is also proposed to bring all the Veterinary institutions and Gopalamitra Centres under the purview of a 'Call Centre', which can be accessed by any farmer by dialing a toll free number.

### 7.3.2. Impact of the Sheep programmes

Farmers are being benefited by increased body weights of each sheep in the flock by 1.0 to 1.5 kg (kilogram) and economically they are benefited by Rs. 450 to Rs. 675 per animal depending on the prevailing market rates. As the programme covers entire sheep and goat population, it is estimated that there will be an approximate increased production of 170 lakh kilograms and income generating of Rs.76,500 lakhs in the entire state.

There is reduced morbidity and mortality in the flock. The lambing rate and immunity to diseases has increased. There has been reduced pasture land contamination by minimising the worm load within the host. The knowledge about the occurrence of important parasitic infestations in the area among the shepherd community has increased.

### 7.3.3. Need for Integrated Sheep Development for the state

The growth rates and conversion efficiency is very high in ram lambs during the post weaning period. It is beneficial for the shepherd to sell the lambs after they attain a weight of 20-25 kg (in 9-12 months) and use ewes to reproduce lambs in an efficient way. Therefore, it is better to encourage rearing units with an aim to increase the profits by selling lambs at appropriate time and weight. The animal traders move over vast tracts



**Shepherd with his sheep pen**



**Sheep enclosure in a farm**

and to neighbouring states to get good quality rams or ewes of desired breed and body weight. Further, the lambs arrive at the market or for slaughter at an early age. There is shortage of availability of quality animals for further rearing. Therefore, there is an urgent need to promote breeding units and to supply adequate number of lambs / adult animals of desired weight.

#### **Box 7.1: Recent interventions on sheep rearing by Government**

Telangana government aims at bringing a significant change in the lifestyle of the Yadava community by adopting a multi-pronged strategy to promote sheep-rearing, including supply of sheep at subsidised rates, providing 'Talapia,' (Stylo Hamata) a particular kind of grass, which is high in nutrition and providing infrastructure to facilitate easy marketing of meat. The government intends to cover assistance to four lakh Yadavas in the first phase through various benefits including subsidy of 75 per cent on sheep. The government has asked the 4,384 societies of sheep and goat rearers in the State to ensure that all the Yadava community members are made part of it so that they can avail of the government assistance. Besides, a team of officials from the Animal Husbandry Department and members drawn from the societies have started visiting Andhra Pradesh, Karnataka, Maharashtra and Chattisgarh to procure best breeds of sheep for breeding in Telangana State. Plans are afoot to spend a whopping Rs 5,000 crore on empowerment of Golla and Kuruba communities through supply of sheep and goats.

Government proposed to extend financial assistance for sheep rearing activity to 4 lakh traditional shepherd families, so that their present income level may increase by about Rs 5000 per month. A Cabinet Sub-committee has been constituted towards the welfare and development of shepherd community and committee recommended for importing 84 lakh sheep from neighbouring states.

The Committee also recommended for distribution of sheep unit comprising of 20 ewe (female sheep) and 1 ram (male sheep) to 2 lakh Yadav families in the first year and cover the entire 4 lakh sheep rearing community in the second phase of next year. Each sheep unit would cost around Rs. 1.25 lakh including cost of sheep, transportation and insurance.

#### **7.4 Inland Fisheries Development**

Fisheries is one of the important sectors contributing to 0.5 percent of state's GSDP as well as generating income and employment. The sector aims at exploitation of all the possible resources under capture and culture fishery base for increasing fish production and productivity through sustainable development. The sector contributes significantly towards food security, nutrition and health, livelihood security of rural population and welfare of fishermen. The state of Telangana ranks third as per the water resources available and ranks eighth as per fish and prawn production (Source: Hand Book on Fisheries Statistics 2015, GoI). The major goals set out by the Government are:

- a) Year round fishing activity and supply of local fish in Telangana throughout the year.
- b) Saturation approach for fish rearing in water bodies, reservoirs and tanks
- c) Diversification of fish rearing activities by introducing cage / pond culture and prawn culture
- d) Enroll all fishermen in societies and provide welfare schemes for improved livelihoods

During 2016-17 (upto October, 2016), 0.92 lakh tonnes of fish and prawn were produced in the state as against the target of 3.535 lakh tonnes. The state has fishermen population of 19.04 lakh of which 3.20 lakh are active fishermen who depend on fishing for their livelihoods. These fishermen are organized into 3,515

Primary Cooperative Societies at village level. Similarly, 23,053 fisherwomen have been organized into 416 cooperative societies and SHGs working for domestic fish marketing and other livelihood activities. There are seven fishermen marketing cooperative societies having 3,307 members. There are 55 fish markets and 244 community halls sanctioned in the state. The scenario of fish & prawn production in the state during last decade is shown in the table below.

**Table 7.6: Freshwater fish and prawn production in Telangana (in tonnes)**

Sl. No.	Year	Inland Fish Production	Inland Fresh Water Prawn Production	Total
1	2006-07	6,04,311	2,221	6,06,532
2	2007-08	6,88,301	2,296	6,90,597
3	2008-09	1,49,049	2,242	1,51,291
4	2009-10	1,33,613	2,008	1,35,621
5	2010-11	1,33,587	2,206	1,35,793
6	2011-12	1,96,708	3,774	2,00,482
7	2012-13	2,14,591	5,037	2,19,628
8	2013-14	2,43,037	6,596	2,49,633
9	2014-15	2,60,010	8,352	2,68,362
10	2015-16	2,28,185	8,567	2,36,752



**Murrel - Telangana state fish**

A total of 23,874 tanks covering about 5.63 lakh hectares are suitable for fish growth and 781 hectare of dug-out ponds have been brought under fish culture. About 1,808 km length of rivers and canals also contribute to capture fisheries. Wild capture of 2.28 lakh tonnes of Fish and 0.84 lakh tonnes of fresh water prawn was received during 2016-17. There is scope to increase the production up to 40 lakh tonnes with total seed stocking.

There are 28 seed fish seed farms, in which seven farms are having hatchery facilities to produce fish seed. Due to non-availability of

water and lack of farm maintenance, only 3.26 crore is achieved against targeted 10.89 crore. However, the Government has initiated to release 27.85 crore fish seed procured and imported from private farms, which is less than 50 percent against the requirement of total 54.58 crore fish seed. There are no private seed production farms in the state, hence there is scope to revive seed farms, increase seed rearing area and revive carp seed production, both in public and private lands.

**Table 7.7: Status of various water resources in Telangana for fish production**

1	Reservoirs	No.	Water Spread Area (WSA) in Ha.	Nos. in Licensing System	Nos. in Lease System
a	Large	8	1,40,074	8	0
b	Medium	17	28,090	10	7
c	Small	55	21,671	8	47
	<b>Total</b>	<b>80</b>	<b>1,89,835</b>	<b>26</b>	<b>54</b>

2	Tanks	Departmental		Gram Panchayath	
		No.	Water Spread Area (WSA) in Ha.	No.	Water Spread Area (WSA) in Ha.
i	Perennial	628	53,148	176	1,235
ii	Long Seasonal	2,195	1,14,188	967	7,225
iii	Short Seasonal	1,789	73,228	23,067	1,29,685
	<b>Total</b>	<b>4,612</b>	<b>2,40,564</b>	<b>24,210</b>	<b>1,38,145</b>
3	Aquaculture Ponds	<b>No.</b>		<b>Area in Ha.</b>	
		474		781.30	
4	Rivers and Canals	-		1808 Km	

#### 7.4.2 Current interventions by the Fisheries Department

- Government is encouraging freshwater aquaculture in the state for farmers. So far, 474 ponds covering an area of 781 hectares have been allotted to farmers and issued with certificate of registration.
- The inland water bodies are being mapped by Central Inland Capture Fisheries Research Institute, Barrackpore with Remote Sensing Technology.
- The Government has released Rs. 33.67 lakh towards premium of fishers under Group Accident Insurance Scheme. During the year 2016-17, the lives of 3.26 lakh fishers had been insured.
- Government is implementing a major programme on development of fisheries sector under the Blue Revolution-Integrated Development and Management of Fisheries scheme. The major components of the scheme are:
  - a. Construction of Landing centres
  - b. Construction of new ponds and tanks
  - c. Establishment of freshwater fish seed hatcheries
  - d. Establishment of freshwater Fish Brood bank
  - e. Fish seed rearing unit
  - f. Input cost for fish seed rearing up to fingerlings
  - g. Input cost for fish culture
  - h. Installation of cages in reservoirs and other water bodies
  - i. Establishment of small fish feed mills



**Model of modern fish market**

With an objective to improve productivity, reduce post-harvest losses, increase livelihood support and welfare of fishermen during capture and culture fisheries, a comprehensive scheme for fisheries development is proposed with a total outlay of Rs. 7015 lakh. In this project, infrastructure oriented schemes, beneficiary oriented programmes, community assets for fishermen including SC/ST fishermen are proposed. The details of components are furnished below:

- a. Supply of fish seed
- b. Construction of community halls for inland fishermen

- c. Savings-cum-relief to inland fishermen
- d. Supply of Boats and nets to reservoir / river course licensees
- e. Establishment of fish/prawn farm or fish seed farm or fish hatchery
- f. Vending unit with moped
- g. Vending unit with luggage auto
- h. Construction of fish Landing centres
- i. Construction of wholesale fish market
- j. Retail fish markets
- k. Cage culture (one unit contain 10 cages)
- l. Setting up of backyard hatcheries for ornamental fish production by fisher women (SHG)/Co-operatives
- The fish seed on 100 percent grant is provided to be stocked in all reservoirs/department tanks during 2016-17, for the enhancement of livelihoods of fishermen and to boost fish production. A total of 3,939 reservoirs and tanks have been stocked with 27.853 crore of advanced fingerlings at a cost of Rs. 22.46 crore. It is expected to get a yield of 80,000 tonnes of fish production with expected income of Rs. 500 crore.
- Women Self Help group movement in the state is very strong. Taking advantage of the prevailing favourable conditions, the Government has organised fisherwomen into Matsya Mitra Groups (MMGs). There are 383 fisherwomen cooperative societies with a total membership of 1,068. The MMGs are organized within the fisherwomen cooperative societies. These MMGs prepare their micro business plan and take up income generating schemes for improving their economic condition. A revolving fund is given to MMGs under the CM Package and RKVY at Rs. 25,000 per group of 10 to 15 women. The groups can also approach the banks for taking loans to augment their resources. So far, 868 MMGs covering 8700 fisherwomen are organised in Telangana state and a financial assistance of Rs. 138.65 lakh is released to 550 MMGs.

#### **Box 7.2: Method for measurement of fish seed counting**

The fish seed being delicate and aquatic in nature it is difficult to arrive at accurate measurement, hence a unit of measure is arrived and followed for each consignment of seed stocking. In general fish seed is classified as Fry stage (20 - 25 mm); Fingerling stage (50 – 60 mm) and Yearling / Advanced Fingerling stage (60 – 100 mm). Fish seed of uniform size and weight have to be separated in order to arrive at unit of measure. Generally a plastic vessel (mug) of one litre volume is taken as a unit of measurement. There are holes to drain water from the mug and seed which is ready to be transported and stocked is lifted. The water drained through holes is poured into a bucket of water separately. Seed is counted in one such unit to arrive number of seed and taken up as unit of measurement. A measure of three units would give an average count, however the count varies with size and weight of seed. Stocking of the seed is done with such unit measure and number of units is multiplied by average count which gives the total number of seed stocked in that water body. The counting procedure has to be repeated for every consignment and at each tank separately. In general, seed of three inch size will count 160 numbers of seed in one litre plastic porous mug.

Recently, the Fishermen Department has undertaken initiatives to improve the fish production and livelihoods of the fishers. In this context, a brainstorming session was organized with various stakeholders at NFDB conference hall on 16-17 February 2017. A project has also been sanctioned to Centre for Good Governance to study the current status of Fisheries sector and provide recommendations and pathways for improvement.

### **7.5. Backyard Poultry Development**

India's poultry industry is one of the largest in the world. It employs over 25 million people and feeds millions of people. It contributes Rs. 95,000 crore to the economy each year. Since the turn of the decade, however, the poultry industry has been in severe crisis. The rise in input cost (chicken feed having a mix of maize and soybeans), the inflation in labour and utilities' cost was making the poultry industry to bleed.

The Government approved for the reduction in the rate of electricity for poultry industry by Rs. 2 per unit. Poultry industry consumes 24 crore units of electricity per year, hence this subsidy eases the burden by Rs. 48 crore. Orders were passed for a temporary subsidy on maize that reduces the burden on chicken feed by Rs. 12.15 crore.

Government has planned to provide backyard poultry birds to 14,370 beneficiaries with a unit of 45 birds. Each beneficiary will be provided with chicks in two spells of 20 and 25 chicks, at an interval of 16 weeks after duly verifying the performance. An amount of Rs.50 per bird will be provided as subsidy for 45 birds. The balance amount over and above Rs.50 per bird will be met from beneficiary contribution. Besides that, an amount of Rs.1500 will be provided as 100 percent subsidy towards night shelter to accommodate 20 chicks at a given time. This amount can be spent towards cages, feeders etc.

### **7.6. Forestry and Logging**

Forests play a major role in supporting livelihood activities of rural poor, contributing to the economy of State, mitigating the threat of 'global warming', besides conserving the fertile soil and vulnerable wildlife. The 'forestry and logging' contribution to state GSDP at current prices is 0.4 percent in 2016-17 (Advanced Estimates). The core objective of 'forest sector development strategy of the State' is to enhance green cover by integrating it with livelihood opportunities. The State Government is implementing various development schemes to protect and develop existing forests, to improve its productivity and economic value. One of the flagship programmes of the State in the forest sector is Telanganaku Haritha Haram (TKHH), which was launched in the year 2015 with the objective of planting 230 crore seedling in next four years, in and outside the forest area to achieve 33 percent of forest cover in the Telangana State.

#### **Telanganaku Haritha Haram**

Telanganaku Haritha Haram (TKHH) a flagship programme of the State Government, implemented with an aim to increase the tree cover of the State from present 24 percent to 33 percent of the total geographical area of the State. This objective is sought to be achieved by a multi-pronged approach of rejuvenating degraded forests, ensuring more effective protection of forests against smuggling, encroachment, fire, grazing and intensive soil and moisture conservation measures following the watershed approach. Apart from the above, major fillip is sought to be given to 'social forestry' by taking up massive plantation activities outside forest areas including multi-row road-side avenues, river and canal bank, barren hill, tank bunds and foreshore areas, institutional premises, religious places, housing colonies, community abandoned lands etc. The programme also entails improving the livelihoods of rural communities, such as plantation of ita for improving livelihood of toddy tappers.

The greening efforts are being taken up every year during the monsoon season involving all stakeholders. Target of TKHH is to (i) plant 120 crore seedlings in outside the forest area and 10 crore seedlings in the GHMC / HMDA areas in 4 years from 2015-16 to 2018-19, and (ii) planting and developing of 100 crore seedlings / saplings inside the notified forests. About 15.86 crores of seedlings were planted during 2015-16 and a massive plantation drive took place in 2016 with plantation of 31.67 crore of seedlings.



## 7.7. Outlook

While both farm and non-farm activities are important for the development of rural economy, the later has been relatively less emphasised in the past. The present Government has taken a gamut of initiatives encompassing development of animal husbandry, promotion of fisheries and rejuvenating traditional occupations.

There is a need to develop a comprehensive and integrated sheep development policy for Telangana state. The state policy should be built upon the seven fundamental principles for strengthening small ruminant sector viz., i) the sheep programmes should be decentralised and location specific; ii) improve the genetic pool through local selections from the climate-resilient indigenous breeds ; iii) streamlining service delivery, disease surveillance and promote local, ethno-veterinary health care service; iv) knowledge enhancement of small ruminant rearers, particularly on best management practices; v) enhancing natural resource base (fodder, water, shelter) for increased productivity and production; vi) strengthening sheep rearers' institutions and encourage entrepreneurship and vii) value addition, marketing, modernisation, IT-enabled services, research and monitoring.

Similarly, the fisheries sector needs to encourage private partnership and rural entrepreneurs to undertake the fish production and marketing in a business approach and profitable venture. The Fisheries Policy will need to look into the following six aspects namely, i) develop resources (present & potential) for inland fish and prawn production; ii) attain self-sufficiency in requirement of fish seed, fingerlings etc.; iii) develop aquaculture production systems and institutional support ; iv) develop strategies for markets, marketing, processing and value addition ; v) make institutional arrangement for entire supply chain / value chain and also encouraging entrepreneurship; and 6) address HRD, infrastructure and policy issues.



# The Industrial Sector:

*Initiatives for Ease of Doing Business*



*Efforts to promote private investment may not succeed unless the rule of the game are clear and potential investors see governmental action to be credible, rational, transparent and predictable.*

– Dr. C. Rangarajan



In the wake of employment transition from the agricultural sector industry has got due emphasis for both in growth and employment generation in the state. In order to facilitate growth of industrial sector, the Telangana government initiated number of industrial friendly policies; notable one among them is the enactment of the new industrial policy, viz., the Telangana State- Industrial Project Approval and Self-certification System (TS-iPASS) Act, 2014, which is the first policy of its kind in India. As a result of the new policy, Telangana has become the most attractive destination for investment in the country in a very short period of time.

## 8.1. Structure of the Industrial Sector in Telangana

The Annual Survey of Industries (ASI) is the major source of industrial statistics. The structure of industry in the state is analysed using ASI data from 2008-09 to 2013-14. ASI data covers all units registered under the Factories Act, 1948 i.e., those units employing 10 or more workers with power and 20 or more workers without power, respectively.

**Table 8.1: Important economic indicators of the industrial sector**

Sl. No.	Characteristic	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
1	Factories	7,357	7,729	8,980	9,005	10,279	11,068
2	Fixed Capital (Rs crore)	37,710	39,193	52,672	54,094	59,521	57,596
3	Employees (incl. workers)	7,07,487	6,56,438	7,09,863	7,00,357	7,07,738	7,45,005
4	Emoluments (Rs crore)	5,042	5,642	7,172	8,267	9,757	9,920
5	Total Input (Rs crore)	70,246	71,023	1,12,300	1,18,287	1,20,647	1,33,318
6	Gross Value Added (GVA) (Rs crore)	24,117	24,373	31,034	36,476	33,975	35,985
7	Net Value Added (NVA) (Rs crore)	21,584	21,428	27,394	31,986	28,728	31,113

Source: Annual Survey of Industries, Directorate of Economics and Statistics, Telangana

There is a significant growth in the number of factories registered in Telangana, from 7,357 in 2008-09 to 11,068 in 2013-14, posting 50 per cent growth. Similarly, other indicators have registered a positive growth during this period (Table 8.1). The percentage of the state with respect to All India, the share of net value added was 3.47 per cent and gross value added was 3.38 per cent, during 2013-14.

It is noted that 89 per cent of the total net value added (NVA) in 2013-14, was contributed by the corporate sector alone, the other two sectors ('non-corporate' and 'other') contributing only 11 per cent. The non-corporate sector has seen growth in number of factories, employees, NVA and gross capital formation (GCF). The Gross Capital Formation, which is an indicator for investment in the sector, shows that around 88 percent of the total investment in the state was in the corporate sector, while it was 91 per cent in 2012-13. The other sector has witnessed negative gross capital formation in 2013-14 (Table 8.2).

**Table 8.2: Distribution of industries by type of organisation, 2013-14**

Type of Organisation	Number of Factories		Number of Employees		Net Value Added (Rs Crores)		Gross Capital Formation (Rs Crores)	
	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13	2013-14	2012-13
Non-Corporate Sector	7,395	7,018	3,61,378	2,83,115	3,067	2,937	1132	958
Corporate Sector	3,614	3,214	3,56,252	3,97,048	27,702	25,606	8,163	9,580
Other Sector	59	47	27,375	27,575	344	186	-17.17	22

Source: Annual Survey of Industries, 2013-14, Directorate of Economics and Statistics, Telangana

### Relative performance of Telangana *vis-à-vis* India

While Telangana accounts for about 6 per cent of the total number of factories in All India and contributes about 3.4 per cent of the total GVA in the country, indicating lower productivity.

**Table 8.3: Industrial performance, 2013-14: Telangana *vis-à-vis* All India**

State/All India	Factories (Numbers)	Employees (Numbers)	Total Output (Rs Crores)	Gross Value Added (Rs Crores)	Gross Capital Formation (Rs Crores)
Telangana	11,068	7,45,005	1,69,304	35,985	9,278
India	1,85,690	1,35,38,114	65,55,251	10,65,112	3,53,738
Share of Telangana	5.96	5.5	2.58	3.38	2.62

Source: Annual Survey of Industries, 2013-14, Directorate of Economics and Statistics, Telangana

Most of the factories functioning in the State are small in size. Around 61 per cent of the total factories in the state have employment size of less than 50 and only 5.34 per cent of factories have employment size of 500 and above (see Table 8.3).

## 8.2. The MSME Sector in Telangana

The Micro, Small and Medium Enterprises (MSME) sector plays an important role in the economic and social development of the state and provide direct employment opportunities to 7,82,406 people, with a vast network of around 69,120 units. Its contribution is immense in terms of direct employment, providing inputs/raw material for other sectors, and export earnings,

**Figure 8.1: MSME Units and Investments in Telangana**



Source:Commissionerate of Industries, Telangana

Sector-specific issues and inadequate credit have dampened the growth of the micro and small enterprises post 2013-14. The medium enterprises are in an almost stable state since 2007-08, without much effect from the vicissitudes of time.

Investments in micro enterprises reached high in 2011-12 and thereafter remained stable, whereas investments in small enterprises peaked in 2013-14 and witnessed downward trend thereafter. Investment in medium industries is almost stable through out the period. Decline in growth rate is largely due to the medium and large enterprises steeped in Non-Performing Assets (NPAs), defaulting in payments to the MSE vendors on the one hand and on the other, the ineffective delayed payment redress mechanism, with the governments, PSUs and judiciary not adequately and appropriately responding to the arbitration mechanism of the MSE Facilitation Council.

Employment generation by micro enterprises is less compared to small and medium ones. The employment generation, after reaching high in 2013-14, is in declining pace due to inability of the enterprises to honour contractual payments, the migratory practices of labour, and largely mismatched skills.

#### Box-8.1: MSME Data Bank and Online Facilitation Portal

The Ministry of MSME has launched the MSME Databank Portal and Online Finance Facilitation Web Portal. Key facts of the MSME Databank Portal are:

- It aims to gather information about micro, small and medium enterprises (MSMEs).
- Its objective is to form a one-stop source of information of MSMEs of India, including their credit and technology, requirements in terms of raw material and marketing, etc.
- It will enable the MSME units and the various associations to furnish data online.
- It will save the efforts and money required for a physical Census. The databank's MIS dashboard will provide real-time information on various types of MSMEs registered on the portal.
- The databank will be used for public procurement purposes and the PSUs will make use of the data for procuring from MSMEs.

#### Online Finance Facilitation Web Portal

- It will provide collective funding options for MSMEs.
- The portal will allow MSMEs to apply for loans from the various banks on the NSIC (National Small Industries Corporation) portal itself.

## **Rehabilitation and revival of sick enterprises**

Industrial sickness leads to problems such as unemployment, revenue loss to the State and Central Governments, reduced flow of institutional finance, increase in non-productive assets etc., apart from dampening investment climate in the State. Lack of financial discipline, adoption of low level of technologies, non-compliance with loan terms of banks' and Financial Institutions' loan terms, delayed payments, indiscrete application of Securitisation Act, apart from delay and even denial of loans for Micro manufacturing enterprises dominated the reasons for shrinking growth and endemic sickness of the manufacturing sickness.

As per the State Level Bankers Committee (SLBC) report of Telangana State 2016-17, there are 8,618 sick units in the state as per the RBI definition of industrial sickness. Eighty percent of the total sick units have been declared as non-viable units. Potentially viable units are only 7 per cent (i.e. 632 units).

The progressive industrial policy has pledged revival and rehabilitation of sick enterprises as one of the key areas of attention. Although RBI and the Government of India have put in policies for revival, their tardy implementation also required that the state on its own should supplement the efforts to accelerate such relief operations.

### **Box-8.2: Telangana Industrial Health Clinic**

The 'Report of the Committee on Medium-term Path on Financial Inclusion' (2015) of the Reserve Bank of India, prepared by the Committee headed by Deepak Mohanty, recommended that compliance risks in administering credit given by formal credit institutions can be addressed appropriately by 'instituting professional credit intermediaries/advisers for MSMEs to help bridge the information asymmetry and thereby help better credit decisions'. The Government of Telangana is contemplating to set up the Telangana Industrial Health Clinic Ltd. (THIC) as a subsidiary of TSIDC in this direction. It's credo: Facilitate finance founded on faith; provide responsible and responsive mentoring and counselling services; Review, Resource, Restructure, Regain and Recover and ensure healthy industrial ecosystem for MSEs.

## **8.3. Handloom Sector in Telangana**

The handloom industry is the largest cottage industry in the country with a position next only to agriculture in providing massive rural employment. Ethnic handloom designs of Telangana promote the cultural glory of Indian heritage and culture. The design patterns of Pochampally Ikats, Gadwala cotton, silk and sico-sarees, Narayanpet cotton and silk sarees, Warangal durries, Karimnagar bedsheets and furnishings stands testimony to the outstanding skills of handloom weavers.

There are 627 Handloom Weaver Cooperative Societies in the state (Table 8.4). About 82,438 handloom weavers in the State are in the fold of Cooperatives and about 38,002 handloom weavers are outside cooperatives. There are about 49,112 powerlooms in Telangana.

**Table 8.4: Handloom sector in Telangana**

S.I.No	Handloom Cooperatives	Number
1	Cotton	259
2	Silk WCSs	33
3	Wool ICSs	44
4	Powerloom WCSs	157
5	Tailor CSSs/ Garment CSs	134
<b>Total</b>		<b>627</b>

#### 8.4. Special Economic Zones

Government of India sanctioned 67 Special Economic Zones (SEZs) in Telangana, of which seven SEZs were approved. The list of approved SEZs is given in Table 8.5.

**Table 8.5: List of notified SEZ developed by TSIIC Ltd**

Sl. No	Type of SEZ	Location	District	Date of Notification	Total Extent (in Ac)	Remarks
1	IT / ITES	Nanakramguda (V), Serilingampalli (M)	Rangareddy	25/4/2007, 24/09/07, 6/03/13	42.31	Operational
2	Aero Space and Precision Engineering	Adibhatla (V), Ibrahimpatnam (M)	Rangareddy	24-Dec-08	337.80	Operational
3	Biotech	Lalgadi Malakpet(V) Shameerpet (M),	Medchal	20-Oct-09	25.27	Operational
4	Formulation	Rajapur & Pollepalli (V), Jedcherla (M)	Mahabubnagar	13-Jun-07	250.00	Operational
5	Biotech	Karakapatla (V), Mulugu (M)	Siddipet	25-Jul-07	100.00	Under Operational
6	IT / ITES	Madikonda (V), Hanamakonda (M)	Warangal (Urban)	12-Dec-07	35.00	Under Operational
7	Electronic Hardware	Maheshwaram(V), Maheshwaram (M)	Rangareddy	25-Jul-07	275.00	Proposed for denotification*

\* Electronic Hardware Manufacturing SEZ at Maheshwaram, has been dropped with an intention to make use of the same land for Electronic Hardware Manufacturing Cluster proposed by the Government of India.

Out of the seven SEZs, four SEZs viz., IT / ITES SEZ at Nanakramguda, Aero Space and Precision Engineering SEZ at Adibhatla, Biotech SEZ at Lalgadi Malakpet, formulation at Rajapur, Jadcharla are in operation at present. The total employment potential from these four SEZs is about 22,709, of which about 19,000 persons were already employed. An IT/ ITES SEZ at Warangal Urban is under development and is expected to be operationalized in 2017-18, which and is likely to generate jobs to 3000 persons.

#### 8.5. Merchandise Exports from Telangana

State-wise merchandise exports in 2015-16 reveal that Telangana with Rs. 35,444 crore worth of merchandise exports and 2.07 per cent in all India share, stands eleventh among states and union territories. State-wise merchandise exports details are given in Annexure 8.1.

Sector-wise analysis of merchandise exports reveals that the lion's share in Telangana's exports earnings consists of pharma and chemical products. Pharmaceutical products earned the highest income from exports during 2015-16, valued at Rs 12,837 crore, accounting for about 36 per cent of the total merchandise exports from the state. Organic chemicals accounted for about 33 per cent of the total exports from the state. Table 8.6 shows Sector wise merchandise exports from the state in 2015-16

**Table 8.6: Sector-wise merchandise exports from Telangana during 2015-16**

Sl. No	Sectors	Value in Rs. Crores	Percentage (%)
1	Pharmaceutical Products	12,837	36.22
2	Organic Chemicals	11,776	33.23
3	Electrical Machinery & Equipment	1,465	4.13
4	Nuclear Reactors, Boilers, Machinery and Mechanical Appliances	1,359	3.83

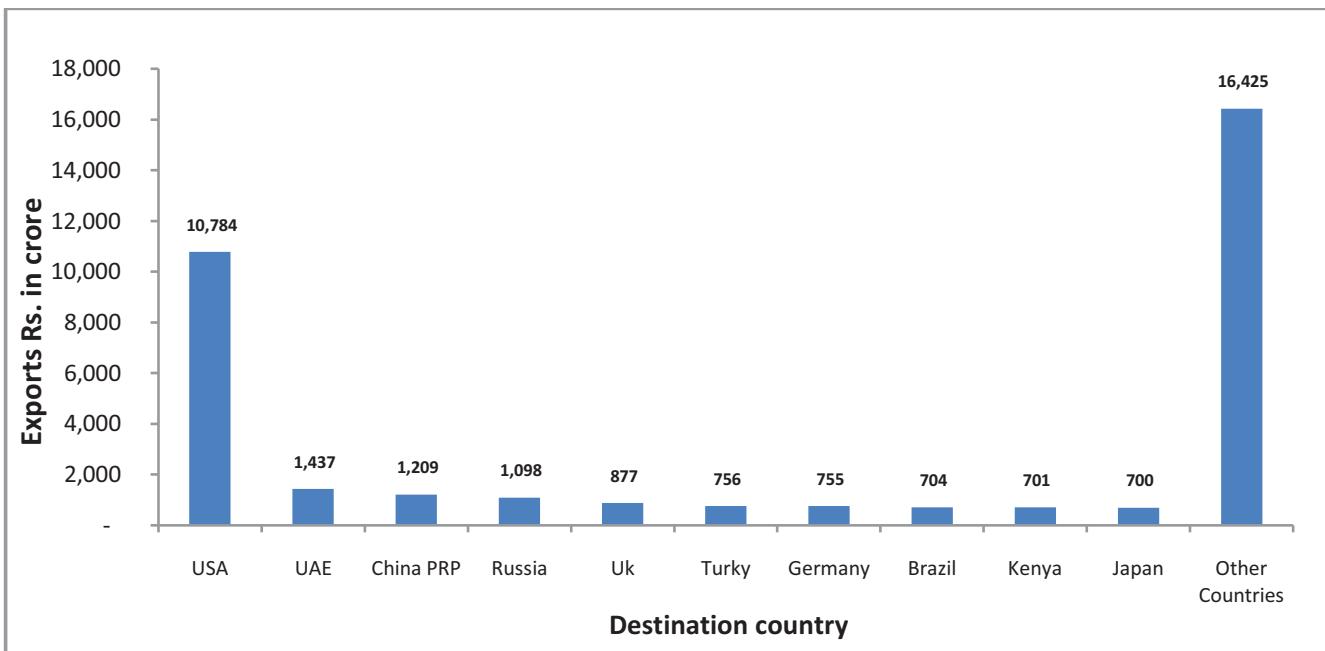
Sl. No	Sectors	Value in Rs. Crores	Percentage (%)
5	Salt, Sulphur, Earths and Stone, Plastering Materials, Lime	699	1.97
6	Pearls, Precious or Semi-Precious Stones/ Metals	622	1.75
7	Articles of Stone, Plaster, Cement, Asbestos, Mica	545	1.54
8	Aircraft, Spacecraft and Parts Thereof	503	1.42
9	Preparations of Cereals, Flour, Starch or Milk	442	1.25
10	Tools and their Parts of Base Metals	423	1.19
11	Other Sectors	4,774	13.47
	<b>Total Exports</b>	<b>35,444</b>	<b>100.00</b>

Source: DG CIS, Kolkata

### Destination-wise merchandise exports from Telangana

The USA is the biggest importer of merchandise products from Telangana. Thirty per cent of the total merchandise exported to the USA, followed by the United Arab Emirates (UAE), China, Russia, the United Kingdom, etc. (see Figure 8.2)

**Figure 8.2: Destination wise Merchandise Export from Telangana (Rs. Crores)**



The Government of Telangana has initiated various measures to promote exports from the state. The state is actively involved in providing finance to exporters, organising/participating in international trade fairs, taking measures regarding to improvement of trade facilitation and development of export-related infrastructure, etc.

### 8.6. TS-iPASS

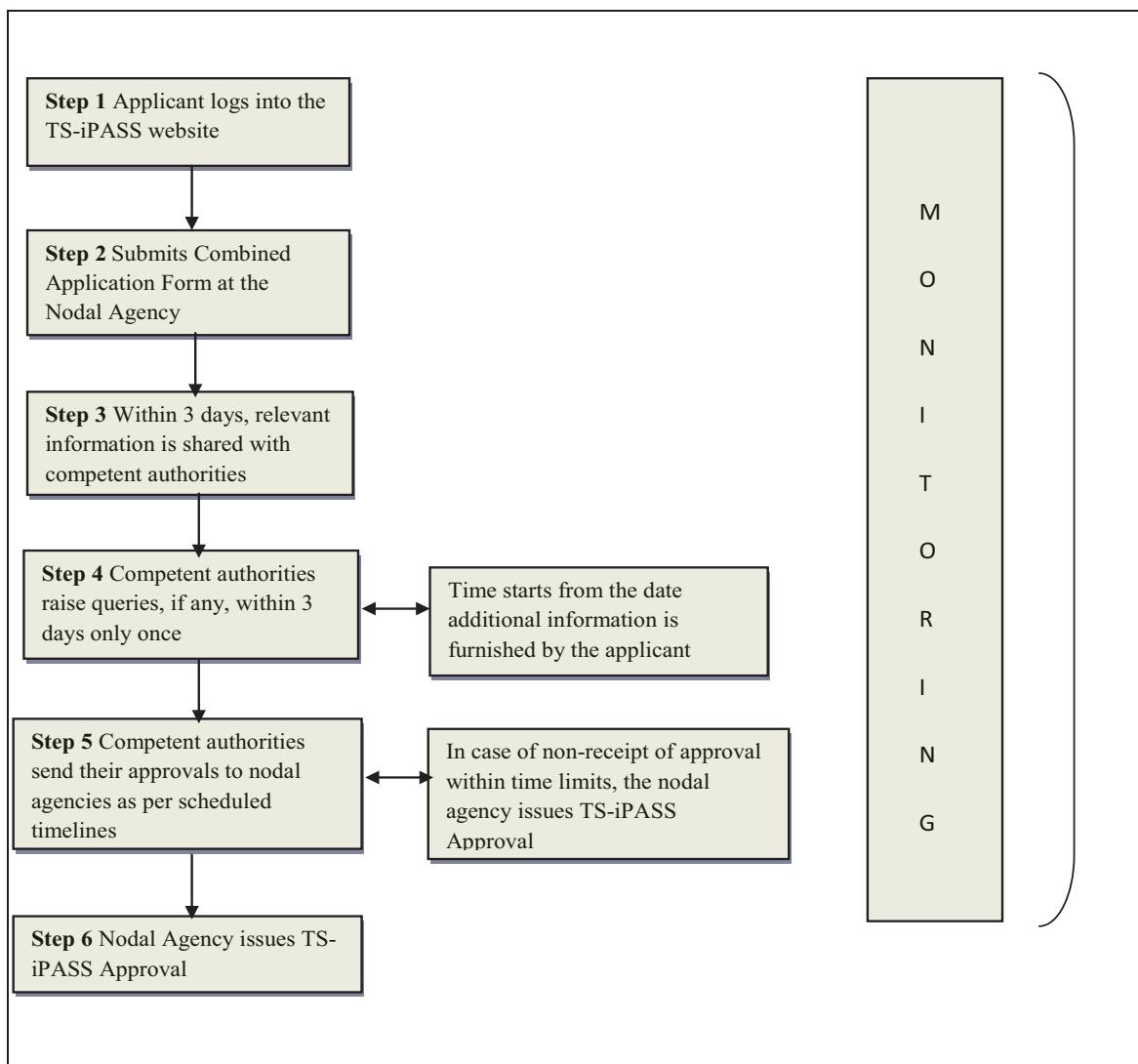
The Telangana Government has enacted the ‘Telangana State Industrial Project Approval and Self-Certification System (TS-iPASS) Act, 2014’ for speedy processing of applications for issue of various clearances required for setting up of industries at a single point, based on the self-certificate provided by the entrepreneur.

### Box-8.3: Telangana Ranked No. 1 in Ease of Doing Business

Telangana State secured first rank in 'Ease of Doing Business-2016' and has been declared by the Ministry of Commerce, Government of India, as the national topper with a score of 98.78 per cent inspite of being the youngest state in the country. This is the result of the untiring efforts put in by the Government by making several systemic changes. As a part of Ease of Doing Business initiatives, the Government has launched 113 online services across 22 government departments, introduced inspection reforms and simplified the procedures.

Telangana is the only state in the country that has accorded the investor a legal right to get industrial clearance, provided all compliances are in order. There is a provision of levying a penalty of Rs.1000 per day on any officer delaying the process, thus making the system accountable, and approval is deemed to have been granted after the stipulated period is over. The number of documents to be attached to an industrial application has been brought down from 110 to just 10. The approval process under the TS-iPASS is illustrated in the flowchart below.

The key steps involved in the approval process of TS-iPASS are presented in the flowchart below.



The TS-iPASS is being implemented through an end-to-end interactive online system. While the approval for mega projects i.e. (investment of more than Rs. 200 crore or an employment potential of more than 1000) is accorded within 15 days, the approval for all other projects will be granted within 30 days. Thirty clearances from 25 departments, required for establishment and operation, as indicated in the Annexure-8.2 have been brought under TS-iPASS.

As on 24.01.2017, about 3327 units have been given approvals in the state with an investment of Rs. 51,358 crore, including the investment of TSGENCO, providing employment to 2.12 lakh persons. So far, 1,138 industries have actually commenced commercial production, 405 are in an advanced stage of completion and the rest are under various stages of construction. The district-wise and sector wise permissions accorded under the Act are provided in the following sections.

**Table 8.7: Major sector-wise approvals given under TS-iPASS (1 January 2016 to 24 January 2017)**

Sl. No	Major Industrial Sector	No. of Industries	Investment (Rs in Crores)	Total Employment
1	Food processing	361	2,168	22,527
2	IT (services)	5	2,648	22,300
3	Pharma and chemicals	169	4,055	19,910
4	Power	87	21,856	10,133
5	Plastic and rubber	165	798	7,014
6	Engineering	280	643	5,739
7	Agro-based (incl. poultry and cold storage)	195	408	5,492
8	Electrical and electronics	46	684	4,877
9	Granite and stone crushing	166	322	3,083
10	Paper and printing	69	872	1,992
11	Textiles	63	168	1,756
12	Cement	117	111	1,197
13	Aerospace and defence	7	477	1,160
14	Others	1,597	16,148	1,04,853
<b>Total</b>		<b>3,327</b>	<b>51,358</b>	<b>2,12,033</b>

Major sector-wise analysis reveals that, highest number of approvals (361) were given in the food processing sector during this period, followed by engineering, agro-based, pharma and chemicals, granite and stone crushing, plastic and rubber etc., Though only five IT services units were approved so far, they have high employment generation potential.

District-wise distribution of industries approved under the TS-iPASS reveals that a majority of the proposed industries are grounded in and around Hyderabad. Medchal district has received the highest number of proposals (727) with an employment capacity of 25,585, followed by Rangareddy, Sangareddy, Karimnagar, Nalgonda, and Warangal (Urban) (See Annexure -8.3 for district wise details).

## 8.7. Thrust Areas and Core Sectors

The Government of Telangana identified 14 thrust areas to accelerate the pace of industrialisation process. Details of these sectors are discussed below.

- Life sciences –including bulk drugs, formulations, vaccines, nutraceuticals, biologicals, incubation centres, R&D facilities, and medical equipment:** Hyderabad is the bulk-drug and vaccine capital of the country. However, in the past 8–10 years the sector has experienced stagnation. While the leadership in formulations and bulk drugs has to be maintained, new opportunities like life-saving drugs, new vaccines and biologicals have to be emerged. As such, there is an urgent need to encourage this sector, especially in the areas of emerging life sciences areas.

#### **Box-8.4: Life Sciences: The Sunrise Sector in Telangana**

Hyderabad has always been known as the Pharma destination worldwide, contributing over 30 per cent of the pharmaceutical production of the country. Over the years, Hyderabad has started dominating India's vaccine production output, and contributes significantly to the global vaccine production while inching closer to be recognised as a global disease prevention capital of the world. Major Government initiatives in 'life sciences' are given below:

##### **(i) Genome Valley:**

Genome Valley is a shining example of Hyderabad's dominant position in Life Sciences sector. Genome Valley has become the largest innovation and life sciences cluster in Asia and has the privilege of being India's first and only systematically developed R&D and clean manufacturing ecosystem. The cluster has grown tremendously to become home to over 200 companies, including a number of global powerhouses, employing a scientific workforce of over 10,000. It is, indeed, a very unique cluster and the kind of cutting edge scientific efforts happening in Genome Valley are just unmatchable by any other cluster in India and perhaps Asia. It is home to companies with varied capabilities - pre-clinical research, development R&D, contract manufacturing, vaccines, clinical research, biosimilars and biologicals. The cluster has a rich mix of global companies like Novartis, GSK, Ferring Pharmaceuticals, Ashland, Lonza, Nektar Therapeutics, United State Pharmacopeia, Sanofi, among others and India biotech majors like Biological E, Bharat Biotech, etc.

##### **(ii) Medical Devices Park**

The Government of Telangana is also developing a first of its kind park in India for medical devices and electronics, focused on medical innovations, R&D and manufacturing. Proposed to build in an over an area of around 250 acres, the 'medical devices park' brings together a holistic ecosystem for setting up research as well as manufacturing units, and benefit from the scale and facilities of a larger cluster.

##### **(iii) Hyderabad Pharma City**

Leveraging the State's leadership position in the Pharma sector, the Government of Telangana is developing 'Hyderabad Pharma City' at an area of 14,000 acres, which will be the largest and first of its kind, smart ecosystem creating a new international benchmark for Sustainable Industrial cities. With just in time, plug and play infrastructure, Pharma city is designed to become the jump start platform for the companies with a thrust on Bulk Drugs (Antibiotics, Fermentation products, Synthetic Drugs, Large volume chemical synthesis), Intermediates, Vitamins, Vaccines, Drug Formulations, Nutraceuticals, Herbal medicinal products, Speciality Chemicals, Cosmetics, etc. Conceived around creating an innovative seeding cluster symbolizing the culture of the work, live, learn and play, the cluster will elevate the environmental standards and will garner support from the world class social infrastructure facilities including: tertiary pharma university, centers of excellence and incubation centers, common testing facilities and vivarium, efficient and cost effective common effluent treatment plants based on 'zero liquid discharge' etc.

2. **IT hardware including biomedical devices, electronics, cellular communications, and FAB:** Telangana has a robust IT software sector, which will complement IT hardware. The Government of India has approved the IT Investment Region for Hyderabad, as well as two electronics manufacturing clusters. The large health industry in Telangana will support biomedical devices and medical electronics. Two clusters at Adibatla and Pocharam are at a nascent stage.

- 3. Precision engineering, including aviation, aerospace, and defence:** Hyderabad is home to a large number of defence aerospace and defence research laboratories like DRDO, DRDL, RCI, BDL, MDN, Ordnance Factory, DMRL, etc., in addition to the five large investments by the Tata Group in the aerospace sector, there is also GMR MRO. A group of innovative aerospace SMEs also located in Hyderabad which has supplied components to the Chandrayan and Mangalyan Satellites launched by the ISRO. The Government of India has also announced permission for 49 per cent FDIs in the defence sector, creating huge investment opportunities, in the state.

The Telangana Government is proposing to set up three more aerospace and defence parks on the outskirts of the Hyderabad in coming four years with an investment of Rs. 2500 crore. The Aerospace Park in Adibatla SEZ, which spreads over 500 acres, is already fully functional.

Tata Advances Systems Ltd. (TASL) and their JV partners have set up facilities with Sikorsky and Lockheed Martin for the manufacture of helicopter cabins, aircrafts and their components. Boeing and Tata Advanced Systems have also announced a joint venture that will manufacture aero structures for aircrafts.

- 4. Food processing and nutrition products, including dairy, meat, and fisheries:** Telangana is a major producer of agro-products like cereals, pulses, oilseeds, fruits and spices. It is also the market leader in the poultry and seed business. There is huge potential to expand greenhouse and exotic vegetable cultivation. Therefore, there is a need to encourage this sector to add value to agro-products and to maintain and expand the existing strengths, as well as to partner with the national Food Processing Mission.

In this direction, the Government of India has accorded final approval for setting up a Mega Food Park in Khammam district. The Rs. 110 crore Mega Park formally kick-started, which will work as a Central Processing Centre and other infrastructure facilities in about 60 acres at Buggapadu near Sathupalli, Khammam. The foundation stone was laid at Lakkampally village in Nizamabad district, with an initial investment of Rs.110 crore.



- 5. Automobiles, transport vehicles, auto-components, tractors, and farm equipment:** The automobile industry is an important sector for any state. The upstream and downstream supply opportunities will boost the engineering SME sector also. The M&M tractor plant in Telangana and

the auto-component SMEs will be the anchor around which the future growth and investments in the automobile sector will emerge.

Commercial vehicle maker Ashok Leyland entered an agreement with the Telangana Government for setting up a body building unit in the state with an investment of Rs. 500 crore. The unit, to be established in phases, will provide employment to 1000 people directly and hundreds indirectly.

6. **Textiles and apparel, leather and leather value-added products like shoes, purses, bags, artificial material-infused and coated textiles, paper, and paper products:** Telangana is the large producer of long-staple cotton. It is also one of the largest producers of raw hide. However, there is no value-added production within the state and raw material is exported from the state. The state has a strong base for the paper industry. There is tremendous potential for paper and paper products industry in the state due to the growing demand for such products.

India's largest textile park will come up in Warangal Rural district. A 'Cotton-to-Garment' park will be set up in an area of 2000–3000 acres. The state is also planning to establish nine leather parks across the state. A mega leatherpark, spread across 117 acres, will be established in Station Ghanpur of Jangaon district at a cost of Rs. 210 crore. A proposal has been sent to DIPP under Indian Leather Development Programme (ILDP) Scheme, Government of India.

#### **Box-8.5: Kakatiya Mega Textile Park at Warangal Rural**

Telangana is the third largest producer of long staple cotton with production of around 50 lakh bales per annum. However, most of the cotton is exported adding little value-addition in the chain of textile process in the State. There are 33 spinning mills with a capacity of 10 lakh spindles, which consumes only about 20% of the cotton grown in the State while the rest 80% goes to other states for spinning. Capacity utilization of weaving industry in the State is negligible and there is not much processing capacity available in the State. There is no further downstream facility like processing and garmenting. The State is also known for skilled textile workers but due to absence of industry, they migrated to other states for their livelihood. The State Government proposes to develop a Mega Textile Park (MTP) with state-of-the-art manufacturing facilities for ginning, spinning, weaving, knitting and Textile processing at Warangal. The proposed park cover all activities in the textiles value chain and help the industry in Telangana in achieving economies of scale.

7. **Plastics and polymers, chemicals and petrochemicals, glass and ceramics:** Plastics, polymers and downstream petrochemical industry are predominantly in the MSME sector with a huge employment potential. The products of this sector are consumed on a daily basis all over the country. This sector is critical for a large number of MSMEs. It is proposed to establish a 'plastic park' in 100 acres of land in Tumaloor village, Maheshwaram mandal of Rangareddy district. With an estimated investment of Rs. 123.24 crore. It is expected to provide employment opportunities both direct and indirect, to approximately 5000 persons.
8. **FMCG and domestic appliances:** The growth rates of the Fast Moving Consumer Goods (FMCG) and domestic appliances sectors have been phenomenal, even when the country's economy was slow. Telangana is centrally located in India and for FMCG sector, transportation costs are very critical. It is important to capitalise on the locational advantage of the state, especially for this sector.
9. **Engineering and capital goods, including castings, foundry and ferro-alloys and other metallurgical industries:** This sector is very important if the state is to capture the entire value chain of the automobile, aerospace, petrochemicals, domestic appliances, and paper and textile sectors. The

thrust areas in this sector will provide the supply chain to the other thrust area sectors.

10. **Gems and jewellery:** Hyderabad pearls and lacquer bangles made by local artisans are known all over the world. Value-addition to these traditional products and diversification into other gems and jewellery items will provide much-needed relief to local artisans and craftsmen.
11. **Waste management and green technologies:** This sector will become mandatory for all industries. Green initiatives can be shown to be profitable. The Telangana State has functional models of SPV/JV efforts of waste management. This sector has tremendous growth potential in the state.
12. **Renewable energy and solar parks:** This sector is priority one all over the world. The State of Telangana has large extents of land suitable for non-conventional and renewable energy installations.
13. **Mineral-based and Wood-based Industries:** Much of the minor mineral wealth, such as granite, quartz and silica-sand, is exported in raw form with minimal processing from the state. Similarly, bamboo and other MDF-suitable plant materials also need to be exploited so that sustainable incomes are generated and regular forest trees can be saved.  
A plan for an industrial park for furniture makers and a host of manufacturers across the broad spectrum of home décor is on the cards. It is proposed to come up on hundreds of acres. The facility is expected to attract investments from domestic, typically small and medium enterprises, as well as foreign firms, especially those from China and South East Asia.
14. **Transportation/ logistic hub/inland port/ container depot:** The State of Telangana is land-locked; yet it hopes to become a major destination for international investors. In addition, it is centrally located and has the potential to become a major transit and logistics hub. The State Government proposes to set up four dry ports around Hyderabad with an investment of Rs 2,700 crore. Land areas to the extent of 825 acres in Zaheerabad, 450 acres in Bhuvanagiri, 319 acres in Jedcherla and 3000 acres in Damarcharla have been identified for this purpose. NIMZ-Medak has been accorded final approval. It would attract an investment of about Rs.17,300 crore and will generate employment for about 2.61 lakh persons.

#### **Box-8.6: RICH: Innovation through Collaboration**

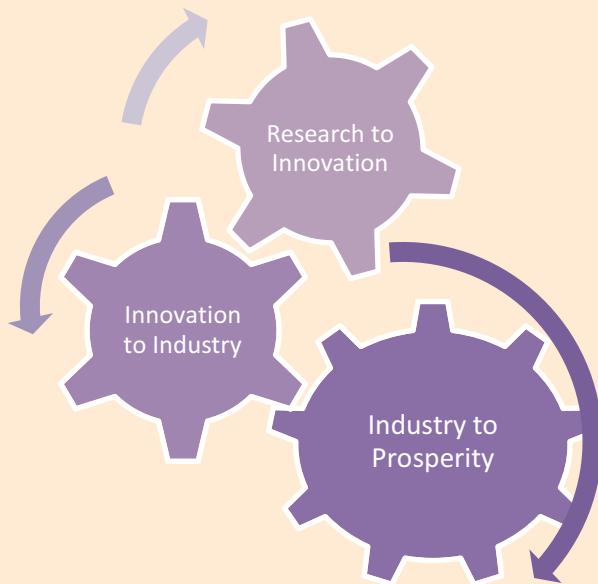
The Government recognises that effective implementation of innovative new ideas in business and social services will benefit its people and create wealth in the country. The State's Industrial Policy envisions a platform for innovation through a collaboration between the many excellent research institutions based in the State (CCMB, CRDA, DRDL, IICT, ICRISAT, LVPEI), along with world renowned educational institutions (IITH, ISB, IIITH, NALSAR, OU, UOH), and the industry. The Government recognises that it can play a key role in getting this collaboration started. Research and Innovation Circle of Hyderabad (RICH) has been conceived to play this role.

RICH is an initiative that has been conceived to unlock the national treasure created by the top scientific research institutions in Telangana State, and to actively facilitate the process of taking their research to market. This requires new ideas, innovations, technologies, advisors, mentors, funding and support services, to be brought together seamlessly. The Government recognises that there are gaps in this innovation-entrepreneurship-investment ecosystem, which has prevented full utilisation of the R&D work taking place in these institutions. RICH is the platform that will link research institutions, academia and industry along with venture capitalists, angel investors and incubation funds.

#### **RICH will enable the following:**

- Protect the IP (Intellectual property) created from research, and create mechanisms to license the IP

- Assist with the Initial evaluations of technical, market, legal and economic feasibility of taking the research to market
- Identify options for scaling up
- Arrange for Advice and support on business models, staffing, go to market strategies
- Coordinate training inputs in design thinking, business management, and project execution, for scientists and entrepreneurs
- Introduce funders and investors at various stages of growth
- Provide technological and managerial advice, as required
- Influence government policy for creating an innovation and entrepreneurial culture in the State, and
- Identify and document the best practices, from across the world, for rapid commercialization of research and innovations



## 8.8. Mines and Mineral Products in Telangana

Telangana has varied geology, endowed with a rich and wide variety of minerals suitable for specific mineral industries. The state has natural stores of coal, iron ore, limestone, dolomite, manganese, quartz, feldspar, stowing sand, laterite, clays, yellow ochre, barytes, uranium, black and coloured granite, limestone, fuller's earth, marble, road metalling/building stone/ballast, gravel/earth and ordinary sand. The Government of Telangana aims to serve as a guiding force to translate the state's mineral potential into reality with the objectives of ecofriendly and sustainable mining.

### Box-8.7: Important Mineral Resources in Telangana

- **Coal:** Telangana is the only state in the entire southern India with vast deposits of coal, which is being mined by M/s Singareni Collieries Company Ltd., a State Public Sector Undertaking.
- **Iron Ore:** The state is also endowed with a number of scattered medium-grade iron ore deposits in Bayyaram Reserve Forest and float iron ore deposits in revenue and patta lands of Mahabubabad, Jayashankar, Jagtial and Warangal Urban districts. It is proposed to establish a steel plant by SAIL, as per Section 93 of the Andhra Pradesh Reorganisation Act, 2014.

- **Uranium ore:** There are estimated reserves of 11 million tonnes uranium ore in Lambapur, Pulicherla, Nammapuram and Yellapuram villages of Nalgonda district. The Uranium Corporation of India Ltd. (UCIL) has filed an application for grant of mining lease over an extent of 542 ha. It is yet to be considered for approval. The Ministry of Environment and Forests, GoI, granted EC for this project. Presently UCIL is acquiring the lands for the said project.
- **Limestone:** The state is also endowed with extensive limestone deposits in Adilabad, Peddapalli, Mahabubnagar, Nalgonda, Suryapet, Vikarabad, and Mancherial districts with a total resources of around 7519 million tonnes. Limestone is being consumed in the manufacture of cement by 21 cement plants (10 major and 11 minor plants) with a capacity of 29.50 MTPA.
- **Granite:** Good varieties of granite are available in the districts of Karimnagar, Peddapalli, Jagtial, Warangal Urban & Rural, Mahabubabad, Khammam and Kamareddy. Brown Porphyry, Red Rose, Blue Brown and Tan Brown are the varieties found in Karimnagar, Peddapalli and Jagtial; Black and Sapphire Brown are the varieties in Warangal Urban & Rural, Mahabubabad and Khammam; Indian Aurora is found in Kamareddy district.

**1. Mineral industries in Telangana:** The mining sector is identified as one of the growth engines and certain minerals have been identified as focus minerals, viz., coal, iron ore, diamond, dolomite, uranium, garnet and limestone. The establishment of cement factories, thermal plants, granite cutting and faceting, steel and sponge iron are the focus industries for overall growth and development of the mining sector in the state. The existing mineral-based industries are given in the Table 8.8. (District-wise potential mineral based industries are given in Annexure-8.4)

**Table 8.8: Mineral-based industries in Telangana State**

Sl. No.	Mineral-based Industries	No. of Industries
1	Cement plants	21
2	Sponge iron plants	15
3	Quartz pulverising units	79
4	Ferro alloys units	2
5	Granite cutting & polishing units	723
6	Stone crushing units	463
7	Napaslabunits	183
8	Manufacture of sand units	44
9	Ready mix concrete units	34
10	Thermal power plants	3
11	Clay and ceramic units	29
12	Fuller's earth processing units	55
13	Mosaic chips units	16
14	Brick kilns	234
15	Laterite beneficiation plants	2
16	Barytes processing units	1
<b>Total</b>		<b>1904</b>

**2. Mining and leases:** Mining for coal and limestone falls under the large-scale mechanised sector, while granite, dolomite, quartz, feldspar, clays and barytes, etc., fall under semi-mechanised medium sector and the other minerals fall under semi mechanised small sector. Nearly 90 per cent of mines fall under small sector and the remaining 10 per cent under medium and large sectors.

The details of reconnaissance permit, prospecting licenses and mining leases for major minerals, and quarry leases for minor minerals in the state, and their extent, details are provided in Table 8.9.

**Table 8.9: Mining permit/lease and area in Telangana**

Sl. No.	Permit/License/Lease	Number	Extent (in Hectares)
1	Reconnaissance Permit	1	1357
2	Prospecting Licenses	20	5045
3	Mining Leases	135	85652
4	Quarry Leases	3154	9908
	<b>Total</b>	<b>3310</b>	<b>101963</b>

**3. Important policy initiatives in the mining sector:** In the light of the new State of Telangana's recently enacted Mines & Minerals (Development & Regulation) Amendment Act, 2015, and related rules, the State Government is considering the priorities for development of the mineral sector and formulating a 'State Mineral Policy' with special focus on swift clearances, speedy grant of mineral concessions with prioritisation for captive industry; incentives as applicable under TS-iPASS (the new Industrial Policy); good infrastructural facilities; pronouncing entrepreneur-friendly initiatives; emphasis on environmental aspects; initiatives for conservation of minerals and waste management; identification and assistance in establishing auxiliary/ancillary industries for better utilisation of by-products generated from mining and mineral industry, etc. The 'Telangana State Mineral Policy' will be announced very shortly.

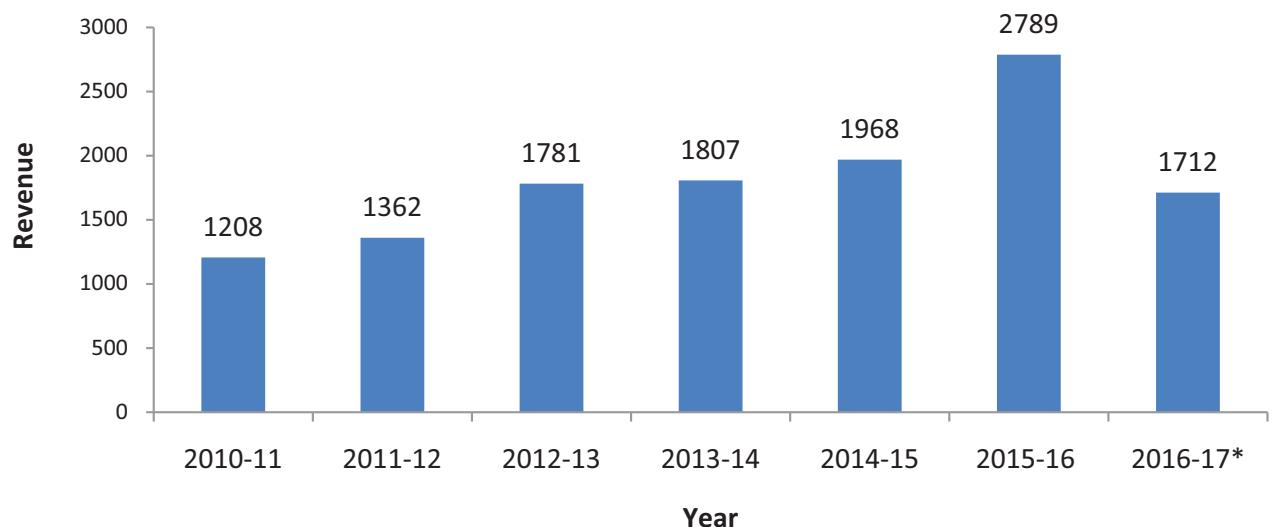
The State Government has introduced the 'Online Mineral e-Payment & e-Permit System', facilitating payment of statutory amounts, filing, processing, issue of dispatch permits and generation of transit forms (way bills) by leaseholders through a user-friendly online service, totally avoiding any manual interface.

**4. Mineral production and value:** The consumption of minerals is increasing due to the promotion of various industries and manufacture of mineral-based products. The state produces about 30 million tonnes of industrial minerals, 50–55 million tonnes of coal and 58 million cubic metres of dimensional stones and building materials.

#### Revenue from minerals

The minerals and mining sector in the state contributed Rs. 2788.99 crore in 2015-16. The target for 2016-17 is Rs. 2687.87 crore and the sector achieved Rs. 1712 crore up to December, 2016.

**Figure 8.3: Revenue realisation from Minerals (Rs. in crore)**



Note: 2016-17 year revenue is up to December, 2016.

### **Box 8.8: Resurgence in Public Sector Enterprises in Telangana: Case of Singareni Collieries Company Ltd.**

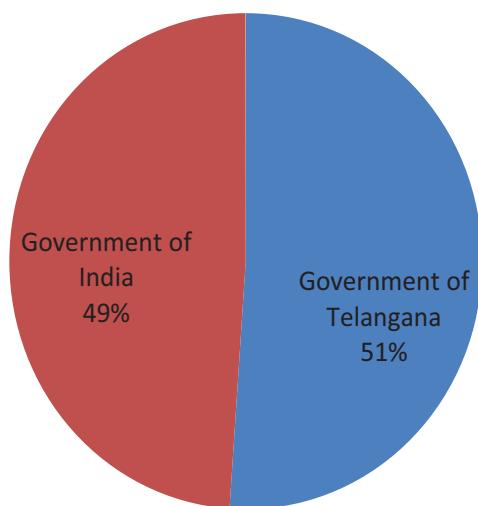
The Singareni Collieries Company Ltd. (SCCL), a State Level Public Enterprise involved in mining of coal, has been the backbone of Telangana since its inception. It has grown exponentially, especially after the formation of Telangana, in all metrics of measurement, be it in terms of production, profits, diversification, volume of investment or undertaking of Corporate Social Responsibility initiatives.

#### **A Brief History of SCCL**

The Hyderabad (Deccan) Company Limited, the predecessor to SCCL, started mining coal in the year 1889. The Singareni Collieries Company Ltd. was incorporated on 23 December 1920 under the Hyderabad Companies Act as a public limited company. The State of Hyderabad purchased majority shares of the company in 1945. Thus SCCL is the oldest coal mining company in the country. The controlling interest of the company devolved on the erstwhile Government of Andhra Pradesh in 1956.

#### **Shareholding of SCCL**

**Figure 1: Ownership Shareholding of SCCL**



**Note:** Private shareholders own 0.002% (worth Rs. 0.04 crore) of equity in SCCL

Mancherial, Peddapalli, Jayashankar, Bhadravati, Kothagudem and Khammam, along the Godavari river.

#### **Reserves – Godavari Valley Coal Fields (GVCF)**

Of the 470 km-long Pranhita–Godavari Valley Coal Field, 350 km lies mostly in the South Indian state of Telangana. The SCCL coal reserves stretch across those 350 km of the Pranhita–Godavari Valley, aggregating to a proven whopping 10,528 million tonnes. The coal extracted by SCCL in the Godavari valley coalfield up to the year 2015-16 was about 1249.23 million tonnes. At this rate of production, the reserves will last for 100 more years of mining by SCCL.

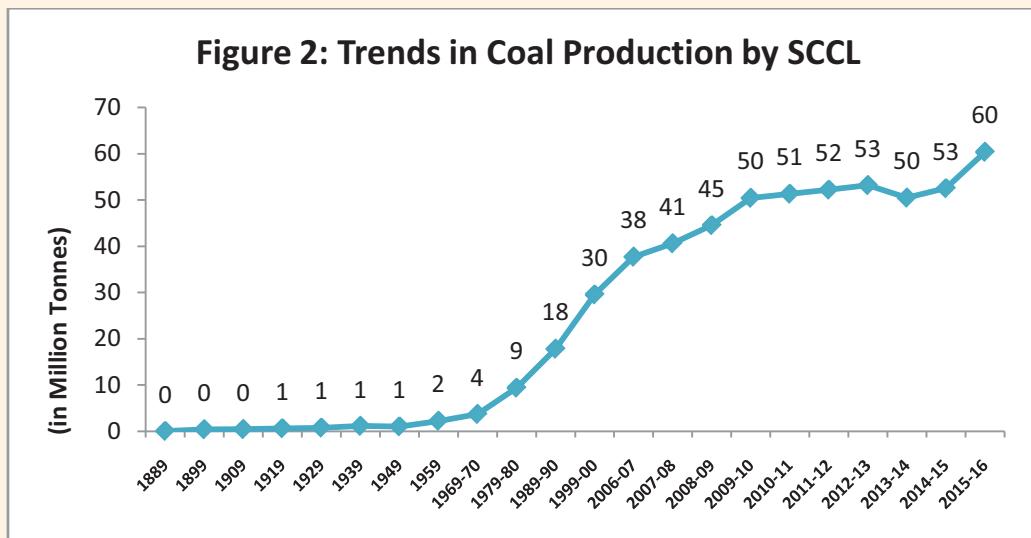
#### **Trend in Production of Coal by SCCL**

In contrast to the company's marginal or negative growth in the years immediately prior to the formation of Telangana State, in 2015-16 SCCL registered its highest ever growth.

The Government of Telangana holds major equity (51 per cent) of SCCL, followed by the Government of India (48.9 per cent), besides a negligible portion held by a few private shareholders. The shareholding pattern is shown in the Figure 1:

Singareni Collieries Company Ltd is the only company producing coal in South India. It meets the thermal energy requirements of Karnataka, Tamilnadu, Maharashtra, Andhra Pradesh and Kerala, along with our own state, besides meeting the requirements of cement, sponge iron, pharmaceutical and fertiliser industries in the state. Presently, SCCL is operating 46 mines (Underground – 30, Open cast – 16) spread over six districts of Telangana State, viz., Kumuram Bheem,

The SCCL is a leader in the implementation of new techniques and in adoption of new technologies. Because of the compulsion of introduction of new technologies and mechanisation in mines and to reduce manual filling of coal at faces, owing to occurrence of accidents, the manpower has come down year by year. Historical trends in coal production by SCCL is given in the Figure 2.



Though the manpower has come down from more than one lakh in 1980s to about 58,000 in 2015-16, the production has increased over the years, indicating increased labour productivity.

### **The Singareni Thermal Power Project (STPP)**

The Singareni Collieries Company Limited, which has been serving the nation by producing coal for about 125 years now, took a great step forward to enter into power generation.

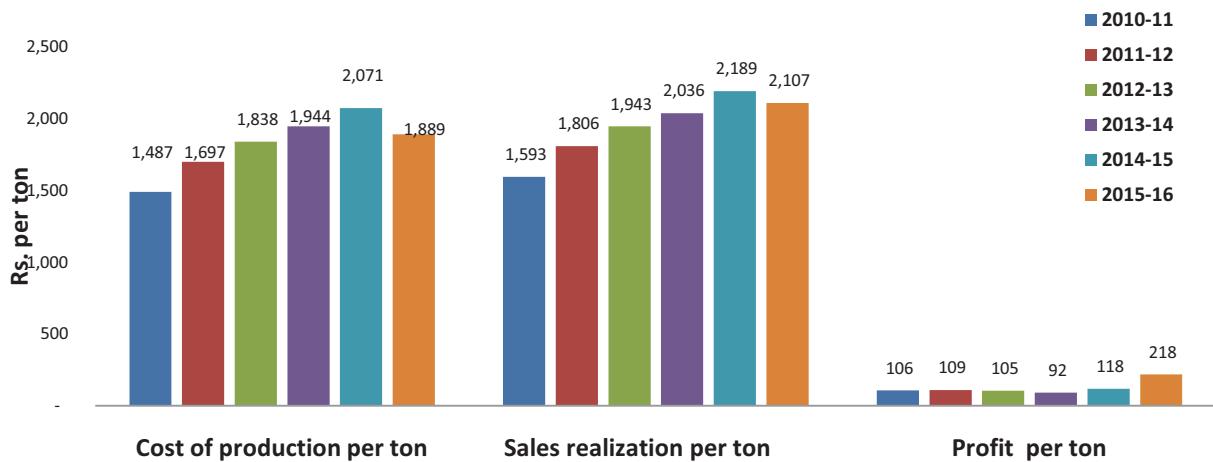
Taking advantage of an abundant water source from the river Godavari and sufficient coal from its own reserves, SCCL looked for new horizons of service-oriented business and took steps to set up a power generation facility. This has given birth to the Singareni Thermal Power Project (STPP). Under the policy initiative of the Government of India, the Electricity Act 2003, SCCL obtained permission to set up a 2x600 MW capacity power project at Jaipur mandal, Mancherial district. Construction started on 11<sup>th</sup> November 2011 and power generation started from 1 June 2016.

The 2x600 MW Singareni coal-based thermal power plant in Jaipur mandal of Mancherial district of Telangana State was dedicated to the nation by the Hon'ble Prime Minister on 7<sup>th</sup> August 2016. Commercial operation of Unit 1 commenced from on 25<sup>th</sup> September 2016 and commercial operation of Unit 2 in November 2016, and both the units are in operation. From the start on 1<sup>st</sup> June 2016, up to 22<sup>nd</sup> January 2017, they have generated 2533.67 million units, of which 2316.55 million units were exported to the Grid. As the power station is supplied coal from the same company, the cost of power supplied by SCCL to the Telangana DISCOM will be comparatively lows.

### **Financial status of SCCL in last 5 years**

Since the year 2001-02, SCCL has not been receiving any budgetary support from GoI and State Government. All the operations and developmental activities are being carried out only with its internal resources.

**Figure 3: Financial Performance of SCCL during 2010-11 to 2015-16**



However, efforts are continued to make the underground mines profitable. The losses from many underground mines are getting reduced. After the formation of Telangana, multi-departmental meetings were held to educate the workmen about all matters. With the regenerated enthusiasm of officers and workmen, the company achieved 600 lakh tonnes production with 15 percent growth in 2015-16, making the company No. 1 in the country. Financial performance of SCCL is presented in Figure 3. The company is in the forefront of Coal India and other public sector companies.

### CSR activities

Singareni is committed to achieving high standards of corporate governance and developing mutual trust in local communities. The company is taking up all possible measures to provide welfare amenities to its employees, particularly in the fields of health, sanitation, residential accommodation, education to workers' children, supply of drinking water, laying of roads, improving health awareness among employees and their families through communication cells, and sports. In the three years since the formation of Telangana (2014-16), SCCL has spent about Rs. 60 crore, as compared to Rs. 23.7 crore spent during the three financial years before the formation of Telangana (2011-14) on CSR activities.

### 8.9. Outlook for the Industrial Sector

Decline in growth of industrial sector could be due to multiple reasons such as excess capacity existing in the industrial sector and prolonged gestation of some of the critical infrastructural projects, and decline in demand due to demonetisation, especially during third and fourth quarters of the current financial year. The new industrial initiative TS-iPASS is a paradigm shift in giving thrust to industrial growth in the state. With the right policy and institutions in place, the state could achieve number-one position in 'Ease of Doing Business' in the country, in spite of being the newest State.

Small and Medium Enterprises sector is vital for generating employment and industrial output. Role of the SME sector has a changing over a period of time, they are becoming organised and supplementing the large industries in a cluster based approaches. However, one of the biggest problems faced by them is industrial sickness and there is a need to address it with a holistic approach.

The major challenges before the state in industrialisation are lack of availability of skilled labour in major thrust areas. However, this could be turned to an opportunity, if we could skill our labour force. Industrial sector has the potential to create large scale semi-skilled jobs, especially for those transiting from rural areas to urban areas and educated youth.

**Annexure-8.1: State-wise merchandise exports in 2015-16**

Sl. No.	State	Value (Rs. in Crore)	Share in All-India Exports
1	Maharashtra	4,36,436	25.45
2	Gujarat	3,25,950	19.01
3	Tamilnadu	1,67,214	9.75
4	Karnataka	1,25,880	7.34
5	Uttar Pradesh	81,209	4.74
6	Andhra Pradesh	79,463	4.63
7	Haryana	67,664	3.95
8	Delhi	60,734	3.54
9	West Bengal	48,696	2.84
10	Punjab	36,574	2.13
11	<b>Telangana</b>	<b>35,444</b>	<b>2.07</b>
12	Rajasthan	34,313	2
13	Kerala	28,652	1.67
14	Madhya Pradesh	25,971	1.51
15	Odisha	19,599	1.14
16	Goa	10,532	0.61
17	Dadra & Nagar Haveli	10,160	0.59
18	Uttarakhand	7,940	0.46
19	Himachal Pradesh	5,849	0.34
20	Daman & Diu	4,845	0.28
21	Chattisgarh	3,685	0.21
22	Bihar	3,498	0.2
23	Jharkhand	3,126	0.18
24	Assam	2,561	0.15
25	Puducherry	2,356	0.14
26	Jammu & Kashmir	814	0.05
27	Chandigarh	685	0.04
28	Meghalaya	575	0.03
29	Andaman & Nicobar	76	0
30	Arunachal Pradesh	43	0
31	Nagaland	28	0
32	Sikkim	19	0
33	Mizoram	9	0
34	Tripura	8	0
35	Lakshadweep	3	0
36	Manipur	1	0
37	Unspecified	84,004	4.9
	<b>Total</b>	<b>17,14,618</b>	<b>100%</b>

Source: DGCIS,Kolkata

**Annexure-8.2: Department-wise time limits for approval under TS-iPASS**

Sl. No.	Approval	Department	Time Limits
1	NOC from Gram Panchayat	Panchayat Raj Department	10 days
2	CFE – Green Category	TSPCB (Consent for Establishment)	7days
	CFE – Orange Category	TSPCB	14 days
	CFE – Red Category	TSPCB	21 days
	d) Authorisation under hazardous waste	TSPCB	21 Days
3	Power feasibility & estimate a) Up to 33KVA connection	DISCOMs (TSSPDCL or TSNPDCL) & TSTRANSCO	2 days for feasibility 10 days for estimate
	b) Above 33KVA connection		25 days
4	Factory plans approval	Factories Department	7 days
5	Plot allotment	TSIIC	7 Days
6	Change of Land Use	CCLA – under NALA Act	14 days
7	Change of Land Use	HMDA and KUDA	30 days
8	Industrial building plan approval	DT&CP/IALA/ HMDA/ KUDA	7 days – DT&CP, IALA 14 Days – HMDA/KUDA
9	Provisional Fire NOC Fire Services Department	Less than 15 m height – exempted from taking Fire NOC and Occupancy	14 days for buildings more than 15 m height
10	Permission to draw water (Borewell permission)	Ground Water Department	14 days
11	Feasibility of water supply	HMWW&SB	14 days
12	Allotment of water from irrigation sources	Irrigation Department	14 days
13	VAT registration	Commercial Taxes Department	1 day in Hyderabad 3 days in Districts
14	Approval of the layout and building plans	Municipal Administration	14 days
15	License to store RS, DS	Excise Department	14 days
16	Firm registration	Registration and Stamps Department	7 days
17	NOC for Explosives License	The District Collector	7 Days
18	NOC for Change of Land Use in urban development area if location is near water body	The District Collector	7 Days
19	NOC for Change of Land Use in urban development area if location is near water body	Irrigation Department	7 Days
20	Permission for felling non-exempted trees under AP WALTA Act.	Forest Department	15 Days

**Annexure-8.3: District-wise approvals under the TS-iPASS**

Sl. No.	District	No of Industries	Investment (Rs. in Crore)	Total Employment (Nos.)
1	Medchal-Malkajgiri	727	3,988	25,585
2	Rangareddy	365	8,939	90,202
3	Sangareddy	286	5,358	20,608
4	Karimnagar	217	230	2,673
5	Nalgonda	147	853	3,744
6	Warangal Urban	127	161	1,825
7	Nizamabad	111	191	2,418
8	Khammam	110	116	1,535
9	Medak	106	2,735	6,353
10	Yadadri Bhuvanagiri	95	484	3,245
11	Siddipet	86	1,033	5,332
12	Adilabad	84	632	1,316
13	Vikarabad	81	564	1,565
14	Rajanna Sircilla	78	91	1,080
15	Mahabubnagar	70	1,412	3,679
16	Warangal Rural	68	101	994
17	Bhadradri Kothagudem	56	7,352	6,028
18	Jagtial	55	9	338
19	Mancherial	55	72	531
20	Mahabubabad	52	54	650
21	Peddapalli	51	11,016	2,887
22	Suryapet	47	341	972
23	Kamareddy	47	216	1,655
24	Kumuram Bheem	34	31	264
25	Jangaon	32	3,214	1,830
26	Nagarkurnool	29	595	697
27	Nirmal	29	417	236
28	Jayashankar	28	34	433
29	Jogulamba Gadwal	27	837	22,474
30	Wanaparthy	16	158	544
31	Hyderabad	11	124	340
	<b>Total</b>	<b>3,327</b>	<b>51,358</b>	<b>2,12,033</b>

#### Annexure-8.4: Distribution of minerals and scope for establishment of mineral-based industries

Sl. No.	District	Mineral Resources	Scope for Mining Based Industries
1	Adilabad	Manganese ore, limestone, stone metal, laterite, ordinary sand	Establishment of cement and ferro-alloy industries
2	Mancherial	Limestone, white clay, stone metal, coal, ordinary sand, stowing sand	Establishment of a greater number of power plants near the places of coal availability to overcome power deficit for the state; scope for units of the cement industry, sponge-iron units
3	Nirmal	Road metal, quartz	Establishment of road metal crusher units.
4	Kumuram Bheem	Limestone, stone metal, white clay, laterite	Establishment of ceramic industry and lime industry
5	Karimnagar	Coloured and black granite, stone metal, laterite, ordinary sand	Establishment of granite cutting and polishing units
6	Jagtial	Coloured granite, stone metal, ordinary sand	Establishment of granite cutting and polishing units
7	Peddapalli	Coal, stowing sand, limestone, road metal, coloured granite, laterite,	Suitable location to setup coal-based thermal power plants, sponge-iron units.
8	Rajanna Sircilla	Coloured granite, stone metal, quartz	Establishment of granite cutting and polishing units
9	Nizamabad	Road metal, quartz, coloured granite, ordinary sand, gravel	Establishment of road metal crushing units
10	Kamareddy	Road metal, quartz and feldspar, ordinary sand, laterite, black granite	Mineral-based ancillary units like fly-ash bricks and blocks, cement mosaic tiles, white cement, granite cutting and polishing units, ceramics and chemical industry have good scope for growth.
11	Warangal Urban	Coloured and black granite, stone metal, quartz, iron ore	Establishment of granite cutting and polishing units
12	Warangal Rural	Laterite, black and coloured granite, stone metal, ordinary sand	Establishment of granite cutting and polishing units.
13	Jayashankar	Coal, iron ore, road metal, laterite, coloured granite, ordinary sand	Establishment of power plants based on coal, fly-ash bricks, hydrated-lime units, sponge-iron plants.
14	Jangaon	Road metal, block granite	Establishment of granite cutting and polishing units.
15	Mahabubabad	Black granite, laterite, stone metal, iron ore, stowing sand, marble, barytes	Establishment of granite cutting and polishing units
16	Khammam	Dolomite, barytes, mica, corundum, garnet, coloured and black granite, chromite, marble, quartz and feldspar, stone metal, ordinary sand	Establishment of granite cutting and polishing units

<b>Sl. No.</b>	<b>District</b>	<b>Mineral Resources</b>	<b>Scope for Mining Based Industries</b>
17	Bhadradri Kothagudem	Coal, copper and lead, garnet, road Metal, quartz and feldspar, marble, ordinary sand	Suitable location to setup coal-based thermal power plants, sponge-iron units.
18	Medak	Road metal, quartz and feldspar, coloured granite, ordinary sand	Suitable for establishment of manufactured sand units, glass industries and stone crushing units
19	Sangareddy	Road metal, quartz and feldspar, granite, ordinary sand	Establishment of granite cutting and polishing units, Ferro-silicon industries, manufactured sand units, glass industries
20	Siddipet	Coloured granite, stone metal, quartz, ordinary sand	Suitable for establishment of manufactured sand units, glass industries and stone crushing units
21	Mahabubnagar	Road metal, quartz, feldspar, coloured and black granite, ordinary sand	Suitable for establishment of manufactured sand units, glass industries and stone crushing units
22	Wanaparthy	Road metal, quartz, feldspar, ordinary sand, black granite	Establishment of quartz and feldspar pulverising units, manufactured sand units
23	Nagarkurnool	Quartz, feldspar, stone metal, black granite, ordinary sand	Establishment of quartz and feldspar pulverising units, road metal crushing units
24	Jogulamba Gadwal	Road metal, laterite, dolomite, coloured and black granite, ordinary sand	Establishment of road metal crushing units
25	Nalgonda	Road metal, quartz, feldspar, black and coloured granite, limestone, limestone slabs, ordinary sand	Establishment of uranium refining unit, cement manufacturing units, glass and ferro-silicon industries, granite cutting and polishing units, stone crushing units
26	Suryapet	Limestone, stone metal, black and coloured granite, limestone slabs, ordinary sand	Establishment of cement manufacturing units, limestone cutting and polishing units, stone crushing units
27	Yadadri Bhuvanagiri	Road metal, colour granite, ordinary sand	Establishment of manufactured sand units, granite cutting and polishing units, stone crushing units
28	Vikarabad	Limestone, limestone slabs, black granite, stone metal, laterite, Fuller's earth, quartz, ordinary sand	Establishment of cement manufacturing units, limestone cutting and polishing units, pulverising units
29	Medchel- Malkajgiri	Road metal, black and coloured granite, quartz and feldspar, amethyst	Establishment of manufactured sand units, granite cutting and polishing units, stone crushing units
30	Rangareddy	Road metal, laterite, quartz and feldspar, black granite, Fuller's earth	Establishment of manufactured sand units, granite cutting and polishing units, stone crushing units, quartz and feldspar pulverising units.



# Economic Infrastructure:

*Boost to irrigation, energy, road sector and urban infrastructure*

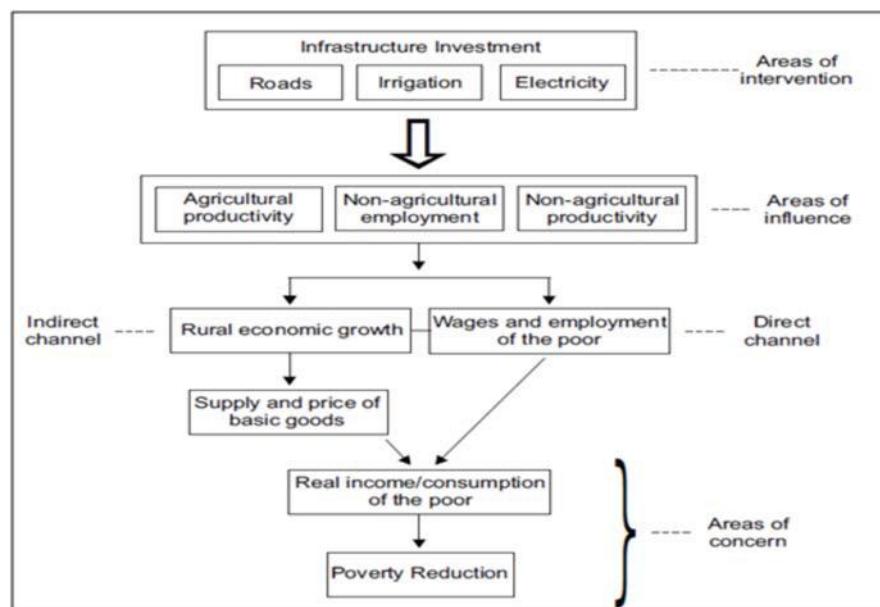
*Progress in development has to be preceded, accompanied, and followed by progress in infrastructure, if we are to fulfil our declared objectives of generating a self-accelerating process of economic development*

— Dr. V.K.R.V. Rao

Infrastructure is one of the major prerequisites for economic growth, as it promotes production capacity, provides employment opportunities, reduces transaction costs, and improves the standard of living. Infrastructure is an umbrella term, consisting of economic and social infrastructure. Economic infrastructure includes irrigation, roads, railways, airports, power plants, drinking water and urban infrastructure etc. whereas social infrastructure comprises of schools, universities, hospitals, dispensaries, etc.

At present juncture of development, the State Government put high emphasis on building/upgrading of the infrastructure in irrigation, power and roads, which especially critical for the development of rural areas. As seen in the Figure 1 investment in the basic infrastructure especially in roads, irrigation and energy will have high impact on improving income in rural areas.

**Figure 9.1: Relationship between infrastructure and rural development**



Source: Ali Ifzal and Ernesto M. Pernia (2003), Infrastructure and Poverty Reduction, Asian Development Bank Publication.

It is also important to note that the present economic growth and development is driven by the urban growth. There is a ‘pull migration’ of educated and skilled labour to urban areas for better employment opportunities and incomes. However, this is putting pressure on the existing urban infrastructure. In order to strengthen the urban infrastructure in the State, the Government unleashed slew of initiatives. The present chapter delineates the flagship schemes and projects that the State Government has launched in infrastructure sector in the following sections.

### **9.1 Irrigation Sector**

Irrigation remains the backbone of agricultural development as it increases crop productivity and reduces the risk of crop failure. Development of irrigation infrastructure is important in Telangana, as rainfall occurs only for three to four months and storage of water is the only source for irrigation during the rest of the year. This has also been recognised and accepted throughout the country for further development of irrigation.

Earlier, the irrigation policies ignored Telangana’s requirements on three fronts: (i) neglect of tank irrigation, leading to destruction of age-old water conservation systems, (ii) inadequate financial allocation leading to non-completion or partial completion of irrigation projects, (iii) need for re-designing of irrigation projects, and (iv) prolonged neglect of utilisation of a large quantum of water resources in Godavari Basin. Important initiative taken up in the irrigation sector is explained below.

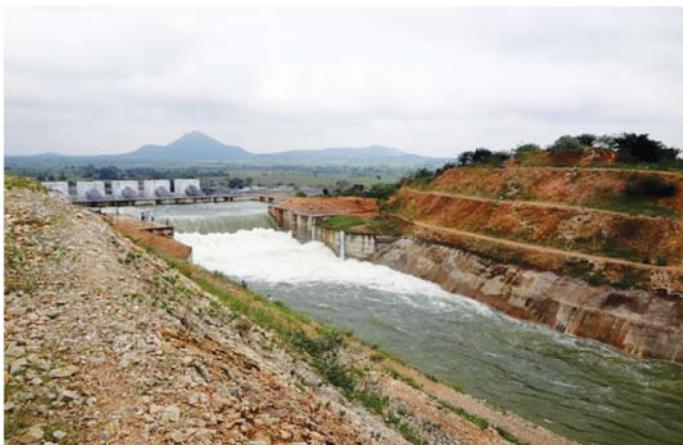
**1. Thrust on major and medium irrigation projects:** Major irrigation is an important component for supporting agriculture sector as it is more dependable in view of the large river basins in Telangana. Major rivers passing through Telangana are the Krishna, the Godavari and their tributaries like the Musi and the Manjira, etc. (see Table 9.1 for catchment areas of major rivers in Telangana). In order to harness the river water, the state government started various major and medium irrigation projects to cater the needs of Telangana. The new projects are formulated to utilise the balance of water available optimally in the Godavari and Krishna basins and regenerate water in these basins with the least inter-state issues. Some of the existing projects were re-engineered so as to make them cost effective, to reduce cost of lifting of water, to make availability of water possible for a greater number of days, increase gravity flow to the maximum extent possible and to minimum submergence and resettlement of existing habitations.

**Table 9.1: Catchment areas of major rivers in Telangana**

S. No.	Name of the Basin	Area in Ha	% of Geographical Area
1	Godavari	1,45,78,191	52.64
2	Krishna	1,29,06,671	46.60
3	Minor basins	2,09,637	0.76

Government of Telangana has taken up the task of providing irrigation facilities to one crore acres (including existing irrigated area) as one of its main flagship programmes with the ultimate objective of ensuring 1 lakh acres of irrigation in each of the rural constituencies. Only then it is expected that prevailing drought conditions and distress in agriculture sector would be mitigated to a great extent and rural economy would be vibrant and stabilized.

Towards this objective 23 Major and 13 Medium Irrigation projects which have been ongoing since different time period are being implemented duly resolving many issues and bottlenecks in their execution. Out of the total contemplated new Irrigation Potential (IP) of 68.19 lakh acres and stabilization of 8.44 lakh acres in these projects, so far 7 projects have been completed and 14 projects are partially commissioned creating a new IP of 12.29 lakh acres. An ayacut of 2 lakh acres has also been stabilized under the above projects.



Mahatma Gandhi Kalwakurthy Lift Irrigation Scheme



Bhakta Ramadasu Irrigation Project

#### Box-9.1: Major bottlenecks in the implementation of the projects

- Delay and backlog of land acquisition causing delay of 7-8 years beyond contractual period of the ongoing works and complete stoppage of the land acquisition process consequent to the Land Acquisition Act of 2013.
- Un-resolved Inter-State issues.
- Delay in Forest clearances and R&R issues.
- Delay in Inter-Departmental issues involving Railway Crossings, National Highways, R&B crossings, GAIL pipeline crossings etc.
- Consequent contractual issues due to all the above delays in execution of works resulting in slowdown in works execution.
- Deficiencies in the planning of certain major projects like Pranahita-Chevella, JCR Devadula Lift Scheme, Rajiv Sagar and Indira Sagar Lift Schemes and scope for increase in the ayacut and stabilization benefits of Flood Flow Canal (FFC) project of Sri Ram Sagar Project (SRSP) etc.

#### Initiatives to speedy completion

Government of Telangana has taken several steps to resolve the long pending issues and bottlenecks and also initiated reforms in the working of the department.

- i) **Land Acquisition:** To revive the land acquisition process, which was in complete suspension for more than one year, the Land Procurement Process (Government Order) was issued.
- ii) **Inter-State Issues:** Govt. has resolved long pending Inter-State issues with Maharashtra and concluded a landmark agreement facilitating the expeditious completion of Pranahita, Kaleshwaram, Chanaka-Korata, Lendi projects in Godavari Basin covering an ayacut of 20.60 lakh acres.
- iii) **Forest Clearances/R&R Issues:** To resolve long pending forest clearances regular weekly and monthly inter department meetings are being conducted between Irrigation and Forest Departments facilitating expeditious clearances of forest areas from the Central Government.
- iv) **Railways and National Highways:** Issues with railway and national highway crossing has caused delay in creation of irrigation potentials. Regular meetings are being held to complete the railway and national highway works in time bound manner.

- v) **Contractual Issues:** Wherever the agreement periods is more than 7-8 years period, the work agencies either stopped the work or slowed down, citing increase in labour and material costs. The issues raised by the Builders Association representing the work agencies have been deliberated and has been resolved through G.O.146 Dated 8.10.2015. This has facilitated resumption and expediting the progress as per revised time schedule.
- vi) **Reforms Taken up:** Govt. has restored the survey and investigation function to the Irrigation Department for ensuring proper and better execution of works. The Government also appointed new Chief Engineer posts for major irrigation projects i.e., Pranahita project, Kaleshwaram project, Sitarama project etc., for focused execution along with several new circles in the field.
- vii) **Re-Engineering of Certain Projects:** In order to rectify defects in certain major projects to suit to the irrigation, drinking and industrial needs and to use the available water to the best possible extent, following projects have been re-engineered, viz., i) Pranahita ii) JCR DLIS iii) Sitarama LIS iv) SRSP Flood Flow Canal.

#### **Box-9.2: Re-engineering of irrigation projects in Telangana**

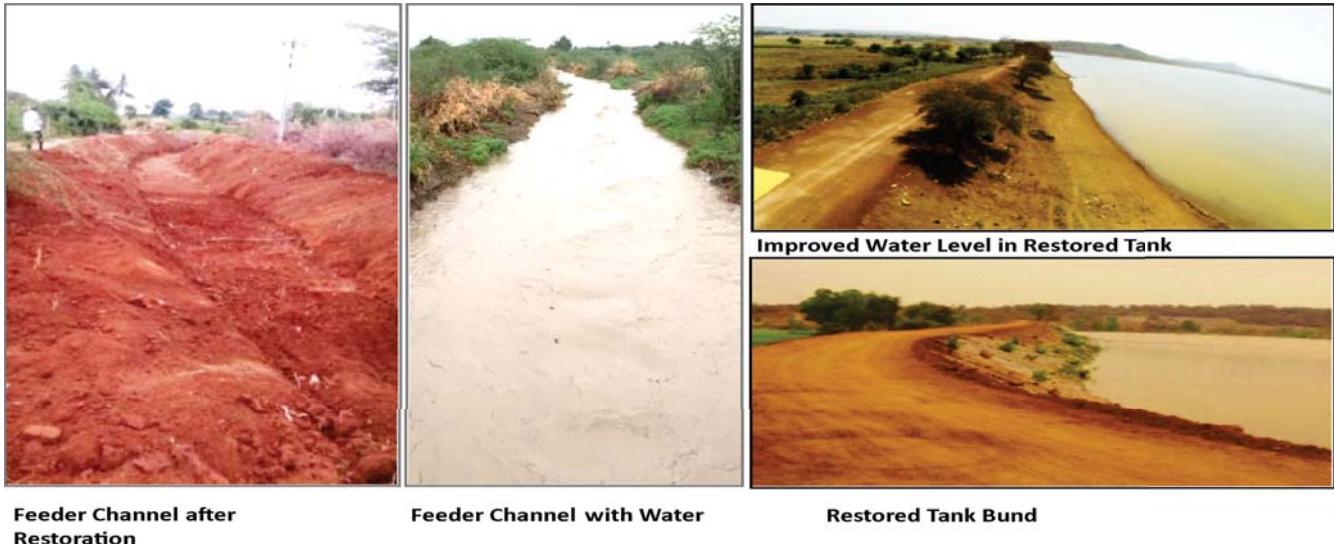
Pranahita-Chevella project is revised and modified into two components viz., a) Pranahita project for Adilabad district benefitting 2.00 lakh acres instead of 56,500 acres contemplated earlier. b) Kaleshwaram Project benefitting 18.257 lakh acres of new ayacut and stabilization of SRSP, Nizamsagar, Singur, Ghanpur, FFC, JCR DLIS covering a total area of 18.829 lakh acres.

**JCR Devadula LIS/Kanthanapally:** The project contemplated for 5.437 lakh acres was allocated only 38 TMC of water from Godavari which has been revised to 60 TMC to meet the requirements and further creation of new Ayacut of 30,000 Acres in the enroute constituencies. The three important medium irrigation projects of Ramappa, Pakhal and Laknavaram are being supplemented and fully stabilized to irrigate two crops every year under them. All the tanks in the upland drought prone areas of command area are also being supplemented and stabilized. To facilitate the utilization of the increased allocation of water a new barrage at Tuppakulagudem is under execution in lieu of Kanthanapally Barrage proposed earlier which was involving large number of villages and area of submergence.

**Sitarama Project:** Recognizing the deficiencies in the long delayed projects of Rajiv Sagar and Indira Sagar Lift Irrigation Schemes in Khammam District, Govt. after comprehensive study of availability of water and location of headworks, has taken up the integrated project of Sitarama Lift Irrigation Scheme to utilize the abundant water available at Dummugudem Anicut to cater to the needs of new Ayacut of 3.87 lakh acres and stabilization of 6.44 lakh acres covering the entire (erstwhile) Khammam District duly foreclosing earlier projects.

**Flood Flow Canal Project of SRSP:** The FFC project of SRSP was contemplated to create new Ayacut of 1.90 lakh acres duly forming a new Mid-Manair Reservoir as the main storage with 25 TMC. The Mid-Manair reservoir has been identified as the main balancing reservoir for the revised Kaleswaram Project also and accordingly the availability of water has increased considerably. Thus the new Ayacut under FFC project has been increased to 2.20 lakh acres and also it is proposed to supplement and stabilize 2 lakh acres under JCR DLIS with suitable balancing reservoirs at Gouravelly and Gandipalli.

2. **Mission Kakatiya:** Tanks have been the lifeline of Telangana owing to the state's geographical terrain. There are about 46,531 tanks and water bodies spread across the State, including 5000 chain-link tanks. Though tanks are mainly used for irrigation purposes, they are also used for fish culture, as common grazing land, as a source of clay for pottery, etc. In short, tanks are the core of the rural ecosystem.



### Schedule of the project

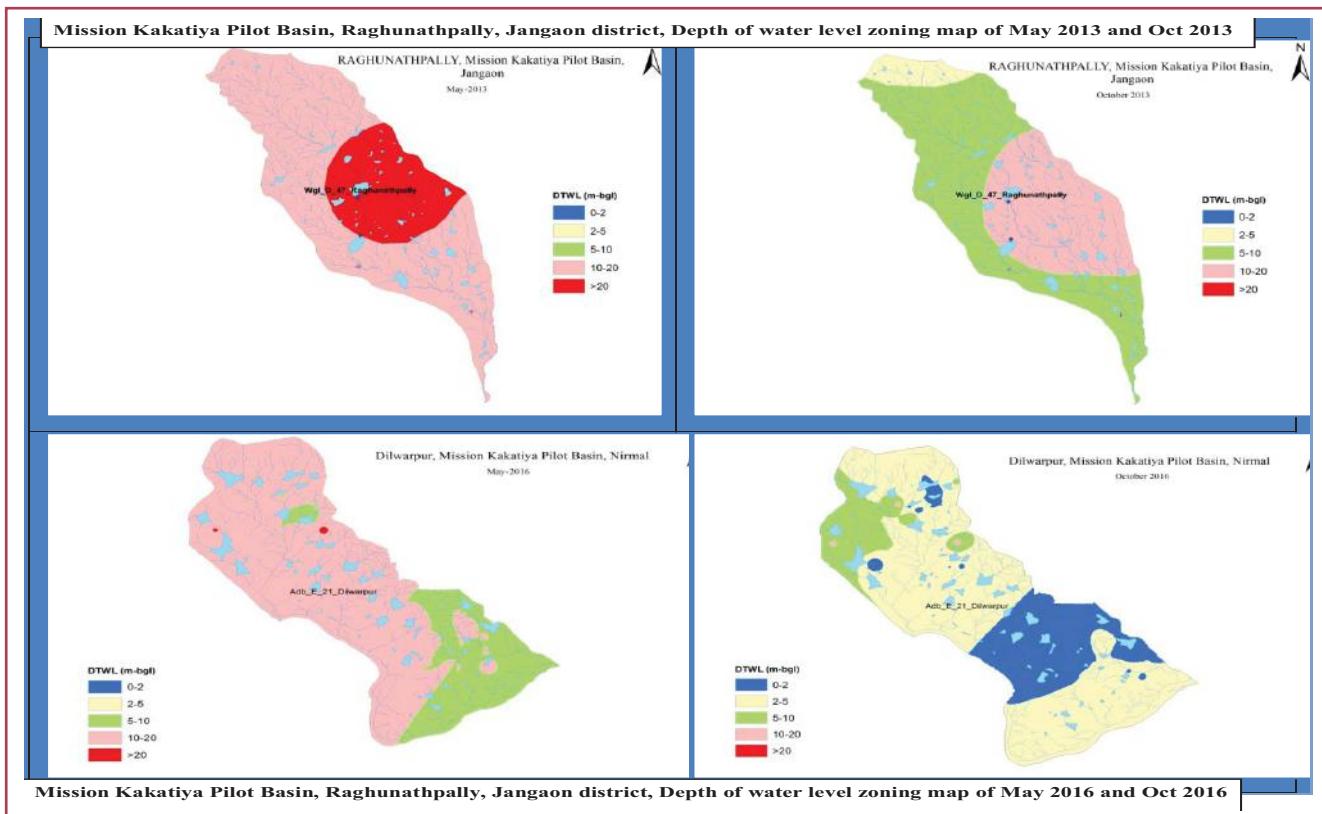
The Mission Kakatiya programme envisages repairing and rejuvenating 9,300 minor irrigation tanks every year. About 8,165 tanks were taken up under Mission Kakatiya Phase-I and works have started on 8,059 tanks and are nearing completion. In the second phase, the government has given administrative sanction for 9,113 tanks. Work was started on 8806 tanks and 1,536 tanks were completed. The remaining works will be completed by June 2017. The Mission Kakatiya Phase-III works are scheduled to be launched from January 2017. It is proposed to take up all the feeder channels for repairs and rejuvenation in Phase-III along with construction of some water tanks.

#### Box-9.3: Impact Assessment of Mission Kakatiya

An evaluation study was made to assess the impact of Mission Kakatiya on improving the ground water resources in the State. About 80 tanks in Over Exploited (OE) Basins of erstwhile district were selected for the Study. The department established 446 observation wells in 80 tanks' ayacut influence zone tank areas. The study reveals that the impact of Mission Kakatiya is seen in the rise of ground water levels in the OE areas.

A comparison has been made of the rise in water levels for the two good rain fall (RF) years, i.e., 2013 and 2016. During 2013, cumulative rainfall of 1000 mm was received through which an average water column of 9.57 m was built up to October 2013 (i.e., during the monsoon period) in nine pilot basin areas. Whereas during 2016 with good rainfall and Mission Kakatiya activity, the average build-up of water column has been found to be 12.12 m up to October 2016 during the monsoon period). It indicates that an additional water column of 2.55 m is due to the impact of Mission Kakatiya.

On an average it is also observed that in Nalgonda and Rangareddy districts impact was not found, due to deficit rainfall. The basin-wise impact is shown through water level zoning maps of May 2013 to October 2013 and May 2016 to October 2016. The areas with lowground-water levels in the range of 10–20 m range reached a range of 5–10 m range during October 2013 whereas areas with the same range of water level (5–10 m) in May 2016 reached a water level range of 2–5 m in October 2016.

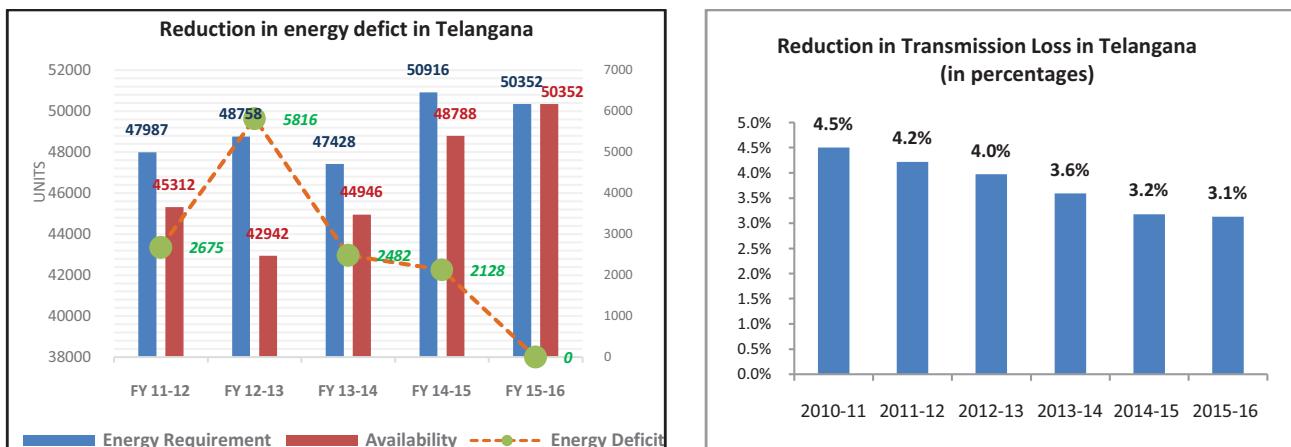


## 9.2. Energy Infrastructure in Telangana

The power sector is one of the growth engines of the economy. There is a direct relationship between economic development and energy consumption. With greater urbanisation, mechanisation of agriculture, and promotion of the manufacturing sector, there is a huge demand for power. Adequate and affordable energy directly contributes in improving the quality of life.

Telangana is one of the highest power-intensive states in India, with per capita power consumption of 1439 units in 2015-16, which is higher than the all-India average (1010 units in FY 2014-15). Energy unmet in the state of Telangana for the years 2011-12 to 2014-15 was in the range of 4–12 per cent, with a deficit of 4.2 percent (including market purchases) in FY 2014-15 (Figure 9.2). There has been no load shedding since November, 2014.

**Figure 9.2: Improved performance of energy sector in Telangana in the last five years**



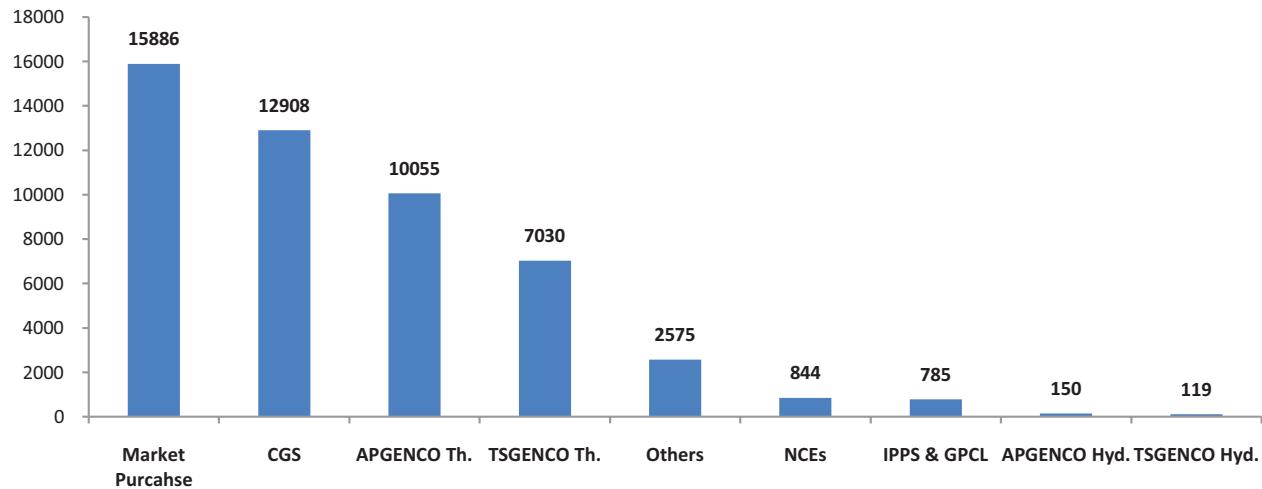
The government is committed to provide 24x7 power supply to all households, industry, commercial businesses, public needs, lift irrigation schemes, other electricity consuming entities and adequate power to agricultural farm holdings. The government plans to meet the demand by increasing the generation capacity and enhancing the energy availability from the existing sources.



### Present power supply scenario

The total installed capacity of erstwhile Andhra Pradesh was divided between the succeeding states in the proportion of 53.89 per cent (to Telangana) and 46.11 per cent (to Andhra Pradesh). The existing installed capacity of Telangana State with Telangana's share of 53.89 per cent, as on December 2016, stands at 12,295.75 MW, which includes state, central and private sectors (see Figure 9.3).

**Figure 9.3: Energy Availability in Telangana  
(Figures in MU)**



The government put all its efforts in providing uninterrupted quality power to all consumers in the state. The peak demand of 8284 MW was met on 9<sup>th</sup> September 2016. The total number of consumers served in Telangana State stands at 1.31 crore as on 31<sup>st</sup> December, 2016, including 21.40 lakh agricultural consumers.

### Power generation by TSGENCO

The Telangana State GENCO is the largest power generating company of Telangana with installed capacity of 5235.26 MW as on 31<sup>st</sup> December, 2016, comprising thermal 2882.5MW, hydel 2351.7MW and solar 1MW. Details of the installed capacity are explained in the Table 9.2.

**Table 9.2: Installed capacity of TSGENCO as on 31<sup>st</sup> December 2016**

S. No.	Name of the Scheme (Station)	Capacity (MW)
A	<b>Thermal</b>	
1	Kothagudem-ABC(4x60MW+4x120MW)	720.0
2	Kothagudem Stage-V(2x250MW)	500.0
3	Kothagudem Stage-VI (1x500MW)	500.0
4	Kakatiya TPP Stage-I (1x500MW)	500.0
5	Kakatiya TPP Stage-II (1x600MW)*	600.0
6	Ramagundam-B(1x62.5MW)	62.5
	<b>Total Thermal</b>	<b>2882.50</b>
B	<b>Hydel</b>	
1	Priyadarshini-Jurala (6x39MW)	234.0
2	Lower Jurala HEP (6x40MW)**	240.0
3	Srisailam Left(4x50MW)	900.0
4	Nagarjunasagar PH(1x110MW+7x100.8MW)	815.6
5	NS Left CanalPH(2x30MW)	60.0
6	Pulichintala HEP, Unit-1 (4x30MW)***	30.0
7	Singur(2x7.5MW)	15.0
8	Nizamsagar(2x5MW)	10.0
9	Pochampad (4x9MW)	36.0
10	Peddapalli (Mini Hydro)	9.2
11	Palair (Mini Hydro)(2x1MW)	2.0
	<b>Total Hydro</b>	<b>2351.8</b>
C	<b>Solar</b>	<b>1.0</b>
	<b>Total TSGENCO (A+B+C)</b>	<b>5235.3</b>

Note: \* KTPP Stage-II was commissioned on 24<sup>th</sup> March 2016.

\*\* Lower Jurala HEP Unit-3 and Unit-4 were commissioned on 28 July 2016; Unit-5 was commissioned on 20 August 2016; and Unit-6 was commissioned on 1 October 2016.

\*\*\* Pulichintala HEP (4x30MW) Unit-1 was commissioned on 29 September 2016, and the other three units are proposed to be commissioned in 2017.

In order to make the state self-sufficient in power, TSGENCO has grounded projects totalling to 5880 MW at Manuguru, Kothagudem and Dameracherla with an investment of Rs. 37,938 crore. As mandated in the Andhra Pradesh Reorganisation Act, the National Thermal Power Corporation (NTPC) is adding 4000 MW (5x800 MW), of which works have already commenced for 1600 MW (2x800 MW) in Phase-I. Strengthening of the transmission and distribution (T&D) network is also being planned and executed in line with capacity addition and load growth.

**Table 9.3: New power projects initiated by Telangana**

No	Name of the project	FY 17-18	FY 18-19
1	Kothagudem TPS Stage-VII (1x800 MW)	800	
2	Bhadradri Thermal Power Plant (4x270 MW)	1,080	
3	Damercherla Thermal Power Plant – A Station (2x800 MW)		1,600
4	Damercherla Thermal Power Plant – B Station (3x800 MW)		2,400
	<b>Total</b>	<b>1,880</b>	<b>4,000</b>
	<b>Cumulative Addition</b>		<b>5,880</b>

## **Renewable energy: Boost to solar power**

Telangana is keen on increasing the power generation from non-conventional energy. A landlocked state, Telangana has high potential to exploit non-conventional energies such as wind and solar. The state is looking for avenues to improve the energy mix by integrating solar power and other non-conventional energy. The state government has significant capacity additions planned in the coming years in solar and wind power. In order to support the initiative, the Telangana Solar Power Policy 2015 is already in place. It has plans to add 5000 MW of solar power through competitive bidding processes.

### **Box-9.4: The Telangana Solar Power Policy 2015**

Telangana has a vast solar potential with average insolation (incoming solar radiation) of nearly 5.5 KWh/m<sup>2</sup> for over 300 sunshine days a year. The Telangana Solar Power Policy 2015 aims at creating an enabling environment for prospective solar power developers to harness substantial quantum of solar power in the best possible manner. This in turn is expected to meet the objective of providing competitive and reliable power supply to its consumers and also to ensure a sustainable fuel mix in the long run.

#### **Objectives of the Solar Power Policy are:**

1. Realise and harness the vast solar power potential of the state.
2. Contribute to the long-term energy security of the state and promote a sustainable fuel mix in power generation through higher contribution of solar energy.
3. To promote solar parks
4. To promote public as well as private investment in solar power generation
5. To promote decentralised and distributed generation
6. To promote grid-connected and off-grid solar applications and effective energy conservation measures.
7. To promote all technologies of harnessing solar energy.

#### **Incentives offered to solar power developers in Telangana are:**

<b>Ease of doing business Provisions</b>	<b>Fiscal and Operational Incentives</b>
Expedited clearance of all approvals by the 'Single Window Desk'	Exemption of Cross Subsidy Surcharge for sale within the state
Deemed conversion to Non-agricultural land status	100% refund of VAT/SGST for all inputs for SPPs for a period of 5 years
Exemption from Land ceiling Act	Exemption of Electricity Duty for sale within the state
Approval by Gram Panchayat within 14 days	Banking of 100% energy permitted for sale within the state
Open Access approvals to be granted within 21 days	100% refund of Stamp Duty for land purchase
SPPs will be registered as factories under the Factories Act within 7 days	Exemption of wheeling and transmission charges for captive use within the state

The state government, as part of the Power for All programme, plans to increase the renewable energy share from 2 per cent in 2014-15 to 26 per cent by 2018-19. To reach this target, tenders have been invited for 2000 MW solar power and it has entered PPAs for 1988 MW and plans to commission additional capacity by

the end of the current financial year. As of now 977.23 MW of solar projects have been commissioned in the state. Telangana has been ranked the second-highest amongst the states in the country in adding solar energy capacity between 2014-15 and 2015-16. Rangareddy and Medak districts stood first and second respectively in the district category.

### 9.3 Road Infrastructure in Telangana

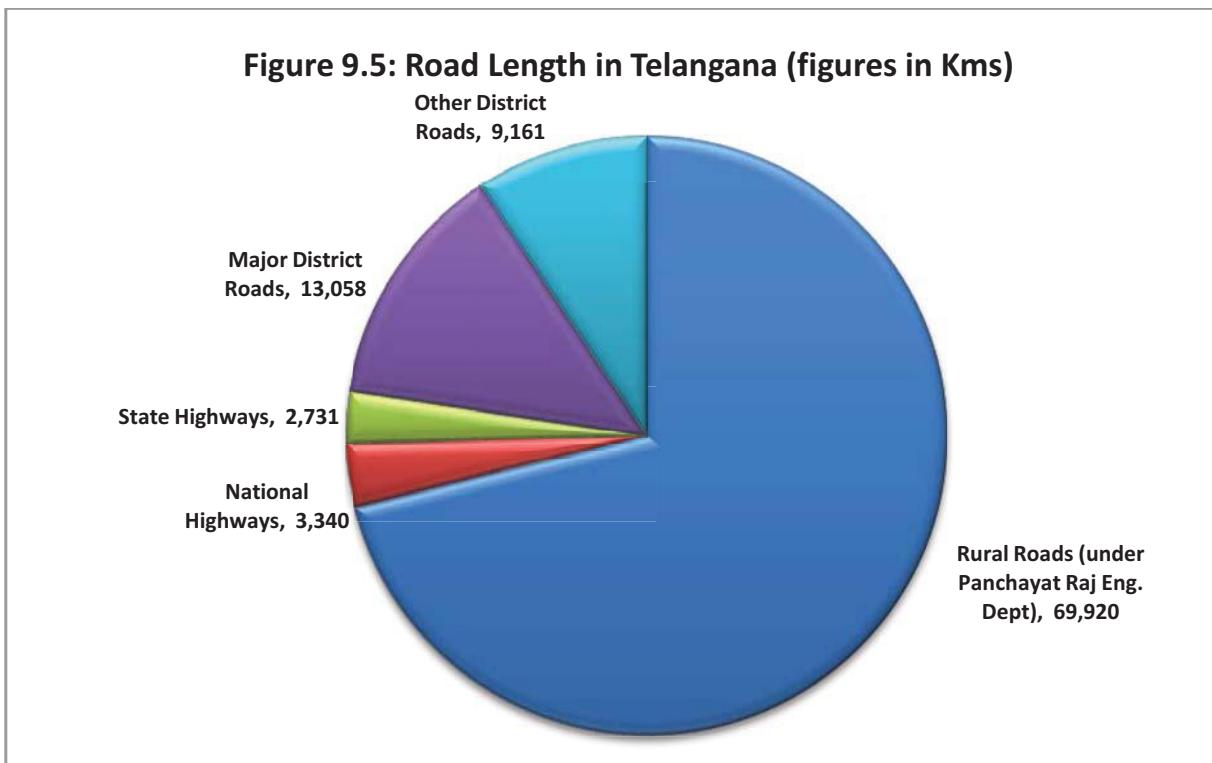
A well connected road network is essential for the movement of people and the transport of produce and services to markets. Availability and quality of roads make cities internationally competitive and can have a multiplier effect on the economy. Within the transportation, road infrastructure is a significant part. Systematic development of the road network is one of the important prerequisites for the development and acceleration of socio-economic growth.

**Figure 9.4: National highways, state highways, major district roads and railway network in Telangana**



Telangana State is well connected by roads. The Department of Panchayati Raj and Department of Roads and Buildings are responsible for building and maintenance of road infrastructure in the state. The total road length in the state is 98,210 km in 2016-17, of which 69,920 km is under the Department of Panchayati Raj and 28,290 km (including national highways) is under the Department of Roads and Buildings.

**1. National highways:** The National Highways wing of the Roads and Buildings Department is the executing agency for the development and maintenance of national highways in the state. The Government of India provides funds for the national highways for the states. There are 18 national highways criss-crossing the state of Telangana, covering a length of 3340 km, out of which 1161 km (including three recently transferred stretches, totalling 310 km) are with the National Highways Authority of India (NHAI) for development under the National Highways Development Project (NHDP). The density of notified national highways in Telangana is 2.90 km/100 sq.km against the national average of 2.84 km/100 sq.km. The Ministry of Road Transport and Highways has approved “in principle” the declaration of 15 state roads as new national highways for a length of 2132 km in Telangana.



**2. Roads under R & B Department:** The Roads and Buildings Department maintains major corridors in the state with a road network of 26,818 km, comprising state highways, major district roads and other district roads. Inorder to improve connectivity of Mandal headquarters with district headquarters, the government has taken up initiatives to widen roads from single lane to double lane. At present about 145 Mandal headquarters out of a total 451 mandalas (excluding Hyderabad) are not connected with double-lane roads. Widening of 139 such roads from single to double lane has been taken up, the total length being 1884 km. Some of the major district roads and state highways are being widened from single-lane to double-lane road for catering to the needs of increased traffic.

**3. Panchayati Raj roads:** There are a total of 24,424 habitations (including 8,686 Gram Panchayats (GPs) and 15,738 habitations) in the state. Of the total 8,686 GPs in the State, 8,231 GPs are connected with bituminous (BT) roads and 455 GPs are yet to be connected with BT roads, requiring a road length of about

1,333 km. Of the 15,738 habitations (other than GPs) in the State, 10,204 habitations are connected with either BT or all-weather roads and 5,534 habitations are yet to be connected by BT/all-weather roads.

The Department of Panchayati Raj is responsible for planning, designing, execution and maintenance of rural infrastructure facilities, such as assisting the local bodies in construction and maintenance of rural roads and development of villages' internal roads. The state government planned to connect all GPs with BT roads and all habitations by BT/all-weather roads. The total length of the rural roads is shown in Table 9.5:

**Table 9.5: Roads under the Panchayati Raj Department.**

Type of Road Surface	Road Length in km	Percentage
Cement Concrete (CC)	2,728	3.90%
Bituminous (BT)	21,218	30.35%
Water Bound Macadam (WBM)	12,919	18.48%
Gravel Roads	14,880	21.28%
Earthen Roads	18,175	25.99%
<b>TOTAL</b>	<b>69,920</b>	<b>100%</b>

#### **9.4. Mission Bhagiratha**

The Mission Bhagiratha (earlier known as Telangana Drinking Water Supply Project) was launched with the objective to provide safe, adequate, sustainable and treated drinking water for the entire rural and urban areas of the State. The project is envisaged to bring down disease burden, a causative factor for consuming contaminated water and improve health standards by providing safe drinking water.

All existing water supply schemes and ongoing drinking water projects in rural and urban areas are integrated and upgraded with the Mission Bhagiratha, with the ultimate objective of providing drinking water of 100 Litres per Capita per Day (LPCD) in rural areas, 135 LPCD to all Municipalities and 150 LPCD to all Municipal Corporations. 10% of water in all the reservoirs is reserved for drinking water purpose and also committed to first charge for drinking water. Necessary water drawl permissions are also accorded.

#### **Box-9.5: Salient features of the Mission Bhagiratha**

- Telangana Drinking Water Supply Corporation is set up under the Chairmanship of Hon'ble Chief Minister for overseeing the implementation and maintenance of the Project.
- The Mission Bhagiratha is divided into 26 main segments covering geographical area of 1.11 lakh Sq.km.
- The Project contemplates to draw about 42.67 TMC of water from rivers Krishna and Godavari.
- The Project is designed in coherence with the nature and topography of the Telangana State thereby 98% of transmission and distribution systems function by gravity.
- Total length of pipelines, in this project is 1.44 lakh kms which includes construction of new pipeline of one lakh kms.
- State Government has also brought in Right of User in Land (ROU) Act for giving rights to the RWS & S department, for laying the pipelines, without acquiring land.
- About 1175 habitations are covered by the project till December' 2016.
- Bulk supply to all the habitations is targeted for completion by 2017.

### Mission Bhagiratha works in progress



## 9.5. Urban Infrastructure

Telangana is one of the fastest urbanizing States in India, with about 40 per cent population living in the urban areas. Hyderabad has been one of the main growth poles of the State and the country. The State Government has unleashed concerted steps to develop Hyderabad as a global city. The State Government is upgrading basic services such as water supply, sewerage, transport and build amenities in the urban areas in twelve urban centres namely Hyderabad, Warangal, Khammam, Karimnagar, Ramagundam, Nizamabad, Mahabubnagar, Miryalaguda, Surpet, Nalgonda, Adilabad and Siddipet under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme, with the help of Central Government. Other significant initiatives taken by the Government to develop Hyderabad and surrounding peri-urban areas are briefly described below.

### (1) Nehru Outer Ring Road

In order to improve the road connectivity and decongest the traffic flow in Hyderabad, a 158-km-long Nehru Outer Ring Road (ORR) was constructed in the outer suburbs of Greater Hyderabad. The ORR passes through Patancheru (on NH-65 towards Mumbai) – Kandlakoi near Medchal (on NH-44 towards Nagpur) – Shamirpet (on Rajiv Rahadari) – Ghatkesar (on NH-163 towards Warangal) – PeddaAmberpet (on NH-65 towards Vijayawada) – Shamshabad (on NH-44 towards Srisailam) – Patancheru (on NH-65 towards Mumbai), providing connectivity to various national highways, state highways and major district roads.

The Outer Ring Road will provide the following benefits: (i) connectivity to peripheral areas of the city, (ii) acts as a bypass to the Hyderabad city, reducing congestion and pollution in the core city, (iii) linkage to

the radial arterial roads, (v) connects the new urban nodes outside the city like Hi-tech City, Games Village, Hardware Park, Singapore Township, Biotech Park, Apparel Park, Finance District, etc., (vi) High-speed connectivity to 22 forthcoming satellite townships, and (vii) linkage to the MRTS and bus systems.

## (2). Hyderabad Metro Rail Project

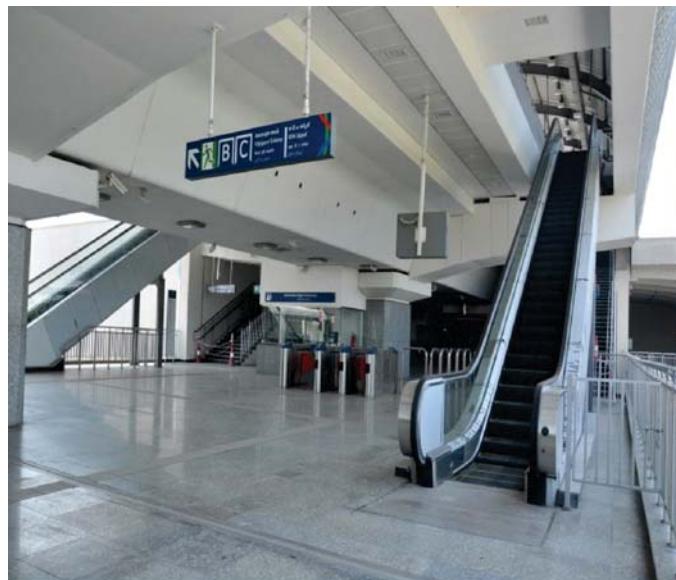
The Government of Telangana is implementing the Hyderabad Metro Rail Project in Public Private Partnership (PPP) mode on design, build, finance, operate and transfer (DBFOT) basis. Phase I of the project covers three corridors with a total length of 72 km, with 66 stations. It is the world's largest Metro Rail Project in PPP mode with an investment of Rs. 14,132 crore. Out of the project cost of Rs. 14,132 crore, Rs. 1,458 crore (10 per cent) is being contributed by the Government of India under the Viability Gap Funding (VGF) scheme and the remaining Rs. 12,674 crore (90 per cent) is being invested by private sector concessionaire L&T Metro Rail (Hyderabad) Ltd. (L&TMRHL). This apart, another Rs. 3000 crore is being spent by the Government of Telangana towards land acquisition, relief and rehabilitation and shifting of utilities, etc.



*Metro Rail elevated viaduct – with two trains*



*Metro Rail technology –signalling and communication system*



*Metro Rail station – passenger amenities*



*State-of-the-art Metro train*

The financial model envisages generation of about 50 per cent of the revenue from passenger fares, 45 per cent from property development and 5 per cent from advertisements and other miscellaneous sources. The concession period of the project is 35 years (including a five-year construction period) which can be extended by another 25 years.

#### **Box-9.6: Salient Features of the Hyderabad Metro Rail Project:**

- Elevated Metro Rail on piers (pillars) with 2 m (7ft) ground footprint at about 30 m (100ft) spacing.  
10 m (22 ft.) flyover-like elevated guide way accommodating two rail lines (up and down).
- Stations at an average distance of 1 km – total 66 stations at 63 locations (3 interchange stations).  
Corridor-I:Miyapur– LB Nagar (29 km; 27 stations)  
Corridor-II: Jubilee Bus Station –Falaknuma (15 km; 16 stations)  
Corridor-III:Nagole–Shilparamam (28 km; 23 stations)
- State-of-the-art signalling system to ensure high safety standards – CBTC (Communication Based Train Control) technology being introduced for the first time in India.
- Video cameras in coaches and CCTVs in stations for better security.
- Elegant, lightweight and air-conditioned coaches with automatic door movement with the doors opening only on platforms
- Sophisticated entry and exit gates – access through contactless smart cards.
- Easy commute for women, children, elderly and differently abled.
- It is expected to generate about Rs. 50,000 crore (Rs. 20,000 crore direct + Rs. 30,000 crore indirect) investments in Hyderabad and its surrounding areas.
- Lower energy consumption (1/5th of road vehicles) and significant reduction in air and noise pollution.
- A 3-car (coach) train carries 1000 passengers and 6-car train carries 2000 passengers. Hyderabad Metro will carry more than 50,000 passengers per hour per direction.
- Substantial reduction in travel time with a maximum speed of 80 kmph and an average speed of 34 kmph (3 times the road speed).
- ‘Seamless travel’ facility through integration with rail terminals, bus depots, MMTS stations and “Merry-go-round” feeder buses to nearby colonies and business areas / offices.
- Frequency of 2 to 5 min during peak hours, with cost-effective price slabs to suit common man’s pocket.
- Apart from addressing the traffic problems, the project aims at rejuvenating many parts of the city and redesigning Hyderabad city as a people-friendly green city and to make it a major destination for global business and investment.

The project works started in June 2012 and the entire project is expected to be completed by December 2018. Two stretches of 8 km between Nagole and Mettuguda in Corridor-3 and 12 km between Miyapur and S.R.Nagar in Corridor-1 have been completed and test runs are successfully going on in these stretches. These two stretches have received safety certification by Commissioner of Metro Rail Safety (CMRS) for opening for commercial operations. Both the major depots at Uppal and Miyapur have been completed. So

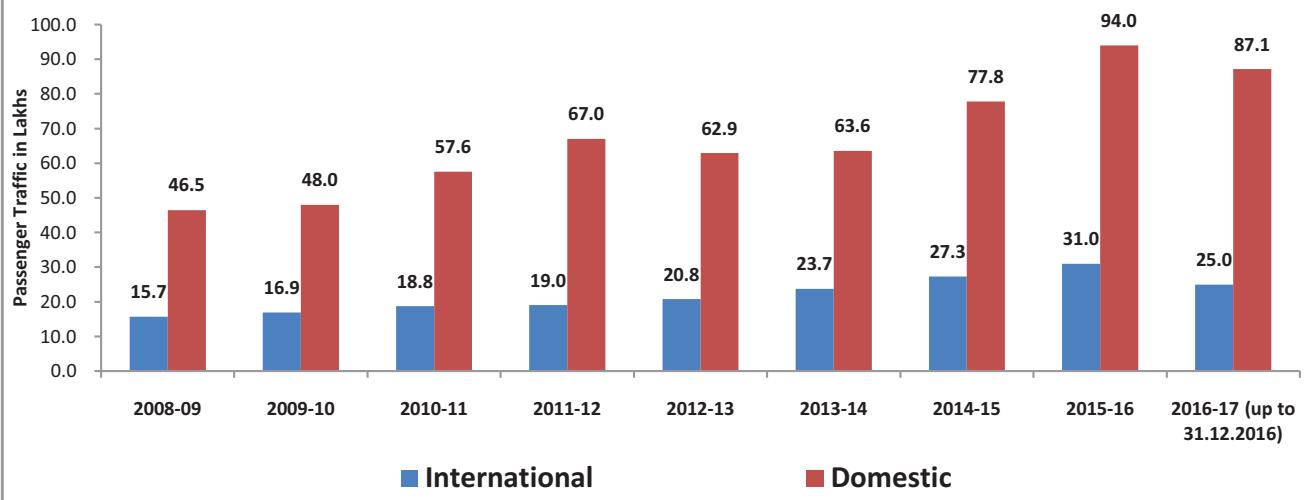
far, 61 km (85 per cent) of foundations; 58 km of pillars (81 per cent) and 50 km of viaducts (68 per cent) have been completed out of 72 km. Overall, 75 per cent of the Metro project has been completed and all the 57 trains have arrived.

### (3). Hyderabad International Airport

Rajiv Gandhi International Airport (RGIA) is built in Public Private Partnership (PPP), a joint venture of GMR Group (63 per cent share) with Malaysia Airports Holding Berhad (MAHB) (11 per cent share), Government of Telangana (13 per cent share) and the Airports Authority of India (13 per cent share). RGIA is an integrated domestic and international terminal, equipped with 12 contact boarding bridges, 30 remote stands, Common User Terminal Equipment (CUTE), self-check-in kiosks (Common User Self Service – CUSS) and 39 immigration counters. RGIA is designed to cater to 12 million passenger per annum (MPPA) which can be developed phase-wise to cater to an ultimate capacity of 40 MPPA. When completely developed, it will have two parallel runways, two integrated terminals, landside commercial zones, two SEZs and the entire necessary supporting infrastructure.

The airport has two major access points: (i) the National Highway NH-7 and Outer Ring Road (ORR) from the western side and (ii) Srisailam State Highway on the eastern side. The first phase of ORR connects Cyberabad region to the airport. The first of its kind, an 11.8 km long elevated expressway (PVNR) enables passengers to reach the airport from the city centre through the NH-7 Highway within 30 minutes. Besides these, Multi-Modal Transportation System (MMTS), Mono Rail Transport System (MRTS) and other alternative modes of transport are being actively explored in collaboration with the state government.

**Figure 9.6: Passenger Traffic in RGIA Hyderabad (in lakhs)**



### Passenger Traffic

There has been increase in passenger traffic at RGIA since its commencement. For the year 2015-16, domestic passenger growth is around 20.8 per cent, based on Year on Year (YoY) growth, whereas international passenger traffic has grown by 13.5 per cent. Overall, the passenger traffic has shown growth of 18.9 per cent YoY.

For the year 2015-16 the domestic cargo growth is around 15.0 per cent YoY, whereas international cargo has grown by 6.3 per cent. Overall cargo has shown a growth of 10.0 per cent YoY. In the year 2015-16 the airport handled 113,002 tonnes.

## **9.6. Outlook for Economic Infrastructure**

In the era of cooperative federalism, there is an increased competition among Indian states to attract investment. Infrastructure is a critical variable for investment consideration for the investors. As Telangana is aspiring to become an attractive investment destination for investment from both domestic and international investors, it is important to put good infrastructure in place. The state government is giving highest priority to irrigation, electricity and transportation infrastructure.

Even while Telangana achieved 100 percent electricity coverage in the state, providing at least nine hours of power supply to the agricultural sector and uninterrupted power supply for industrial and domestic consumption are some of the daunting tasks that the state is facing in power sector. The government has taken up new power projects with the target of generating additional power of 5880 MW to meet future needs. The government brought out the ‘Solar Policy’ to harness substantial quantum of solar power and to ensure a sustainable fuel mix in the long run.

Roads are an important mode of transportation in the state. The government has undertaken several projects to improve road connectivity in the state including four-lane connectivity to all district headquarters from the state capital and two-lane roads to all Mandal headquarters from district headquarters and conversion of 2,132 kms of state highways to national highways.

The works related to the Metro rail project are being taken up in an accelerated mode. Once completed, the project would change the face of the city by smoothening passenger transportation and reducing traffic congestion by discouraging use of private vehicles.



**Rajiv Gandhi International Airport, Hyderabad**



# Services Sector: *The Engine of the State Economy*



*Over the next 10 years, we'll reach a point where nearly everything has become digitized*

— Satya Nadella  
CEO, Microsoft Corporation



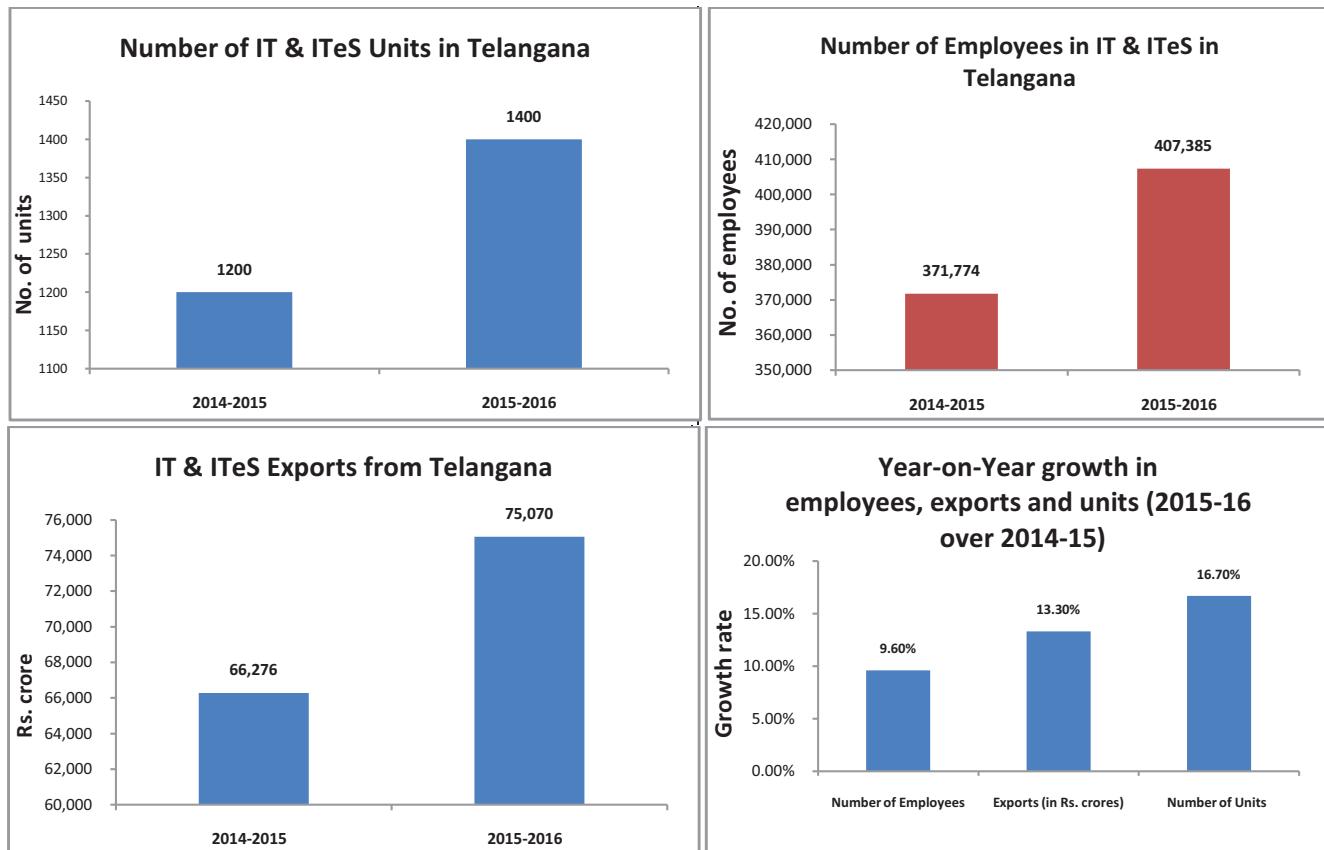
The services sector has become the main engine of growth for the state economy in recent decades. Thriving subsectors of services have been Information Technology (IT) and tourism. Tapping full potentials of these sectors require understanding emerging areas in these sectors and facilitating diversification. Rapid changes in technology have created both opportunities and challenges in the IT sector. The state government has brought in ITC Policy Framework and launched sectoral policies to encourage and facilitate growth and innovation upcoming IT sectors such as gaming, animation, big-data analytics etc.

The tourism sector is another highly potential sector for employment generation. Telangana State is a multi-destination State with a variety of tourist attractions and facilities. The State has become a major attraction for medical tourism and business tourism. The upcoming tourism areas include eco-tourism, tribal tourism, heritage tourism and educational tourism. The Government is promoting tourism in these areas by building infrastructure. The present chapter delineates the changes in policy framework in these two sectors.

## 10.1. Information Technology and IT-enabled Services

Hyderabad is recognised as one of the leading information technology hubs globally. The city houses over 1400 companies, both large and small, which together employ over 4 lakh professionals, besides supporting an indirect employment to over 6.5 lakh people. The total value of software and IT products exports accounted for Rs. 75,070 crore in 2015-16, registering an annual growth rate of 16 per cent, which is 3 per cent higher than the national average growth. Telangana contributes a 12 per cent share of the country's IT exports and Hyderabad ranks second in terms of total revenues from the IT sector in the country. IT sector exports constitute about 68 per cent of total exports from the Telangana (See Figure 10.1):

**Figure 10.1: Performance of IT sector in Telangana**



As a result of industry-friendly policies and other initiatives to attract investments into the state, there has been a resurgence of interest in the IT and allied sectors in the state. Some of the biggest global companies in the IT sector have shown interest in the state. Hyderabad is now home to some of the leading software companies in the world, such as Microsoft, Google, Deloitte, Facebook, Cognizant, Oracle, Amazon, Apple, Salesforce, etc. Many of these companies have made Hyderabad the base for some of their most critical global operations.

Apart from the conventional IT/ITES and electronics manufacturing, the world has seen the emergence of new technologies such as big data, gaming, animation, photonics and cyber security, etc., in recent times. These new technologies are important and India is going to play a big role and Telangana intends to be the number one technology destination. The electronics manufacturing industry, which had by and large ignored India as a whole for the last many decades, is now showing tremendous affinity towards India. Telangana offers a very attractive destination for the electronics and semiconductor industry, and already some of the leading companies have started commencement of units in the state.

In order to seize opportunities in upcoming sectors, Government of Telangana launched the new ICT Policy, Electronics Policy, IMAGE Policy (for the animation and gaming Industry), Innovation Policy and Rural Technology Policy to augment growth in these sectors. Further, to augment growth in emerging sectors, Government of Telangana launched four sector-specific policies such as Data Centres Policy, Open Data Policy, Cyber Security Policy and Data Analytics Policy.

## **ICT Policy Framework 2016**

Although Telangana is emerging as an important global IT destination due to its geographical location, infrastructure facilities and available talent pool, there is a need to drive its IT industry to the cutting-edge areas by creating a conducive policy framework and to make IT a catalyst for improving living standards of people. In these directions, Government of Telangana identified 10 focus areas related to IT investments and rolled out a policy framework towards this end. The policy aims at doubling the exports from the present Rs.75,070 crore to Rs.1,20,000 crore and to create 10 lakh additional jobs in the IT sector by 2020.

### **Box.10.1: Objectives of the ICT Policy 2016**

1. Providing congenial industry-friendly climate for IT companies to locate, grow and sustain their operations most competitively in a hassle-free environment in the state
2. Creating new skill-development initiatives and employment opportunities for the educated youth of all sections of society across all regions
3. Achieving higher levels of export turnover resulting in enhanced productivity and augmentation of Gross State Domestic Product (GSDP)
4. Encouraging innovation and entrepreneurship within the state
5. Spreading IT to Tier 2 locations in the state and
6. Leveraging information technology as a tool for the socio-economic development of the region.

**A brief on the 10 focus areas of the ICT Policy is presented below:**

#### **1. Expansion of IT / ITES Units**

It is aimed to make Hyderabad the national leader in terms of IT exports and employment. Even while encouraging all existing IT/ITES companies to expand, the policy offers various incentives for new companies to establish their units in the state, especially in Tier-2 cities like Warangal, Karimnagar, Nizamabad, etc. Incentives initiated include construction of IT parks, creation of world-class infrastructure, investment approvals as per the provisions of TS-iPASS, special incentives to set up units at Tier-2 cities, etc.

### **Box-10.2: Incentives Offered to IT Industry**

The following are a few incentives offered to the IT industry under the ICT Policy, 2016:

- Reimbursement of stamp duty, transfer duty and registration fee, patent filing costs/copyright/trade mark, quality certification and exhibition stall rental cost etc.
- Allotment of government land
- Lease rental subsidy refund
- Subsidy in power supply

Small and Medium Enterprises (SME) in IT are significant players in the IT services. There are about 500 IT companies in the SME category that collectively employ over 70 per cent of the total IT professionals. Additional incentives are being offered to boost the SME sector in the state, such as: (i) construction of IT towers in Gachibowli/ Madhapur/ Nanakramguda exclusively for SMEs, which can be used as front offices for client interactions and brand building, and (ii) creation of Specialised Financial Instruments to meet the credit needs of the SME sector in collaboration with national and international investment banks, financial institutions and private equity funds.

## **2. Electronics Manufacturing**

The policy provides a roadmap for making Hyderabad a global hub for electronics manufacturing by providing a strategic impetus to the electronic hardware and design industry. The policy provides for infrastructure support, preparing a larger pool of skilled workforce, offering a supportive policy environment, and providing a competitive tax and fiscal regime. The state is setting up two EMCs (Electronic Manufacturing Clusters), spread over 600 acres and 310 acres at e-City and Maheshwaram Science Park, respectively. An LED park of 120 acres is being built exclusively for LED assembly and manufacturing. This park will be home to many of the LED manufacturers in Hyderabad.

## **3. Promoting Innovation and Entrepreneurship through T-Hub**



T-Hub is India's largest incubator for startups and a unique public-private partnership between the government of Telangana, IIIT-Hyderabad, ISB and NALSAR, and other private sector players. T-Hub is not just an incubator which supports startups through their journey, it is a startup which is creating a startup ecosystem in Hyderabad to make the city the startup capital of India.

### **Box-10.3: Key Achievements of T-Hub**

Key achievements of the T-Hub are listed below:

- 711 entrepreneurs are working in T-Hub under 200 startups.
- T-Hub has conducted 92 events/ workshops and reached 2995 entrepreneurs.
- T-Hub has inked partnerships with 15 venture capital funds, 7 angel networks, 25 seed funds, 30 incubators and accelerators
- T-Hub has forged multiple partnerships with key stakeholders in ten countries including USA, UK, Germany and Singapore.
- Startups have grabbed several millions in investment: Banyan Nation (USD 8 lakh), Flatpebble (Rs. 4 crore), V-deliver (Rs. 2.5 crore), etc.
- Major corporate companies like Microsoft, Google, Amazon, HP, Cisco, IBM, Yes Bank and others have been working with several startups by entering into MoUs/Partnerships with T-Hub.

After achieving a phenomenal success in the establishment of T-Hub Phase-I, Government of Telangana has embarked on a plan to develop T-Hub Phase-II in 3 acres of land with a total built-up space of 3,50,000 sqft, providing IT incubation space for 4,000 IT entrepreneurs /professionals. T-Hub Phase-II will be operational by 2018.



T-Hub: Technology Incubation Centre in Hyderabad

#### 4. Skilling through TASK

The Telangana Academy for Skill and Knowledge (TASK) has been established as a non-profit organisation to enhance the synergy between Government, academia and industry with an objective to enhance the employability quotient of the youth in the state and to provide quality human resources and services to the industry. As of date, about 61,769 students have been trained through TASK, and of whom 3,200 students were placed in employment. About 2,000 faculty were also skilled through TASK initiatives in the state.

##### Box-10.4: Innovating Interventions in Skill Development by TASK

The Telangana Academy for Skill and Knowledge (TASK) has several innovative interventions for skill development. Some of them include:

- (i) **Professors of Practice:** Professors of Practice help to impart training to undergraduate students that improves soft skills that would impact the students personal and organisational skills. Training students through the new skilling process designed by TASK is a critical component for the students' success and therefore the role that POPs (Professors of Practice) play in this process is of utmost importance. A Professor of Practice is a distinguished professional from industry (e.g., IT / ITES, banking, financial, services, insurance, retail, healthcare, automobile, aviation, pharmaceuticals, government services) either practicing or retired.
- (ii) **Enhancing the Employability Quotient:** Effective pedagogy incorporates an array of teaching strategies that promote the wellbeing of students, improves students' confidence and thus enable the students to perform better in interviews. The amount of experience and their exposure to the corporate industry would help in enhancing the Employability Quotient of the student, which is the core value of TASK.
- (iii) **Finishing Schools:** With a view to meet the shortage of skilled human resource requirements of corporates, TASK has taken up the initiative to conceive and roll out Finishing School Pilots

for students who have completed their graduation and are currently unemployed, with an objective of enhancing their Employability Quotient. This programme is held for 10–12 weeks, wherein the skilling sessions on technical, organisational and personal skill modules are delivered through instructor-led training, e-learning and self-study labs. These sessions offer industry-relevant learning content, which helps the students in enhancing the success rate for getting through a job interview and selection process.

- (iv) **Technical Skilling:** In collaboration with technology organisations like Oracle, CDAC, SAP, Samsung, IBM, Infosys, CISCO, Salesforce, BIL, CallHealth, ERAU, Pratt & Whitney, etc., TASK is conducting training programmes to meet their manpower requirements.
- (v) The Technology Entrepreneurship Programme (TEP) is a unique initiative of TASK for talented undergraduate students in their third year of graduation to educate and promote technology and entrepreneurship in engineering colleges. Most of the students are not in a position to get the technical help from their colleges and hence the TEP helps the students make their prototypes more marketable.
- (vi) **MOUs Signed by TASK:** TASK has signed Memorandums of Understanding with pharmaceutical, banking, finance, manufacturing and aerospace industries in order to create employment opportunities for the youth of Telangana.
  - Oracle and TASK have signed a partnership agreement to offer the Oracle Academy curriculum to engineering colleges in the state
  - The partnership between TASK and Internshala will provide access to internship and online training portal where students can find an internship in their field of interest.
  - TASK has signed MoUs with Salesforce Academic Alliance Program and Salesforce Developer Relations to provide valuable salesforce skills for students and faculty members over the next two years
  - Call Health and TASK have signed a partnership to provide livelihood opportunities for unemployed youth in Telangana. The plan is to train youth as paramedical and entry-level officers in the healthcare sector over the next few years.
  - Along with this, TASK has also signed MOUs with small and medium-size enterprises.

## 5. Procurement of IT Products and Services by the Government:

The state government is encouraging all government departments to use technology-driven solutions for improving governance, for improving the internal efficiency, or to contribute to better delivery of citizen services. For this purpose, the IT department of the State Government is liaising with large IT companies, SMEs, start-ups and entrepreneurs.

The Government of Telangana is implementing various e-governance projects like Mee-Seva, Simple File Tracking System, e-Governance Summit, e-Governance Awards, Mobile based Monitoring System, e-Office, Online G.O., and maintenance of government website ([www.telangana.gov.in](http://www.telangana.gov.in)) etc. Some of the important e-governance projects include: (i) State Service Delivery Gateway, (ii) e-District Mission Mode Project, (iii) Government Order Register (GOIR), (iv) KM-ATOM, a file tracking system for districts, (v) e-Office Project, (vi) Telangana Portal, (vii) e-Procurement, etc.

### **Box- 10.5: RTA M-Wallet App: First of its kind in India**

As part of good governance initiatives, Government of Telangana rolled out a first of its kind ‘RTA M-Wallet App’ which will help citizen reducing burden of carrying vehicle-related documents. Every driver/rider can store the official documents issued by the Transport department like driving license, registration certificate, insurance certificate, permit, and fitness etc., for a hassle-free, paper-free ride experience. The app derives the data from the centralised database of transport department and update the services on real time basis.

#### **Salient Features of ‘RTA M-Wallet’ App:**

- It is a digital wallet for all vehicle related documents (driving licence, registration certificate, insurance certificate, permit, fitness etc.).
- RTA M-Wallet can be downloaded on Android and IOS platforms.
- It allows auto-fetch the documents with just a single click, if associated with your mobile number.
- Login from any mobile to access your documents.
- A simple and efficient single-screen display for all your vehicle related documents.
- Citizen-friendly options to add multiple vehicles owned by same person and fetch documents.
- The documents once downloaded will be saved permanently and are handy for further use.

## **6. New Initiatives:**

High levels of creativity and innovation are the hallmark of the global IT landscape today. In order to make the state a frontrunner in embracing all these new and emerging technologies, the following areas have been identified as potential sectors and special focus is given to these areas.

### **(i) Photonics Valley Corporation**

Photonics science includes the generation, emission, transmission, modulation, signal processing, switching, amplification, and detection/sensing of light. The Government of Telangana has decided to lead the next computing revolution in terms of facilitating the exploration of ‘Photonics’ technology as the alternative computing paradigm. As the world is probing this new direction in view of the exigencies of the continuing transformation of existing chip technology, the Government of Telangana believes in the dominant opinion that photonics offers the way forward. In this pursuit, it launched the ‘Photonics Valley Corporation’ as a non-profit company and extended the mandate for facilitating the evolution of the technology through a comprehensive ecosystem. It is expected to boost the manufacture of electronics and semiconductors.

### **(ii) GAME City – Gaming, Animation, Media and Entertainment**

The global gaming and animation market is expected to grow to USD 240 billion in the coming two to three years and a significant portion of this work is outsourced to India. The Government of Telangana has identified AVCG (Animation, VFX, Comics and Gaming) as one of the key growth drivers in terms of investments and employment. Hyderabad has a large presence of animation, VFX, comics and gaming companies. Over 75 companies, including VFX Studios, 2D, 3D animation and gaming companies are based in Hyderabad, employing over 30,000 professionals. In view of the large potential in this sector, the Government of Telangana, in association with STPI, has developed a state-of-the-art incubation facility “IMAGE” in the heart of the IT district. This incubation facility is specially designed to support startups and SMEs working in the gaming, animation, multimedia, and entertainment industry. The state unleashed efforts to create dedicated infrastructure for the sector in the form of the “GAME City”.

### **(iii) Smart Technologies**

The Government of India has launched Smart Cities and AMRUT (Atal Mission for Rejuvenation and Urban Transformation) scheme covering 100 smart cities and 500 towns respectively. Although smart cities have various components like smart planning, smart governance, smart citizens, etc., smart technologies form its backbone. These technologies aid the city management in developing intelligent traffic systems, waste management, relief and rescue operations, energy conservation, and improving citizen involvement. While many technologies are already in use of the world over, most of these technologies have the potential to be utilised in Indian cities following suitable modifications. Further, there is always scope for developing tailor-made smart technologies for India.

### **(iv) Data Analytics**

The Government of Telangana has taken initiatives to promote and invest in Data Analytics. Data Analytics or Big Data is a broad term for data sets so large or complex that traditional data processing applications are inadequate. Apart from search, storage, transfer, visualisation and privacy of data, challenges also include capturing and processing of data using predictive analysis methods to extract value. To facilitate research and product development in this area, the Government of Telangana proposes to develop a Data Analytics cluster. Anchor companies, world-class universities, SMEs, and startups will be incentivised to participate in the cluster. Companies operating from Telangana will also be encouraged to take up Data Analytics assignments for various government departments. The Government has come out with a separate policy on Data Analytics.

### **(v) Data Centres**

The government aims to transform the city of Hyderabad into a global data centre hub. Hyderabad offers a multitude of advantages which favour data centre development. Hyderabad already has a thriving data centre ecosystem, including one of India's few Tier 4 data centres. A number of global players have data centres hosted here due to proximity to a 1 GBPS data line. On the geographic location front, Hyderabad is located in one of the least seismically active zones and is far away from the coast, thereby having low susceptibility to other natural hazards. Government has offered various incentives to data centres through a sectoral policy.

### **(vi) Open Data**

Various arms of the government are involved in collection, generation and updating of data on multiple issues using public funds. Such data should be readily available for citizens' consumption. Although individual departments share data for use by civil society and the private sector, there is a need for an open data policy that enables proactive data sharing by every department. This will not only result in greater transparency, but also help the government in better decision-making. To achieve this objective, the Government of Telangana has brought out a sectoral policy on Open Data.

### **(vii) Internet of Things (IoT)**

Internet of Things (IoT) is a seamless connected network system of embedded objects / devices, with identifiers, in which communication without any human intervention is possible using standard and interoperable communication protocols. IoT can also be defined as interplay for the software, telecom and electronic hardware industry and promises to offer tremendous opportunities for many industries. The Government of Telangana is investing in IoT to develop connected, secure and smart systems for the state's economic, societal, environmental and global needs.

### **(viii) Cyber Security**

Cyberspace is vulnerable to wide variety of incidents, whether intentional or accidental, manmade or natural, and the data exchanged in the cyberspace can be exploited for nefarious purposes by both states and non-state actors. With increasing amount of classified data that is used for various purposes, large corporations and companies face huge threats from activities such as hacking and phishing. In this direction, State Government has launched a comprehensive Cyber Security Policy.

### **(ix) Digital Telangana**



In line with the 'Digital India' of the Government of India and the Telangana Government has planned for a very ambitious Digital Telangana programme, with two pivots, one each representing the supply and the demand side.

On the supply side, the main aim is to ensure that digital facilities become available to each and every person in the state. This is being made possible through (i) optical fiber connection to each household through

using the water grid trenches, and (ii) providing 4G services in the entire state in collaboration with various telecom operators.

Similarly, on the demand side, the intention is to make each and every person digitally literate, aware and empowered so that he/she can make best use of the digital facilities that are being made available right at his/her doorstep. The strategies for this include: (i) the Digital Literacy Programme aimed at making at least one member of every household digitally literate in the next five years and (ii) the School Computer Literacy Programme targeted to teach the basics of computers to every child from Class 6 onwards.

### **7. T-Fibre**

Telangana Fibre Grid (T-Fibre) is a novel initiative, where the trenches dug for Mission Bhagiratha (Water Grid) to supply drinking water, would be utilised to lay fibre-optic cables. T-Fibre digital infrastructure shall provide active and passive networks to all 83.58 lakh households in the entire state of Telangana.

#### **(i) E-Governance & M-Governance**

Mee-Seva is the electronic service delivery platform of the Government of Telangana that acts as an integrated and collaborative window for many government departments to serve the citizens with strict timelines of delivery of services. It involves the central pooling of all records, digitally signing, storing them in the database, rendering them using a web-service with efficient and real-time MIS reports (soft and hard copies) to the departments. This has resulted in improved efficiency in service delivery, higher citizen satisfaction, increased transparency and accountability to the government. Telangana currently has 4,168 citizen service centres spread far and wide that are locally called Mee-Seva centres. These centres provide various G2C services and utility payment services through an online platform. Presently about 490 services covering 34 departments are being delivered through these centers to the citizens and about 90,000 to 1 lakh citizens are served daily through these centers.

## **8. Mee-Seva**

The objective of Mee-seva is to provide smart, citizen-centric, ethical, efficient and effective governance facilitated by technology. The initiative involves universal and non-discriminatory delivery of all government services to citizens and businessmen of all strata, and improved efficiency, transparency and accountability for the government.

The project brings in a digital PKI-enabled integrated architecture through multiple service delivery points by fusing the various pre-existing state initiatives with the mission-mode projects like State Data Centre (SDC), State Wide Area Network (SWAN) and Common Service Centres (CSCs) of the National e-Governance Plan (NeGP) of the Government of India.

## **9. Promotions**

The IT Policy Framework proposes to promote investment into the state by sustained promotions by: (i) international and domestic roadshows, (ii) participation in international and domestic trade shows and (iii) hosting major international and domestic events in Hyderabad so that the advantages of the state are showcased more vividly and more contextually.

## **10. Enhanced Quality of Living**

While IT builds world-class infrastructure and creating an accommodating regulatory environment for companies investing in the state, the government also realizes that people and local talent are equally important for propelling the growth of the economy. Therefore, the state government is constantly working towards further improving the quality of life for its citizens.

### **Developing Tier-2, Tier-3 Cities and Rural Areas**

With Hyderabad as a role model, other cities in the state of Telangana, i.e., Warangal, Karimnagar, Khammam and Nizamabad, are being developed as Tier-2 IT hubs. The Telangana Government is aggressively promoting the expansion of the IT industry to Tier-2 cities. Warangal, the second-largest city in Telangana after Hyderabad, is endowed with the right infrastructure, educational institutions, human resources and physical and fibre connectivity, among others. The government has already effected some key initiatives for the city of Warangal with the aim to make it another IT destination in Telangana.

The Government of Telangana, as a matter of policy, is encouraging IT/ITES companies to consider Tier-2 locations for setting up and expanding their units. The government will further incentivise these companies by providing additional benefits. The following outcomes were achieved in the last year:

- IT Incubation Tower inaugurated in Warangal
- Cyient Technology Development Centre commenced operations in Warangal
- MoU with Eclat Health Solutions to set up KPO in Karimnagar

The state government is also promoting the concept of Rural Technology Centres through a special package of incentives for IT/BPO companies desiring to set up their operations in villages and Mandals. The objective of the government is to create balanced socio-economic development and take the benefits of technology to the common man.

However, since the penetration of information technology in rural areas is still in a nascent stage in the country, setting up and operating a business comes with its own risks. The Government of Telangana has come up with a comprehensive set of incentives that mitigate the risks associated with this business through the Policy on Rural Technology Centres 2016. The state government is offering various incentives for the promotion of rural technology centres.

**New IT clusters at Budvel and surrounding villages of Rajendranagar Mandal:** Over the last few months, a number of IT companies expressed their interest in establishing or expanding their presence in Hyderabad. In response, the state government proposed to develop a new corridor at Budvel and surrounding villages in Rajendranagar Mandal.

## 10.2. Tourism Sector

Tourism has become an important sector for economic growth and employment generation. With increased income levels, peoples' ability to enjoy various types of tourism is on rise. However, the growth of the tourism sector in the state is highly dependent on tourism amenities. Therefore, the government has a critical role to play in developing basic infrastructure. At present most of the tourists arrival in the state is confined to Hyderabad, the state capital, and some pilgrim centres. In order to expose the unexplored eco-tourism spots, four tourism circuits are being developed in the state.

### 1. Eco-tourism Circuit in Nagarkarnool district:

Eco-tourism is environmentally responsible travel and visits to relatively undisturbed natural areas, in order to enjoy and appreciate nature in a way that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations. The Eco-tourism Circuit proposed in Nagarkarnool district is on these lines.

Map of Proposed Eco-tourism Circuit



Proposed destinations under the eco-tourism circuit are as given in the table 10.2

**Table 10.2: Destinations covered under Eco-tourism Circuit in Nagarkarnool district**

S. No.	Tourist Attraction	Category	Description
1	Somasila Riverside Development	Religious & Eco-tourism	Somasila reservoir has a unique ecosystem – freshwater from the rivers, many unique species of aquatic life, water birds and animals live in and alongside the backwaters. A highly revered Someshwara Swamy shrine is on the banks of this reservoir, attracting millions of tourists round the year. Among the wild green trees and shrubs, Kollapur samasthan is a large area spanning most of the Nallamala forest area on the banks of river Krishna. About 9 km from Kollapur village, there exists an ancient temple of Sri Lakshmi Narasimha Swamy in Singotam
2	AkkaMahadevi Caves	Eco-tourism	Amazing caves that can be reached by boat, traversing through picturesque green hills covered by dense foliage, Crimson coloured craggy cliffs on the hills provide stark contrast to the green hills, making the ride more delightful
3	Uma Maheshwaram Temple	Religious/ Eco-tourism	Dedicated to Lord Shiva, the temple is located in the picturesque Nallamala forest range. Known as Poor Man's Ooti, this stretch hardly has any sunlight, thus maintaining the temperature below normal year round.
4	Mannanur	Eco-tourism	Mannanur is a dry deciduous mixed forest, part of the Amrabad Tiger Reserve, located along the river Krishna which cuts through a picturesque gorge of the Nallamala hills with deep valleys on sides. The sanctuary with a wide area of 2166 sq km is home to Spotted Deer, Wild Boar, Indian Giant Squirrel, Tree Shrew, Rayel, Mugger Crocodiles, Wild Dogs, Jackals, Wolves, Panthers and Tigers, etc.
5	Farahabad	Eco-tourism	Farahabad, which literally means 'Mount Pleasant', is a holiday destination, encompassing cottages to attract tourists to the destination. A special attraction has been created by the forest department to view the beauty of the tiger reserve and the forest from a point on the ridge of a hill.
6	Mallela Theertham Waterfalls	Eco-tourism	MallelaTheertham is a fantastic waterfall located in the midst of Nallamalla Forest, 8 km along a diversion from the Hyderabad–Srisailam interstate highway. This natural waterfall can be reached by a walk of 350 stairs.
7	Srisailam	Religious Tourism	Located on the ancient sacred hill of Srigiri, in the Nallamalai range of Andhra Pradesh (at the border of Telangana State), is the exotic temple of Srisailam. The temple complex, dating back to the 2nd century AD, is one of the twelve Jyotir Linga Shiva shrines as well as one of the eighteen most sacred goddess shrines, or Shakti Pithas



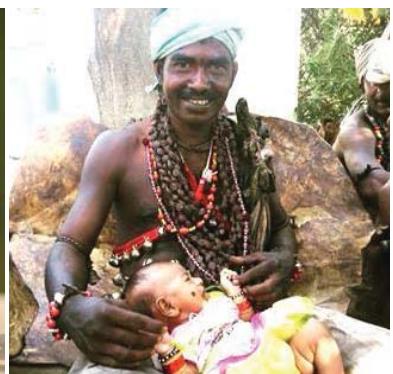
**2. Tribal & Eco-tourism Circuit in Adilabad, Nirmal and Kumarambheem-Asifabad Districts:** The Tribal and eco-tourism circuit in Adilabad, Nirmal and Kumarambheem-Asifabad districts opens the rich and ancient tribal culture, heritage and environment of the district for tourism and uplifts the livelihood of the local tribes by providing both direct and indirect employment. The destinations identified for development as part of the proposed Tribal and Eco-tourism Circuit are:

- 1) **Dichpally** – Abutting the national highway
- 2) **Shyamgadh Fort** – Gateway to the circuit
- 3) **Koratikal Waterfalls** – Beautiful falls adjacent to the national highway
- 4) **Kuntala Waterfalls** – State's highest waterfalls
- 5) **Gayatri Waterfalls** – Serene falls untouched by human intervention
- 6) **Utnoor** – Showcase of precious tribal culture
- 7) **Sapthagundala** – Soothing falls blended with robust tribal practices and rituals
- 8) **Jodeghat** – Rich tribal heritage amidst lush landscape
- 9) **Dokra Metal Craft Cluster** – Unique art forms
- 10) **Mysterious Caves** – A host of ethnic religious rituals and rites

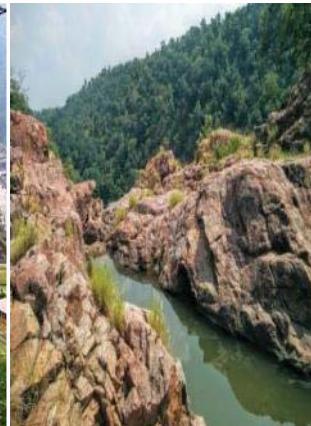


The proposed circuit is a splendid journey through serene forests and landscapes, heritage-rich tribal hamlets, magnificent forts and caves, unique craft communities and mesmerising waterfalls combined with stays in tribal hamlets, shopping for locally made crafts and tasting authentic food of the tribals. This proposed tribal and eco theme-based circuit would provide a complete tribal experience to both domestic (including low-budget) tourists and foreign tourists.

#### Unique lifestyle – a distinct identity of tribes

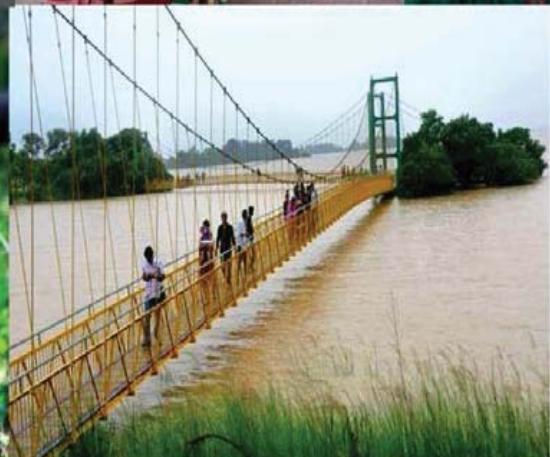


A journey through the picturesque landscapes is a thrilling experience



### 3. Tribal Circuit in Jayashankar-Bhoopalpally district

The Tribal Circuit is being developed in connecting Mulugu–Laknavaram–Medaram–Tadvai–Damarvai–Mallur–Bogatha in Telangana State, known for eco-tourism, wildlife, pilgrimages and tribal culture in the region. The region is blessed with a soothing river, beautiful lakes, dense forests, a wildlife sanctuary, tribal culture, pilgrimage, heritage structures and architectural monuments, a fine blend of new and old.

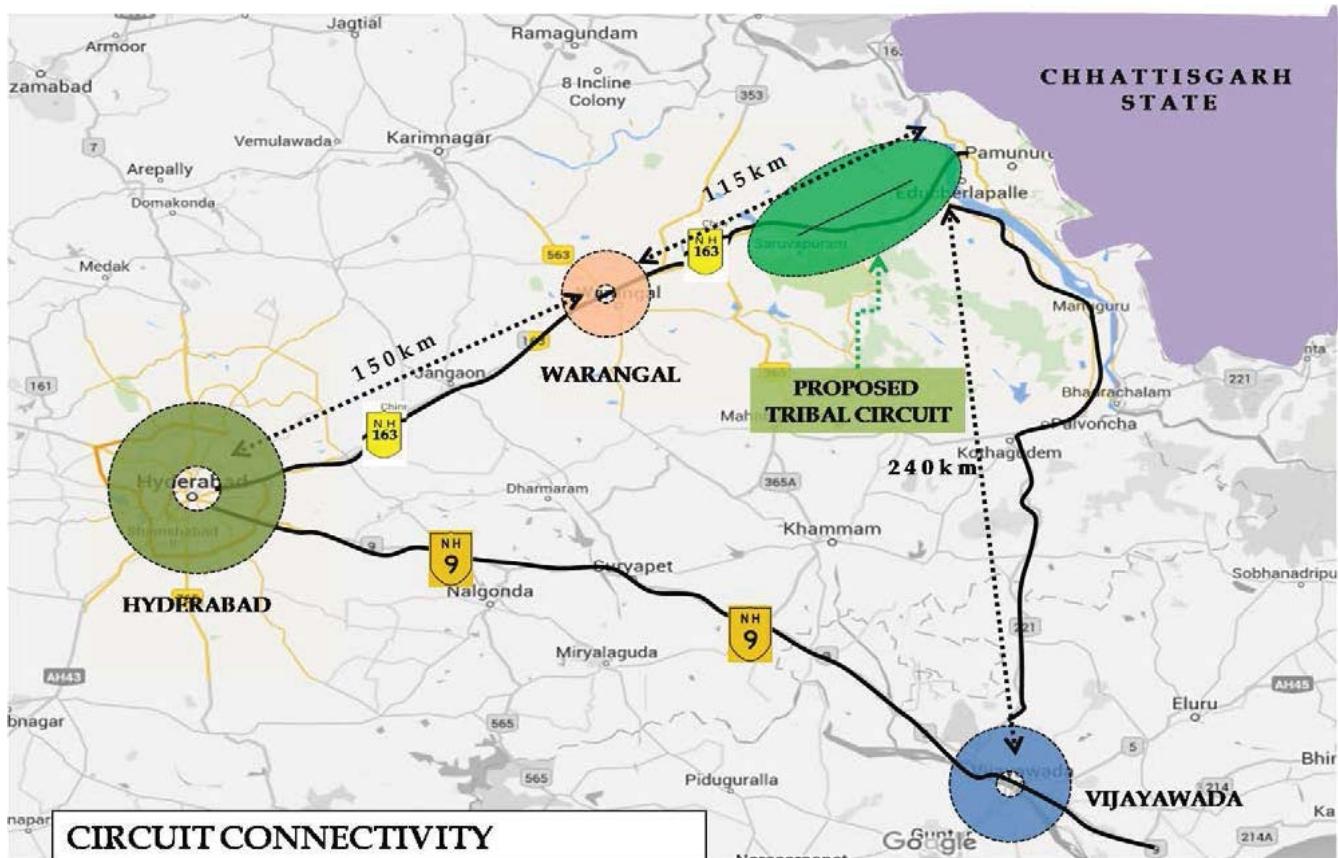


**Table 10.3.: Illustrates the list of destinations under the tribal circuit in Jayashankar-Bhoopalpally:**

Sl.No.	Destination	Category	Description
1	Mulugu	Tribal & Eco-tourism	Gattamma temple, with local tribal goddess Gattamma as presiding deity, is a famous destination in the region. The rituals in the temple are unique and people from across the state and neighbouring states come here to offer prayers and take blessings of the goddess. It is a local custom that even the vehicles passing by stop outside the temple to offer prayers and take her blessings. All visitors to Sammakka and Saralamma Jatara also visit this temple during Jatara period. The famous Ramappa Temple (being considered to be short listed as a UNESCO World Heritage site) is located 15 km from Mulugu and attracts thousands of tourists from across the globe
2	Laknavaram	Lake Front, Tribal & Eco-tourism	This beautiful lake is about 65 km from the Warangal district headquarters. A sprawling lake surrounded by a chain of beautiful green hillocks, serene waters with seven lush green islands dotting the expansive waters and a hanging bridge, it attracts large number of tourists round the year. A 160 m long hanging bridge is the special attraction at the destination.
3	Medaram	Tribal & Eco-tourism	A popular religious congregation or Jatara called “Samakka Saralamma Jatara” takes place for three days biennially in this village. There are many myths about the miraculous powers of the goddesses Samakka and Saralamma who belong to tribes. As per the local belief, these tribal women vigorously fought with Kakatiya kings for the welfare of tribes and sacrificed their lives. In remembrance of their sacrifice, the tribes worship them till today. One of the unique features of the Jatara is, neither idol worship nor vedic and brahmanic influence. Two wooden poles and a container of vermillion (Kumkuma Barini) are worshipped as symbols of the goddesses.
4	Tadvai	Tribal, Wildlife Sanctuary & Eco-tourism	Tadvai, also known as Sammakka Saralamma Tadvai, is a tribal village. It is known for its wildlife sanctuary. In view of the wildlife significance of this region, the State Forest Department has developed a unique project called “Vanajeevan” (Tadvai Huts Complex), a forest resort tucked away deep in the reserve forest area, providing an excellent experience to nature-loving tourists.
5	Damarvai	Tribal & Eco-tourism	Megalithic burial structures are located at Damarvai village, which is about 15 km from Tadvai. These burials stand as testimony to the existence of pre-historic man here 10,000 years ago. These are unique structures – a single chamber of megalithic construction, consisting of two or more structures supporting a huge horizontal capstone.

Sl.No.	Destination	Category	Description
6	Mallur	Pilgrim Tourism & Eco-tourism	Mallur is located at a distance of 5 km from Eturnagaram. "Chintamani Jalapatham", a natural spring runs through the dense forest, is very important in this region. Local tribals believe that the water of this spring, passing beneath the trees roots of the dense forest, possesses various medicinal qualities and is an excellent remedy for skin diseases. A few megalithic burial structures are found on the hilltop near Mallur and located in proximity to tribal habitat.
7	Bogatha	Tribal & Eco-tourism	Bogatha waterfalls are located in Bogatha village near Vazedu, Khammam district. Surrounded by dense forest, hills, streams and tribal hamlets nearby, the spot has excellent connectivity to Warangal. These beautiful waterfalls, with water flowing throughout the year, are located at a distance of 18 km from Mallur. It is known locally as the Niagara Falls of Telangana.

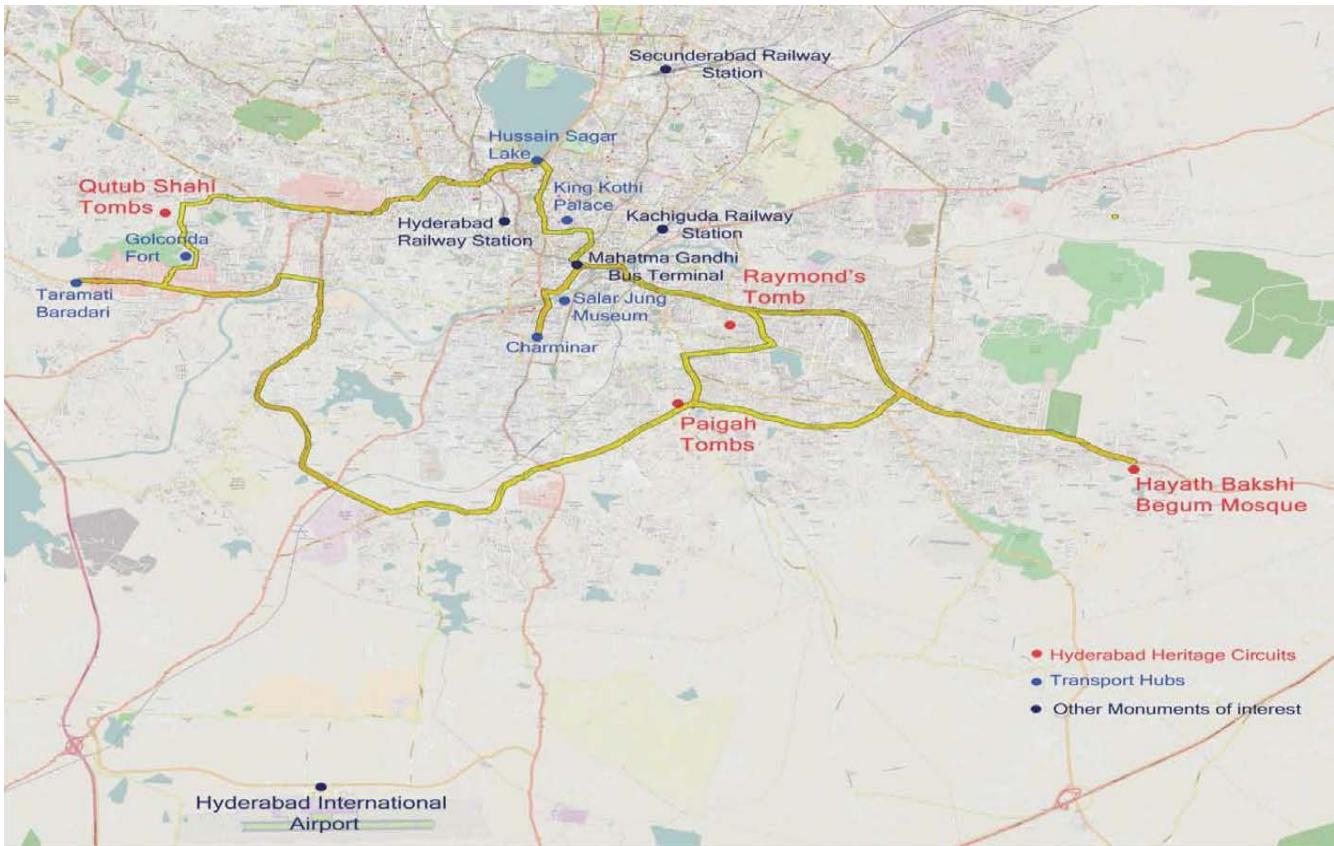
#### Connectivity to the proposed circuit



#### 4. Hyderabad Heritage Circuit

The Hyderabad Heritage Circuit is being developed connecting four monuments, viz., QutbShahi Heritage Park, Paigah Tombs, Hayat Bakshi Begum Mosque, and Raymond's Tomb. These sites highlight the fascinating and mixed cultural landscape of Hyderabad, and the building skills and craftsmanship encouraged by its rulers.

## Circuit map



### Qutb Shahi Heritage Park:

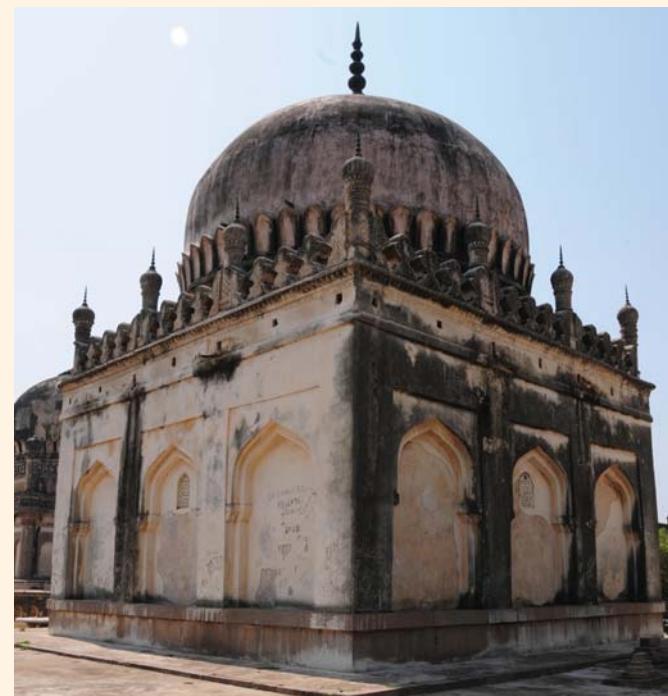
The Qutb Shahi Heritage Park, located close to famous Golkonda Fort in Hyderabad, is spread across 108 acres with 75 monuments. The park contains tombs and mosques constructed by various rulers of Qutb Shahi dynasty during 16th – 17th centuries making it a unique necropolis in India.

#### Box 10.6: Conservation and Landscape Restoration of Qutb Shahi Heritage Park

Conservation works on structures at the Qutb Shahi Heritage Park have been undertaken on all 75 structures. Conservation works will be coupled with landscape restoration of the garden setting of the tombs as well as building of tourist infrastructure with grant received from the Ministry of Tourism, Government of India and co-funded by the Tata Trust on ten of the larger structures. In three years nearly 20 monuments have been conserved, including the Tomb of Sultan Quli Qutb Shah, Tomb of Sultan Jamshed Quli Qutb Shah, Tomb of Muhammed Qutb Quli Shah and the Badi Baoli.

Conservation works are being implemented by master craftsmen – stone carvers, masons, plasterers, carpenters – under the supervision of a multi-disciplinary team of the Aga Khan Trust for Culture. It is expected that the conservation and landscape works will require almost one million man-days of work by craftsmen. Traditional materials such as lime mortar, granite stone are being used for the conservation work and these are being prepared with traditional tools and building crafts.

After the completion of the project, number of tourists will rise significantly from the present 100,000 tourists annually. Hyderabad will also be provided with a significant archaeological park of international significance. Already, moves are afoot to nominate the site for UNESCO World Heritage Status.



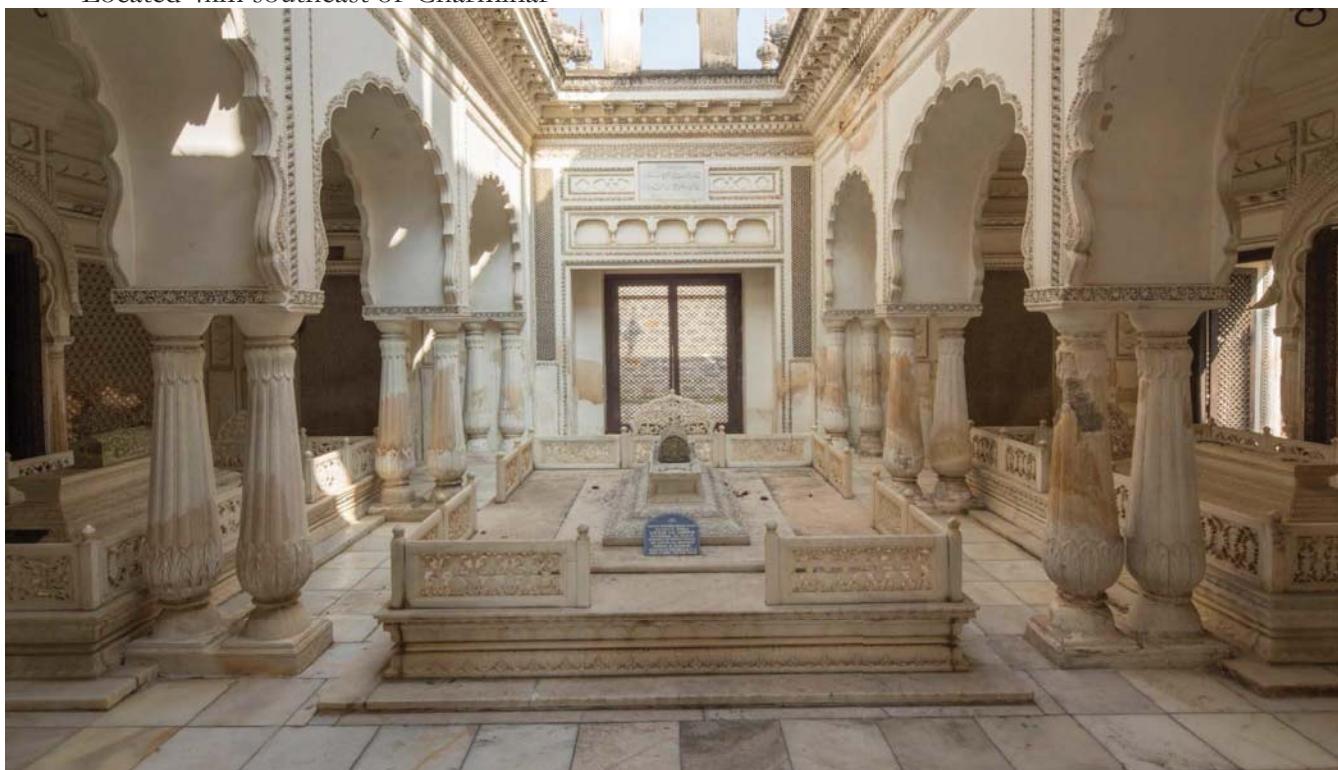
Before



After

### Paigah Tombs

- It is the resting place of the Paigahs, a noble family of the Nizam's court
- Two-acre site with 200-year-old tombs made of lime mortar with beautiful incised plaster work and lattice screens
- Located 4km southeast of Charminar



### **Hayat Bakshi Begum Mosque:**

- Magnificent mosque and sarai complex spread over 4 acres with an intricately carved step well adjacent to the site
- Located along the Vijayawada Highway, it served as a place for traders and travellers to stop and rest, during the QutbShahi reign



### **Raymond's Tomb**

- Built by the Nizam, in the memory of Monsieur Raymond, a French general in the Nizam's army, said to have setup the Nizams gun foundry.
- The tomb is set atop a hill on a 7-acre site, at a distance of 4 km from Paigah tombs. The site offers a panoramic view of the entire city.



### **10.3 Outlook**

Sustaining the growth of the services sector, especially IT and tourism sectors are critical for employment generation. There is a changing landscape of IT sector with the emergence of new areas such as animation, gaming, big data analytics, cloud computing etc. The new ITC Policy Framework and sectoral policies launched by the Telangana Government have created an enabling eco-system for IT companies to diversify their operations and create an opportunity out of the changing scenario.

Tourism has huge potential for employment generation and economic growth. Recognizing the importance of Tourism in Telangana, the Government has embarked on various initiatives to build tourism infrastructure in the State. The proposed four tourism circuits namely, eco-tourism circuit in Nagarkurnool district, Tribal and eco-tourism circuit covering Adilabad, Nirmal and Kumarambheem-Asifabad districts, Medaram Tribal circuit in Jayashankar-Bhoopalpally district and Hyderabad heritage circuit, will showcase the tourist destinations in the State. These circuits will not only make Telangana an attractive destination for tourism but also offer value for money for the tourists.

Telangana, especially city of Hyderabad is becoming the epicenter for medical, education, and business tourism. Availability of advanced medical technology and reputed educational institutions are attracting tourists from all over the world. Hyderabad city remains as most cost-effective city for advanced medical treatment in the world. The world class infrastructure is attracting the business world to organize their events in the city due to existence of world class infrastructure.

Hyderabad has high potential for becoming world-class high education destination. There exist world class institutions and eco-system in the State. However, in order to realize these potentials, there is a need to give special focus.

However, tapping potentials in high-end sectors need availability of skilled labour. Independent surveys have been indicating that there is acute skill gap in these sectors. This challenge could be turned into opportunity by skilling our youth.





# Demographic Dividends: *A Window of Opportunity for Telangana*

CHAPTER

11

*Give a Man a Fish, and You Feed Him for a Day. Teach a Man  
to Fish, and You Feed Him for a Lifetime*

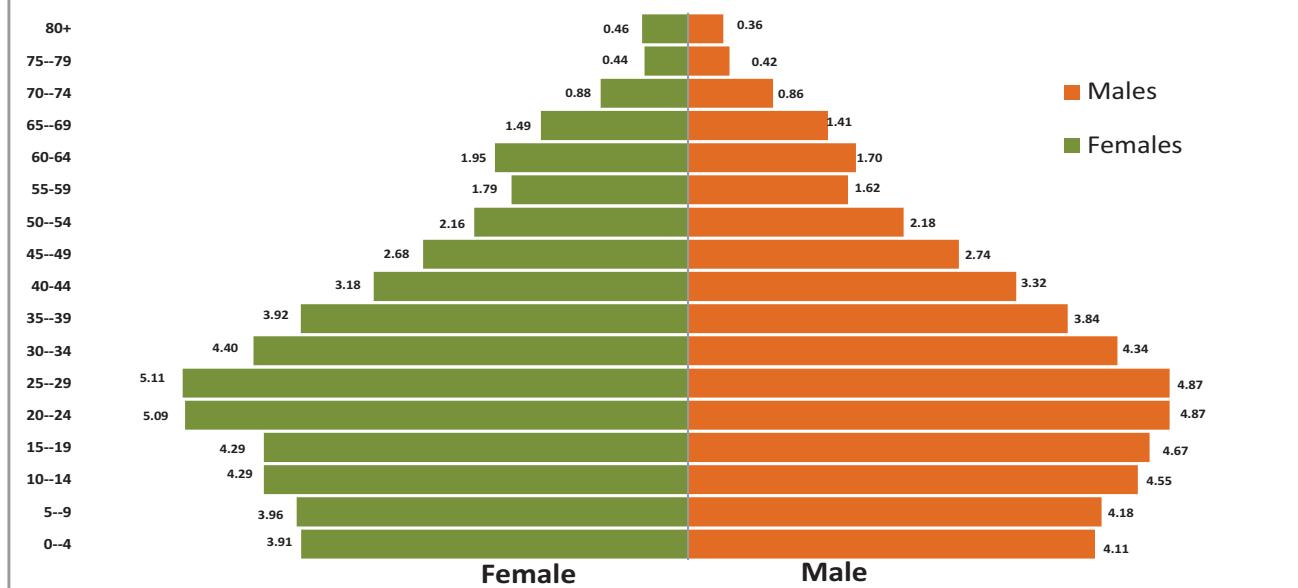
— A Chinese Proverb

As discussed in Chapter-2, “Macro economic trends”, the State economy is characterised by high growth along with the better prospects in the coming years. The average growth rate of the State economy in the last five years (during 2012-13 to 2016-17) is likely to be 7.3 per cent as against the national average of 6.8 per cent. At present, industrial sector and services sector are the main drivers of State economic growth; while there is a shortage of skilled labour required in these sectors. Therefore, sustaining the growth momentum requires skilling our labour force in emerging areas and tapping the available demographic dividends. The present chapter discusses the basic characteristics of the labour force and eco-system of skilling in the State using the data collected in Intensive Household Survey of 2014 (also known as Samagra Kutumba Survey).

## 11.1. Working-age Population in Telangana

Age group wise analysis of the population reveals that highest proportion of population in Telangana is concentrated in the age group of 20–29 years (constitutes about 20 per cent of the total population), followed by 10–19 years (about 18 per cent of the total population). It is also noted that about 65 per cent of the total population in the state is of working-age (i.e., population aged 15–59). The large working age population is an opportunity for the state to leap-frog its economic growth, as this group comprises the economically active population. They earn more than they consume, resulting in higher savings and investment, which will further spur economic growth.

**Figure 11.1: Population Pyramid of Telangana State-2014**



Source: Intensive Household Survey (SKS), GoT (2014).

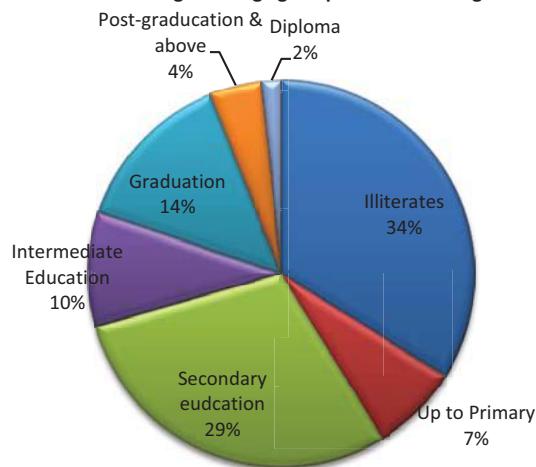
Note: Figures are share of the total population of the state. ‘Age not stated category’ is not accounted for.

The bulge in the working-age population –the demographic window available to the state – is short-lived. As time passes, the working-age population shifts to dependent population age-group. During the ‘demographic window’ period, the labour force grows faster than the population dependent on it, freeing up resources for investment in economic development and family welfare. Therefore, per capita income grows more rapidly too.

A demographic bonus can be realised only if the government invests in human capital, especially in health, education and skill development of those entering in the labour force. Otherwise, a large, uneducated, unhealthy, unskilled, and under employed workforce cause a burden to the society and threatens its stability.

## 11.2. Education Levels among Working Age Population in Telangana

**Figure 11.2: Education levels among Working age Population in Telangana**



Education plays a key role in determining the increase in work participation rate and productivity. However, education levels in the working population in Telangana leave much to be desired. The Figure 11.2 depicts educational levels in Telangana State, ranging from up to primary to secondary, intermediate, graduation, post-graduation and above, and also diploma/polytechnic/ITI.

Note: ‘Others’ and ‘categories not appropriate’ are excluded from totals.

Source: Intensive Household Survey (SKS), GoT (2014).

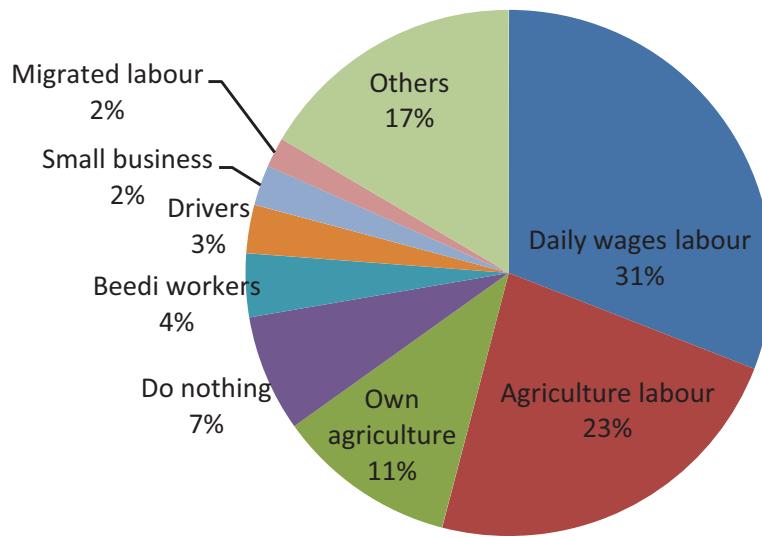
Of the state's 2.39 crore working age population, about 34 per cent are illiterate. Of the educated working age population, 7 per cent are educated up to primary level, about 29 per cent have completed secondary school and 10 per cent have studied upto intermediate level. The working age population that has studied or are pursuing higher levels of education is about 20 per cent (graduation 14 per cent and post-graduation 4 per cent or above). Only 1 per cent of the working age population in the state are having polytechnic/ industrial training institute diploma.

### 11.3. Principal Occupational Analysis of Working-age Population in Telangana

This analysis of the major occupational-wise distribution of the working age population, is based on the Intensive Household Survey. Of the total 2.39 crore working-age population, about 85.5 lakh individuals did not reveal their occupation. There are 18.89 lakh students and 17.7 lakh housewives are in the state is in the age group of 15–19. Apart from this, about 8.4 lakh individuals have reported as “do nothing”, possibly due to unemployment.

Among those who are working and revealed their occupation, the highest proportion are working as “daily wage labourers”, followed by agricultural labourers and “own agriculture”.

**Figure 11.3: Principal Occupational wise engagement of working age population in Telangana**

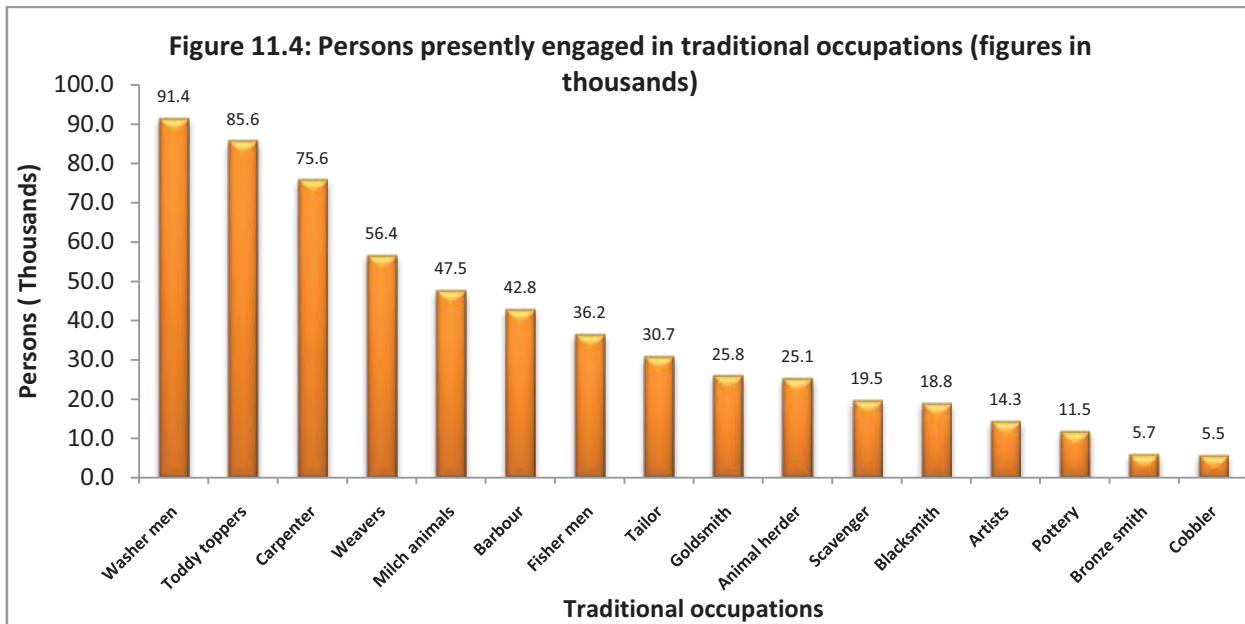


Source: Intensive Household Survey (SKS), GoT (2014).

Note: Persons in ‘Occupations details were not given’ and ‘Doing nothing’ category are not included in the analysis.

#### Traditional occupations

There are about six lakh persons presently engaged in traditional occupations, including laundry-workers, toddy tappers, carpenters, weavers, barbers, fishermen, tailors, goldsmiths, animal herders, blacksmiths, pottery, bronze-smiths, cobblers, etc. The number of people depending upon traditional occupations is shown in the Figure 11.4.



Source: Intensive Household Survey (SKS), GoT (2014).

**Table 11.1: Classification of working-age population (15–59 years age group) by principal occupation**

Sl. No	Occupation	Number of Persons engaged
1	Daily wage labour	36,17,275
2	Agriculture labour	27,08,706
3	Own agriculture	12,92,876
4	Presently working beedi workers	4,57,827
5	Drivers	3,48,053
6	Small business	2,88,957
7	Migrated labour	2,13,553
8	Other professionals	1,17,815
9	Other skilled workers	1,13,730
10	Working in other countries	93,311
11	Presently working laundry person	91,383
12	Presently working toddy tappers	85,563
13	Presently working carpenters	75,648
14	IT professionals	56,968
15	Presently working weavers	56,371
16	Lease agriculture	52,845
17	Tending milch animals	47,458
18	Presently working barbers	42,751
19	Presently working fishermen	36,244
20	Presently working tailor	30,680
21	Large business	26,364
22	Presently working goldsmiths	25,779
23	Animal herders	25,080
24	Scavengers	19,476
25	Presently working blacksmiths	18,841
26	Beggars	18,396
27	Private security guards	15,150
28	Artists	14,256
29	Presently working potters	11,539

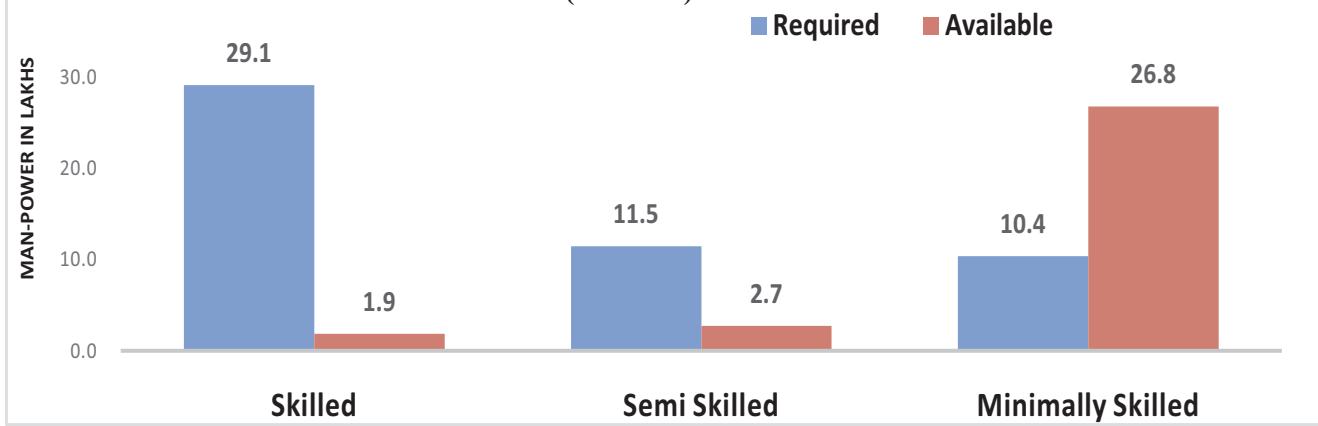
Sl. No	Occupation	Number of Persons engaged
30	Shopkeepers	8,236
31	Apartment watchmen	6,705
32	Presently working bronze smiths	5,747
33	Cobblers	5,545
34	Other occupations	8,31,215
35	Housewives	17,70,711
36	Students	18,89,825
37	Do nothing	8,36,340
38	Not provided	85,51,380
<b>Total</b>		<b>2,39,08,599</b>

Source: Intensive Household Survey (SKS), GoT (2014).

#### 11.4. Skill Gaps in Telangana

As per the skill gap study conducted by the National Skill Development Corporation (NSDC), it was estimated that the state requires about additional manpower of 50.9 lakh people (viz., 29.1 lakh skilled, 11.5 lakh semi-skilled and 10.4 lakh unskilled labour) during 2012-22. However, with a ‘business as usual approach’, the state would be able to produce 1.9 lakh skilled labour and 2.7 lakh semi-skilled. As the existing infrastructure for skill development is inadequate, we would produce about 26.8 lakh minimally skilled workers as against the requirement of 10.4 lakh. This indicates that there is an urgent need to intervene with skill development programmes to correct this imbalance.

**Figure 11.5: Demand and Supply of Skilled Manpower in Telangana (2012-22)**



Source: Computed from NSDC study on “District-wise skill gap study for the State of Andhra Pradesh (2012-17, 2017-22)”

#### Sunrise sectors for job opportunities

The study identified emerging sectors for job opportunities for a skilled workforce, such as tourism, travel and hospitality; construction; banking and financial services; insurance; transportation, logistics, warehousing and packaging; IT and ITeS chemicals and pharmaceuticals; auto and auto components; rubber and plastic products; real estate; food processing; metal and non-metallic products; textile and leather; and electricity, gas and water, etc. The study has also indicated that demand for labour will decline in sectors such as agriculture and allied activities, wood and paper products; mining and quarrying etc., in the coming years.

#### 11.5. Skilling Agencies in Telangana

At present five agencies are involved in skill development initiatives in Telangana, viz., Telangana Academy for Skill and Knowledge, National Academy of Construction, Society for Elimination of Rural Poverty,

Mission for Elimination of Poverty in Municipal Areas, Employment Generation and Marketing Mission, SETWIN, etc., in addition to a plethora of private sector agencies. A brief description of some of these agencies is given below.



**NAC:** The National Academy of Construction is engaged in upgrading knowledge and skills of construction engineers, contractors, managers and supervisors and workforce. Since 1998, it has trained about 3.6 lakh workers in construction-related activities, of which 2.7 lakh were placed.

**TASK:** The key focus at the Telangana Academy for Skills and Knowledge (TASK) is to enhance employability quotient of young graduates in the state and enable them to choose multiple avenues as they graduate. TASK enables a collaboration platform between government, academia and industry to enhance skilling, research and entrepreneurship among youth in Telangana. About 61,769 students were trained by TASK in IT and related areas, of them about 3,200 students have been placed in employment so far.

**MEPMA:** Mission for Elimination of Poverty in Municipal Areas (MEPMA) is the nodal agency for implementation of poverty alleviation programmes in urban areas under various state and central government schemes. In the present year, about 3,562 unemployed urban youth were provided skill training, of which 1,322 youth were provided placements.

## 11.6. Outlook

A skilled workforce is important not just for enhancing people's income, but also crucial for industrialisation of the state. Cross-country experiences show that industrialisation initiatives can be successful only with the availability of skilled labour force. The study by the National Skill Development Corporation has revealed the glaring skill gaps in Telangana. As revealed by the IHS, majority of the state workforce are presently engaged as daily-wage earners or agricultural labourers. While both the government and the private sectors are engaged in skilling process, there is a great need to strengthen these initiatives.

**Section IV**

**FOCUS ON SOCIAL DEVELOPMENT**



# Overview of Social Development in Telangana

*I firmly believe that growth has no meaning and even legitimacy, if the deprived sections of the society are left behind*

— K Chandra Sekhara Rao,  
Hon'ble Chief Minister, Telangana State

## 12.1. Introduction

Social development is prioritizing human needs in the growth and progress of society. The focus is on improving the lives of the people, especially the poor, to make the society a better place for everyone. The Government of Telangana is striving to uplift the socially disadvantaged sections of the people in the state by launching several policy initiatives. Towards this end, the Council for Social Development (CSD) was assigned the task to prepare a report on Social Development in Telangana to evaluate, and make policy recommendations in the field of social development, which is relevant to the guiding principle of the Sustainable Development Goals (SDGs) i.e., ‘leave no one behind’. The Telangana Social Development Report 2017 (TSDR) will present an analysis of the social sector in the State of Telangana. This report is the first of its kind for any state in India and is on the lines of India Social Development Report, published biennially by CSD. The synopsis of the study are presented here, as a curtain-raiser of this unique publication taken up in collaboration with the Planning Department of the state.

The TSDR begins with a demographic profile of the state and discusses and maps the current status of development of Telangana through the following parameters: land and agriculture; credit; household amenities; public distribution system; education; employment/unemployment; and health. The data has been analyzed in the following grids wherever possible: social and religious groups, gender, and location.

The main source of data used for the analysis in this chapter is the Census data for 2001 and 2011, supplemented with data from the Government of Telangana and other relevant official sources. Thus, the analysis has been carried out on a comparative basis between these two periods for the indicators mentioned above.

## 12.2. Demography

The analysis of data reveals that the overall, population of the state during the last decade (2001–2011) grew at 13.58 per cent against the national growth of 17.69 per cent, indicating a faster decline in fertility in the state as compared to the all-India rate; the people of the state reside predominantly in rural areas (61 per cent); the urban population in the state grew by 39 per cent during the decade as against a modest growth of 2 per cent in rural areas. Urban development in Telangana has led to the growth of towns within the state,

which increased from 82 to 158, that is, almost by 93 per cent during the decade. As per the Government of Telangana (2016), around 30 per cent of the total urban population in the state resides in the capital city of Hyderabad alone; Hyderabad also figures among the top 10-million-plus cities in terms of highest number of slum households.

### **Social Composition of Population**

The scheduled tribe (ST) population recorded an increase of 15.04 per cent and scheduled caste (SC) population, 11.61 per cent. The population of Muslims rose marginally from 12.4 per cent to 12.7 per cent during the decade and the proportion of Christian population during the same decade has risen from 1.2 per cent to 1.3 per cent and they are largely concentrated in two districts, namely Hyderabad and Rangareddy. The proportion of Hindus declined marginally from 85.9 per cent to 85.1 per cent.

### **Age Composition of Population and Sex Ratio**

There has been a decline in the proportion of population in the age group of 0–4 and 5–9 across gender, location and social groups. The share of working-age population (15–59) increased during this decade across gender, location and social groups. The proportion of the elderly in total population (persons above 60 years) between the two time periods in India and Telangana shows an increase (7.4 per cent to 9.3 per cent); however, in 2011 the increase in Telangana was more than in India (in 2001 it was more or less the same as per Census). The proportion of elderly women was higher than men in both time periods. This increase in the elderly population has far-reaching implications for provision of a support system, not only in terms of health care but also in terms of social security measures. The sex ratio increased from 971 to 988 during the decade; the sex ratio is lowest in the districts of Rangareddy (961) and Hyderabad (954) – among the more urbanised districts of the state. The sex ratio of the SC population was significantly higher (1008) than the sex ratio of the state as a whole (988). While the sex ratio of the ST population (977) is less when compared with state average, it nevertheless depicts an impressive rise from the 2001 Census (962). Among the major religious communities, there is an impressive rise in the sex ratio from the 2001 Census to the 2011 Census (i.e., 974 to 990 for Hindus, 950 to 969 for Muslims and 1011 to 1033 for Christians).

A favourable sex ratio notwithstanding, what is of concern is the decline in child sex ratio(0–6 years) from 957 to 932 during the decade and this is true in terms of location as well. Hyderabad, Nalgonda, Warangal and Mahabubnagar are the four districts at the bottom four positions in terms of child sex ratio. Further, while the child sex ratio among SCs is better than the state average, the same is quite low for STs when compared with the state as well as with the SCs.

### **Marital Status**

In the under-18 age group, the proportion of currently married persons at all-India level in 2011 was 3.7 per cent for women, whereas it was 2.6 per cent for Telangana women; thus the state average is lower than the national average. However, what DLHS-4 data also reveal is that, more than a quarter (28 per cent) of currently married women aged 20–24 were married before the legal age of 18 years with the districts of Mahabubnagar (35 per cent), Khammam (33 per cent) and Nalgonda showing higher percentages than the state average. Further, when the more urbanized districts of the state, such as Hyderabad and Rangareddy reveal higher than state average proportions of under-18 married women, there is a need to revisit our development theories of urbanization that are supposed to translate into increases in age at marriage with larger proportions of men and women pursuing education and employment.

Data relating to the categories ‘currently married’ and ‘widowed’ are seen together, in the age-group 20–29, only 46 per cent of males are currently married against 79 per cent of females. In the category of widowed, only 11 per cent of 60+ men figure against 57 per cent women.

## **Households and Houselessness**

The rate of growth in households has been 28 per cent in Telangana: 60 per cent in urban and 14 per cent in rural. In terms of the share of households with a size of three to four persons, it is found that the state average was more than the national average during the decade. The proportion of female-headed households increased both in rural and urban areas between the two time-periods. This proportion has seen a relative increase as age progresses and is indicative of the trend in marital status of households, where it is observed there is an increased number of widowed women as age increases. In terms of houseless population, one can discern that, in general, there was a decline between the two time periods. However, there has been an increase of 18 per cent in the houseless population in urban areas in Telangana.

## **Workers and Occupational Profile**

Of the total population, the proportion of workers increased marginally during the decade. Among the total workers, though the proportion of agricultural sector shows a marginal decline, the proportion of cultivators registered a decline while that of agricultural labourers increased during the decade, indicating the need to explore this phenomenon, since agricultural labourers generally constitute the most vulnerable of our working population.

## **Persons with Disability**

As a proportion of total population in 2011, the disabled population accounted for 3 per cent in Telangana, which was more than the national average of 2.2 per cent. In terms of gender, too, the proportion of disabled population was higher among both men and women. Data also reveal that the larger proportion of the disabled population reside in rural areas.

### **12.3. Land and Agriculture**

Land and agriculture are critical for Telangana State as they are the major livelihood base for rural population who are predominantly marginalized social groups (STs, SCs and OBCs). Apart from the general picture in agriculture, the social group-wise understanding is important from the perspective of social justice.

#### **Access to Land and Fragmentation of Operational Holdings**

Compared to other social groups, the access to land among SCs is relatively low, both in terms of ownership and tenancy. SCs, who constitute 15.5 per cent of total population, operated only 9.6 per cent of the total operated land in the state. Their status is low in the districts of Khammam and Nalgonda. There has been increasing fragmentation of operational land holdings among all the social groups, particularly more among SCs as 75 per cent of operational holdings among them are marginal, i.e., below one hectare. The SCs are marginalized even in access to the tenancy market in the state. The gender differences are reported in land as female operational holding, constituting 21.46 per cent in total holdings, operate 19.54 per cent of total operated area and the average size of female holding is lower than that of male holdings in the state.



## **Cropping Intensity and Fallows**

The low level of net sown area reported across all the social groups in the state is indicative of increase in fallow land among all. Cropping intensity is relatively low among SCs and STs and also in the districts of Adilabad, Mahabubnagar and Rangareddy. The shifting of cropping pattern towards non-food grain crops, mostly led by cotton, in the state is reported to be high among SCs and STs.

## **Access to Irrigation**

The irrigation levels are relatively low among SCs (25.4 per cent) and STs (29.9 per cent) against the Others (36.9 per cent). The increasing share of capital-intensive based ground water (dug well and tube well) irrigation (about 70 per cent) among all the social groups is the major concern in the state.

## **General observations**

The livestock base is very low in the state across all the social groups. The access to institutional credit, in terms of household proportions and average amount per household, is reported very low among SCs and STs in Telangana leading to their higher dependency on moneylenders, who are exploitative with their exorbitant interest rates. The incidence of indebtedness is reported significantly high (about 90 per cent) among all the social groups in the state.

### **12.4. Access to Credit**

Apart from issues of timely, adequate and hassle-free access to credit by households in general, the issue of distribution of credit among various sections of people is also essential from the perspective of inclusiveness and social justice, which are the foundational inspirations in the formation of Telangana State.

#### **Credit facilitates for various Socio, Economic and Cultural needs of Households**

Around one-fourth of Households (Hh) in Telangana do not have bank accounts and the ratios are relatively high among SCs and STs and in the districts of Mahabubnagar, Nizamabad, Karimnagar and Khammam. The socially marginal groups (ST, SC and OBC), especially SCs, hold assets (both land and other assets) the value of which is several-fold less per Hh than the socially privileged group (Others). There are huge rural–urban differences in average value of asset per Hh; an average rural Hh owns six times lower value of assets than an average urban household. In Telangana, around 30 per cent Hhs are not accessing credit from any source and the access to institutional sources is limited to 45 per cent of Hhs. The credit outreach of institutional sources in the state is limited; commercial banks reach only 16 per cent of Hhs while co-operative societies reach 9.3 per cent of Hhs. Money lenders still play a dominant role in addressing the credit needs of 50.6 per cent Hhs in the state and 51 per cent of total credit amount.

The average amount of borrowing per household accessing credit from all the sources in Telangana stands at Rs 5.98 lakh, with wide differences between rural (Rs 3.23 lakh) and urban (Rs 11.92 lakh) areas. The STs and SCs are lent a relatively very small amount, i.e., nine times less compared to Other social groups. Moneylenders also charge relatively higher annual interest rates (about 30 per cent) and they charge relatively more on loans given to STs in general and SCs in urban areas.

Huge differences in purpose of loans are reported between rural and urban areas: farm production (32.1 per cent) and household consumption expenditure (31.2 per cent) are major purposes in rural areas, but non-farm production (39.6 per cent) and housing (38 per cent) are major purposes in urban areas.

The socially marginal groups borrow largely for basic needs and for non-production purposes, such as household consumption expenditure, which include social and cultural reasons, etc., but not much for production purposes. Long-term loans are very low in rural areas (27 per cent) compared to urban areas (75 per cent) and are also very minimal among socially marginalised groups (SCs and STs in rural areas)

compared to Other groups. Personal security (44.4 per cent of loan amount) is the main security for obtaining loans, followed by mortgage of property (33.9 per cent). Personal security is relatively higher among socially marginalised groups than the Other groups. The type of mortgage is mostly of conditional sale in urban areas and of simple mortgage in rural areas.

## **12.5. Social Dimension of Employment and Unemployment: Special Focus on the Youth and their Skills**

The main objective addressed here is to have a situational analysis on employment and unemployment across different social, gender and regional groups of the state. Alongside, an analysis is also embarked to understand the existing skill gap and the potential for the state to take advantage of the demographic dividend.

### **Labour Force Participation Rate (LFPR)**

The LFPR is seen to be higher in Telangana compared to the national average during the 2004-05, but declines and becomes lower during 2011-12. The subsidiary proportion of labour force is much lower in Telangana. The LFPR is the lowest in Hyderabad and highest in Karimnagar; three districts, namely, Adilabad, Nizamabad and Hyderabad, show increasing rates from 2004-05 to 2011-12. LFPR is higher in rural areas but declines over time and the rural urban gap is higher in Telangana compared to all India. There has been decline in LFPR for both males and females; the decline being sharper among the latter. The decline in LFPR may be mainly due to the withdrawal of females from the labour force.

### **Worker Population Ratio (WPR)**

Telangana had the highest WPR in 2004-05 according to the principal status but declined over the time period and became the lowest in 2011-12. The employment in subsidiary activities is relatively lower in Telangana. The decline in WPR (across all the districts except Adilabad, Nizamabad and Hyderabad) may be a reason for the decline in LFPR, and, this in turn indicates relatively higher unemployment in the state. The WPR is lowest in Hyderabad and highest in Karimnagar during both periods.

Even though the WPR is higher in rural areas, it declines sharply over the period. It may also be noted that the rural urban gap is higher in Telangana, but the gender gap is lower. Therefore, it may be argued that the major reason for the decline in WPR is the decline in female participation.

### **Type of Employment**

The percentage of self-employed and unpaid family workers is increasing among rural females from 2004-05 to 2011-12; the proportion of regular/salaried is decreasing. In the case of urban females there is significant increase in regular types of employment and reduction in casual jobs.

Casualization is observed among STs in Telangana. And more than half of the ST workers are in self-employed category. The SC category is mostly employed in casual type of employment compared to any other social group. But the advantage of attaining regular/salaried employment from 2004-05 to 2011-12 goes to the SC community even though others category is still leading in the regular type of employment.

### **Sectoral Dimensions of Employment**

Rural farm activities have increased in Telangana but the proportion of urban non-farm activities is higher compared to all India. It essentially means that the entire rural Telangana is still farm based and the urban Telangana is more involved in non-farm activities. Employment in manufacture is stagnating and the employment generated is mainly in construction and services. Even though trade, hotels and restaurants, and public administration sub-divisions have a higher share within the services sector, work is swiftly changing towards financial intermediaries, business and real estate activities from 2004-05 to 2011-12.

## **MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act)**

The share of Telangana in terms of MGNREGA card holders is higher than the national average. Although males hold a higher number of cards, in terms of work, females' percentage is higher. Importantly, the share of beneficiaries among ST community is lower in Telangana when compared to other social groups.



### **Unemployment**

Although the rate of unemployment is higher in urban areas, the increase is seen more in rural (mostly males) from 2004-05 to 2011-12. On the one hand, there is a reduction of females both in the labour force and in the work force, but on the other, the unemployment rate is lower compared to men.

### **The Youth and their Skills**

The proportion of youth (15 to 29 years age group as per NYP, 2014) in Telangana is around 30 per cent, which is higher compared to the national average. The alarming situation is that about one-fifth of the youth in the state was neither in the labour force nor in educational institutions during 2011-12; the percentage was only 14.5 during 2004-05. It is unfortunate to note that as high as 96 per cent of the youth in Telangana do not have technical education at all. Of the total working youth, 44 per cent are in the agriculture sector. Other major employment providers to the youth are manufacturing (15 per cent) and trade, hotels and restaurants (11 per cent).

### **12.6. Education**

Thirty-seven per cent of students in Telangana are in primary level, 20 per cent in middle level, 13 per cent at collegiate level, 2 per cent each in PG level and diploma courses. The proportion of ST students pursuing collegiate education is the lowest. The OBCs have the highest proportion of students in graduate and PG level. (A detailed analysis on education in Telangana State is discussed in Chapter 14).

Among socio-religious groups, Hindus have the highest proportion of students in PG while Muslim students are highest in primary school (43.4 per cent), with attendance dropping sharply in higher secondary (7.6 per cent). 94 per cent of students are in the general stream whereas only 6 per cent are in the professional/technical stream.

## **Types of Institutions Attended**

Proportion of students attending government institutions is the highest among ST students and it progressively declines as it moves up the social hierarchy. Forty per cent of students attend government institutions. Among rural students, 54 per cent attend government institutions whereas 44 per cent attend private unaided institutions. In contrast among urban students, nearly four-fifths attend private unaided institutions. Among social groups, more ST students attend government institutions (65 per cent) rather than private. Half of the SC students attend government institutions. In contrast “Other” students predominantly attend private unaided institutions (72.6 per cent).

41 per cent of ST students claimed better environment of learning in private schools and another 33 per cent complained about poor quality of education in government institutions; 30 per cent of SC students who are in private stream are in it for the sake of English medium education and 10 per cent of them did not get admission in government institutions; poor quality of education in government schools is most important reason for the OBCs and others for choosing private institutions.

## **Free Education and other Support**

Thirty-eight per cent of students in the state get free education. The proportion of students who get free education is the highest among STs and it declines with the higher social groups. One fifth of the students in the state get scholarships. The highest proportion of students who get scholarships are SC students and the next highest proportion of students who get scholarships are OBC students.

## **Rate of Completion**

The completion rate in the state is 75 per cent. The SC students have the highest incompletion rate followed by OBCs. Least incompleteness is reported among ST and ‘Other’ students. The detention rate in Telangana is 3.3 per cent. Completion of Class V, VII and VIII are the major drop-out points in the state. Engagement in economic activity is the major reason for dropping out among all the social groups. ‘Not interested in education’ is the second most important reason for dropping out. Financial constraint is an important reason for SC students to drop out.

## **12.7. Public Distribution System (PDS)**

Data has been analysed using the economic grid of consumption expenditure groups along with the social grids to understand the inclusion and exclusion of the poor and the vulnerable within the public distribution system.

## **Access to Ration Cards**

Nearly about four-fifths of the households in the state have access to the PDS; level of access is highest in Medak district at 94.5 per cent, lowest in Hyderabad with just about half of the households having ration cards. Nearly 92 per cent of the STs in the state have ration cards; among SC households about 80 per cent have ration cards.

## **Consumption of Rice from PDS and non-PDS Sources**

The PDS met about one-fourth of the total quantum of rice consumed by the households in the state; the remaining three-fourths was sourced from other sources. Level of dependence on PDS for rice requirements was highest among the STs (32 per cent), 28 per cent among SCs, 26 per cent among OBCs and 19 per cent among ‘Others’. Just about 1.5 per cent of all households depend exclusively on PDS for rice; two-thirds of the households in the state use both PDS and non-PDS sources to get rice. However, reliance on non-PDS

sources varies enormously among social groups: among ST households, only 7 per cent depend exclusively on non-PDS sources. Among SC households, the dependence is 22.4 per cent; it is 31 per cent among OBCs and 54 per cent among ‘Others’.

### **Pattern of Cereal Consumption in the State**

Rice accounts for nearly 90 per cent of total cereal consumption in the state; about 7 per cent is accounted for by wheat and wheat products; millets account for 3 per cent of total cereal consumed in the state. Millets are consumed relatively more among rural households than the urban households. While rural households spend relatively more on rice and millets, urban households spend a little less on rice but almost double (of rural households) on wheat and wheat products. The ST households spend the least on rice and the highest on millets.

### **Access to PDS for various Expenditure Classes**

Households in the bottom 30 per cent of MPCE with a maximum monthly per capita consumption expenditure of Rs 1332 account for 52 per cent among STs, 42 per cent among SCs, 30 per cent among OBCs and 14 per cent among ‘Others’. Only 6.8 per cent of ST households and 18.5 per cent of SC households are in the top 30 per cent of MPCE and able to report a monthly per capita expenditure above Rs 2996. Analysis of data reveals that 8.9 per cent of households in the bottom three deciles do not have access to PDS. In other words, the ration cards meant for the poorest of the poor households are held by the ‘richest’ households; 36 per cent of ST households that report not having a ration card are in the bottom- decile group while the corresponding percentage for SCs is 14 per cent. The dependence on PDS for rice among the topmost decile group is as high as 19.49 per cent while in urban Telangana it is negligible. That is, the infiltration of the better-off sections into the PDS is more of a problem in rural Telangana.

### **12.8.Socio-Economic Dynamics of Health Status in Telangana**

It is reported that Telangana has higher morbidity in rural areas (9.8 per cent), than the urban areas (9.5 per cent) as against the national pattern of 8.9 per cent and 11.8 per cent for rural and urban areas respectively.

Logistic regression analysis shows that among gender groups, females were more morbid and they were 17 per cent more likely to report morbidity than males. Age group analysis shows that the ‘old’ age group showed itself more likely to be morbid, followed by the age group ‘0–4’. It shows that the old age group, 60 and above, was 80 per cent more likely to have morbidity than the 0–4 age group, which is the next most probable morbid group. Household size analysis shows that small families with three or fewer members were 52 per cent more likely to have morbidity than the families with eight or more members. High-MPCE groups were 17 per cent less likely to be morbid than medium MPCE.

### **Pattern of Ailments:**

Among morbid persons, the majority (56.3 per cent) was suffering from a chronic ailment. A clear pattern is seen that the occurrence of chronic ailments is higher in advantaged groups like urban respondents (61.1 per cent), forward castes (70.8 per cent), high MPCE group (68.4 per cent), male (60.9 per cent) and old age group (82.9 per cent) when compared to their counterparts. On the other hand, it is noticed that the chances of having acute ailments is higher in disadvantaged groups like rural, SC, low MPCE, and females.

### **Maternal and Child Health**

In Telangana, the percentage of women married before the age of 18 years (who belonged to the age group of 20–24 during the time of survey) is much higher in rural areas (about 35 per cent). In urban areas, the corresponding percentage is 15.7. This indicates the prevalence of early marriage system in Telangana, especially in rural Telangana. The IMR is also not showing a good sign of health for society. Rural IMR is

35 and urban IMR is 20. The situation of under-five mortality rate is also a concern in Telangana with 38 in rural and 25 in urban (NFHS-4, 2015-16). The use of family planning methods is about 59 and 56 per cent in urban and rural areas respectively among the women of age group 15-49. The role of health workers in spreading this is also to be improved a lot.

According to NFHS-4 (2015-16), even though the antenatal care is good among the women in terms of their first visit, it is only 47 and 37 per cent (respectively for urban and rural areas) who got full antenatal care. Also, only around half of the pregnant women had consumed iron folic acid for than 100 days.

Although institutional births in Telangana are higher (96 per cent in urban and 87 per cent in rural), the institutional births in public facilities is too low at about only 27 and 34 per cent for urban and rural areas. According to the NSSO (2014) 71st Round survey, the percentage distribution of women (aged 15–49) who gave birth in private hospitals is higher in Telangana both in rural (59.3 per cent) and urban area (74.3 per cent) when compared to all India (22.5 per cent and 45.8 per cent respectively). The rate of utilisation of public hospital for this purpose is very low in Telangana (29.4 per cent in rural and 22.5 per cent in urban) when compared to all India (41.4 per cent and 38.4 per cent respectively). It is to be noted that the rate of deliveries at home is very low in Telangana (2.2 per cent in rural and 1.6 per cent in urban) when compared to all India (19.9 per cent and 10.5 per cent respectively). This necessitates state policy orientation towards ensuring mother and child care through public institutions.

At the same time, it has to be noted that about 96 per cent of the children aged 12 to 23 months in rural Telangana has received most of their immunisation from a public health facility. The rate is, however, only 72 in urban Telangana. An important positive factor is that the percentage of children who were given immediate medical attention during illness is higher both in rural and urban Telangana (NHFS-4, 2015-16). But about 33 per cent of the children under 5 years are underweight in rural Telangana; the percentage being lower in urban Telangana (22 per cent). Another alarming situation is that around 61 per cent of the children of the age 6 to 59 months in rural Telangana are anaemic. Also, 55 per cent of the pregnant women (15–49 age group) in rural areas are also anaemic. (A detailed analysis on health in Telangana State is discussed in Chapter 13)

## **12.9. Housing, Water and Related Amenities**

Housing plays an important role in the welfare of a household. Apart from providing shelter against various physical threats, both man-made and natural, the availability of adequate housing facilities with proper supply of potable water, sufficient sanitation facilities and clean surroundings is necessary to ensure decent public health.

An assessment of types of housing structure in the state shows that Telangana as a state has fared better than India and is comparable to southern states. Still, in rural areas almost 21 per cent households are residing in semi-pucca houses. At 79.6 per cent, SCs households had the lowest level of pucca households.

The data on presence of a bathroom in the household showed that in the state 28 per cent of the households lacked bathroom facilities in their house; the proportion was still lower in rural areas and among SC and STs, indicating that their houses are small and lack basic facilities. At district level, Karimnagar had the lowest proportion of houses with a bathroom inside the premises, followed by Mahabubnagar and Khammam.

With respect to drainage, rural areas lag behind in access; district-wise, Mahabubnagar is especially poor with only 33 per cent households having drainage facilities. Mahabubnagar again stands apart with respect to facilities for garbage disposal – almost 83 per cent households here have no arrangement for garbage disposal. For the state, as a whole, for 29 per cent of households there is no arrangement for garbage disposal, while 37 per cent of households make their own arrangement for disposal.

With respect to drinking water, while Telangana State appears to fare much better than most southern States, one striking feature that data reveal is that 18 per cent of households rely on bottled water for drinking, with rural households far exceeding averages for southern states and India. Further, sufficiency of water in many districts is very low.

Over the period of Telangana's statehood, it has made significant improvement in these areas but still efforts have to be made to achieve universal coverage.



Model 2 BHK House

“ “ *He who has health has hope, and he who hope has everything*  
- Thomas Carlyle. ” ”

## 13.1. Introduction

A fundamental assumption of the SDGs is that health is a major contributor and beneficiary of sustainable development policies. It is believed that health affects, and is in turn affected, by many socio-economic and environmental determinants. Although “Health for all” is one of the 17 goals in SDGs, it emphasises that policies made in all sectors can have a profound effect on population health and health equity. To address the multisectoral nature of health determinants requires the political will to engage the whole of government in health. The health sector should promote “Health in All Policies”, an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies and avoids harmful health impacts in order to improve population health and health equity and address the social determinants of health.<sup>1</sup>

Within the health sector, India’s priority concerns are maternal, newborn and child health related issues. Maternal and infant deaths are still critical concerns. Undernourishment among children is another major issue across all the states in the country. The high birth rate and low death rate indicate the demographic transition India is going through. In India the demographic transition is being accompanied by an epidemiological transition where Non Communicable Diseases (NCDs), mental health disorders and injuries become much more prominent as a cause of death and disability.

## 13.2. Health Indicators: Telangana vis-à-vis Select States in India

Major health statistics on Maternal Mortality Ratio (MMR), Infant Mortality Rate (IMR), Sex Ratio, Birth Rate and Death Rates of Telangana *vis-à-vis* select states in India are given below in Table 13.1. For the purpose of MMR point estimate calculation, MMR is considered to be low if it is less than 100, moderate if it is 100–299, high if it is 300–499, very high if it is 500–999 and extremely high if it is equal to or higher than 1,000 maternal deaths per 1,00,000 live births<sup>2</sup>.

1. Health in 2015: from MDGs, Millennium Development Goals to SDGs, Sustainable Development Goals, WHO.

2. Trends in maternal mortality: 1990 to 2015: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.

As per the MMR bulletin, 2011–13, among the bigger states, Assam has the highest (300) and Kerala the lowest (61) MMR in the country. Telangana (92) is in fourth position after Kerala (61), Maharashtra (68), and Tamil Nadu (79), which are the top-performing states in maternal health. Although MMR in Telangana is much below the national average of 167, MMR gap between the top three states and Telangana is wide. This needs greater attention. As per NFHS-IV survey, among the bigger states, Chhattisgarh (54) has highest and Kerala (6) has lowest IMR. Telangana (28) is in fifth position after Kerala (6), Tamil Nadu (21), Maharashtra (24), West Bengal (27) among the states with best infant health. Sex ratio in Telangana (988) is significantly higher than the all India average of 940. Birth rate in Telangana (18.0) is lower than the all India average of 21.0. Death rate in Telangana is 6.7, the same as the national average.

**Table 13.1: Health indicators: Telangana *vis-à-vis* select states in India**

Indicator	All India	Highest (among bigger states)	Lowest (among bigger states)	Telangana	Source
MMR (per 1 lakh live births)	167	Assam (300)	Kerala (61)	92*	MMR Bulletin, 2011–13
IMR (per one thousand live births)	41	Chhattisgarh (54)	Tamil Nadu (21)	28	NFHS-IV, 2015–16
Birth Rate (2014)	21.0	Uttar Pradesh (27.0)	Kerala (14.8)	18.0	SRS Bulletin, July 2016
Death Rate (2014)	6.7	Odisha (7.9)	Delhi (3.8)	6.7	SRS Bulletin, July 2016
Sex Ratio	940	Kerala (1084)	Delhi (868)	988*	Census 2011

\* State Estimates.

### 13.3. Health Indicators among Districts in Telangana State

Albeit Telangana is performing considerably well in all major health indicators, vis-à vis other states in India, it needs to make significant improvements in bringing down the differences in the districts of the State. As Table 13.2 shows, MMR in Adilabad is very high at 152, whereas in Hyderabad MMR is 71, much lower than the State average of 92.

**Table 13.2: Health Indicators among Districts in Telangana**

Indicator	Telangana State	Highest (among 10 districts)	Lowest (among 10 districts)	Source
MMR, 2011–13	92	Adilabad(152)	Hyderabad (71)	Telangana State estimates based on 2011 Census
IMR	28	NA	NA	NFHS-IV, 2015–16
Total Fertility Rate (TFR)	1.8	Hyderabad (2.0), Rangareddy (2.0), Mahabubnagar (2.0)	Nalgonda (1.6), Nizamabad (1.6)	Telangana State estimates based on 2011 Census
Adult Sex Ratio (females per thousand males)	988	Nizamabad (1040)	Hyderabad (954)	Census 2011

In Telangana, as per the NFHS-IV, 2015–16, report, the Infant Mortality Rate (IMR) has come down to 28 from 39 (SRS 2013, Combined Andhra Pradesh). Under-5 Mortality Rate (U5MR) has come down to 32 from 63 (NFHS-III, Combined Andhra Pradesh).

High fertility has multiple consequences on health and health-related issues. Telangana state successfully limited its fertility rate to 1.8 while the all-India average is 2.4. The State average Total Fertility Rate (TFR)

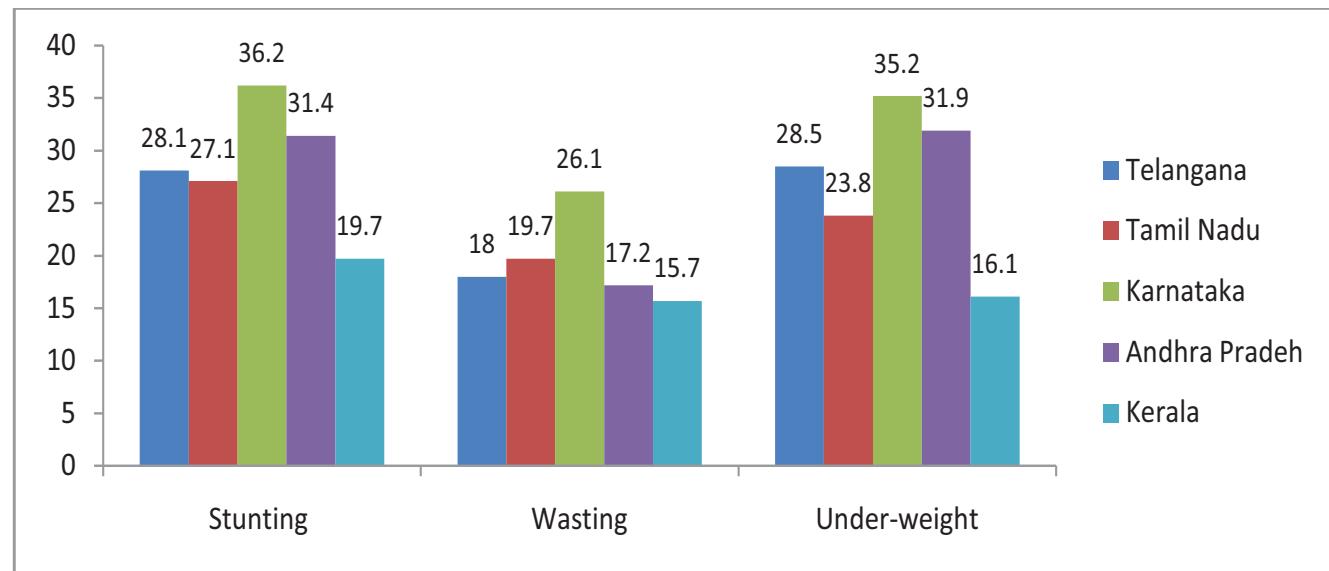
is 1.8, with Hyderabad (2.0), Rangareddy (2.0), Mahabubnagar (2.0) having the highest TFRs and Nalgonda (1.6), Nizamabad (1.6) with the lowest TFRs. Adult Sex Ratio (ASR) is highest in Nizamabad at 1040 and lowest in Hyderabad at 954.

#### 13.4. Nutritional Status among Children in Southern States of India

*“Malnutrition refers to deficiencies, excesses or imbalances in a person’s intake of energy and/ or nutrients. The term malnutrition covers two broad groups of conditions. One is ‘undernutrition’ – which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals). The other is overweight, obesity and diet-related non-communicable diseases (such as heart disease, stroke, diabetes and cancer).” –WHO*

Childhood malnutrition is the underlying cause of an estimated 35 per cent of all deaths among children under five years of age among the developing countries<sup>3</sup>. Malnutrition is a major health problem in India, especially among children. Figure 13.1 represents percentage of children (below five years old), classified as malnourished under three categories of Stunting, Wasting and Under-weight across five southern states in India. A comparative analysis among the southern states shows that the lowest occurrence of Stunting is in Kerala (19.7), followed by Tamil Nadu (27.1) in second and Telangana (28.1) in third positions. Andhra Pradesh and Karnataka are in fourth and fifth positions respectively. The lower the values better the nutrition indicators. When we look at prevalence of Wasting, Telangana (18.0) is in second position after Kerala (15.7). Telangana (28.5) is in third position after Tamil Nadu (23.8) and Kerala (16.1) in Under-weight.

**Figure 13.1: Nutritional Status of Children (below 5 years) across Southern States of India**



Source: NFHS-IV

#### 13.5. Nutritional Status of Children among Districts of Telangana State

Despite making considerable progress in bringing down the MMR, IMR and Fertility Rate, Telangana State is under performing on the nutrition front. Malnutrition is very high among children in the State. As the 31 newly formed districts of Telangana were carved out from the earlier 10 districts, analysis on the former will be relevant to the latter. As seen in Table 13.3, Adilabad, Mahabubnagar, Medak, Nalgonda, and Nizamabad districts are above State average in all the three categories. Hyderabad is comparatively low in all the three categories.

3. Source: World Health Statistics, 2012.

**Table 13.3: Nutritional Status of Children (below 5 years) across Districts of Telangana**

Districts	Stunting	Wasting	Under-weight
Adilabad	38.3	22.1	35.8
Hyderabad	15.7	14.1	16.8
Karimnagar	24.3	19.3	25.4
Khammam	26.5	13.7	22.2
Mahabubnagar	37.1	18.6	34.5
Medak	33.4	20.7	37.0
Nalgonda	28.9	23.1	34.1
Nizamabad	36.6	22.0	36.3
Rangareddy	26.2	14.8	25.8
Warangal	26.6	16.6	29.1
<b>Telangana State</b>	<b>28.1</b>	<b>18.0</b>	<b>28.5</b>

Source: NFHS-IV

Consequences of high undernourishment among children can have a direct impact on their education, leading to high drop outs and low academic performance. It can also have an economic impact on the parents, who would be unable to attend to their duties due to their children often falling sick. Expenditure on child health may also have a negative impact on economic conditions of the parents.

To combat the malnutrition problem, the State government has started a new initiative called Nutritional Rehabilitation Centres (NRCs). The aim of the government is to focus specially on under nourished children. As of now, nine such centres have been set up in district hospitals.

### 13.6. Anaemia among Children and Women

*“Anaemia is a condition in which the number of red blood cells or their oxygen-carrying capacity is insufficient to meet physiologic needs, which vary by age, sex, altitude, smoking, and pregnancy status. Women and children are more vulnerable.” –WHO*

Anaemia is another major problem with which women and children are affected in the state.

As per NFHS-IV, 61 per cent of the children aged six to 59 months in the state, are anaemic. Also, 56.9 per cent of the non-pregnant women and 49.9 percent of pregnant women are anaemic. That is, more than half of the women and child population of the State are anaemic.

### 13.7. Arogya Lakshmi: Nutritional Care for Children (up to six years), Pregnant Women and Lactating Mothers

The Arogya Lakshmi programme was started by the State government on 1 January 2015. The main objective of this scheme is to improve the nutritional status of pregnant and lactating women and to reduce malnutrition among children below six years of age. Undernourishment and anaemia among pregnant women are the important causes for high-risk deliveries and high infant mortality rate. The State government, through this scheme, is providing a sufficient quantity of food with improved nutrients to below poverty line (BPL) beneficiaries.

During 2016–17, the benefits of this scheme reached 9,45,341 children in the age group of seven months to three years, 5,25,439 children in



the age group of three to six years, and 3,69,677 pregnant and lactating women. Apart from this 35,700 malnourished children are given special care under this programme.

Nutrition Health Tracking System (NHTS) is put in place to track the services provided to pregnant & lactating women and children to facilitate timely interventions for addressing high-risk pregnancies, severely under-nourished and under-weight children etc.

### **13.8. Institutional Deliveries: Solution to Maternal and Infant Deaths**

Institutional delivery is a central goal of the safe motherhood and child survival movements. Appropriate delivery care is crucial for both maternal and perinatal health. As per the data given below in Table 13.4, at all-India level, only 46 per cent of States/UTs have exceeded 90 per cent in institutional deliveries. A huge proportion is still below 90 per cent. To bring down the high Maternal Mortality Ratio (MMR) and Infant Mortality Rates (IMR) in the country, one of the important solutions is achieving 100 per cent institutional deliveries.

**Table 13.4: Percentage of Institutional Deliveries among States and UTs in India**

Percentage of Institutional Deliveries	Number of States & Union Territories (UTs)
90 per cent and above	12
80–89 per cent	6
70–79 per cent	4
60–69 per cent	3
50–59 per cent	1
<b>Total</b>	<b>26</b>

Source: NFHS-IV, 2015–16.

As per the *MMR Bulletin* 2011–13, in the age group of 20–34, the proportion of maternal deaths to non-maternal deaths is very high in India. As shown in Table 13.5, maternal deaths between the age group of 20–24 is 35 per cent when compared to 15 per cent of non-maternal deaths. This evidence indicates that proper delivery care is required to protect mother and child at the time of delivery. Clinical evidence says that most of the maternal deaths can be avoided.

**Table 13.5: Age Distribution of Maternal and Non Maternal Deaths, India, 2011–13**

Age Groups	Maternal Deaths Proportion	Non-Maternal Deaths Proportion
15–19	6%	12%
20–24	35%	15%
25–29	33%	13%
30–34	15%	12%
35–39	8%	13%
40–44	2%	16%
45–49	0%	20%
15–49	100%	100%

Source: MMR Bulletin, 2011–13.

An attempt has been made to assess the impact of institutional deliveries (ID) and pregnant women who are anaemic (PWA), on Maternal Mortality Ratio (MMR). Cross-sectional data at all-India level (for 15 states) on pregnant women aged 19–49 who are anaemic and institutional deliveries (ID), is obtained from NFHS-IV.

The MMR data is sourced from MMR Bulletin 2011–13. Regression coefficients with one dependent variable (MMR) and two independent variables (PWA and ID) are estimated.

### Regression Results

$$\text{MMR} = 83.03 + 0.07 \text{ PWA} - 0.62 \text{ ID} \quad R^2 = 0.48$$

(2.50)      (0.16)      (2.99)

Note: Figures given in parentheses are t-values

The R-Square value is 0.48 which means that 48 per cent of the variance in the dependent variable is accounted for by the independent variables. Between the two independent variables, the factor of institutional deliveries has more impact on the MMR.

The coefficient (-) 0.62 for ID is negative, which means that for every one per cent increase in institutional deliveries the MMR will go down by 0.62 per cent. Estimated coefficient is statistically significant based on t-value. The coefficient (+) 0.07 is positive, which means that for every 1 per cent increase in pregnant women who are anaemic, MMR will increase by 0.07 per cent. However estimated coefficient is not statistically significant.

### 13.9. Institutional Deliveries and MMR among Districts in Telangana State

As given below in Table 13.6, the percentage of institutional deliveries in Telangana State is 91.5. Institutional deliveries in urban places are 96.3, while in rural places it is 87.3. Adilabad is lowest among all the erstwhile 10 districts in the State. Very low institutional deliveries in Adilabad signify very high MMR in that district. Conversely, very high institutional deliveries in Hyderabad are associated with low MMR there.

**Table 13.6: Institutional Deliveries and MMR among Districts of Telangana**

Districts	Institutional Deliveries *		MMRC 2011–13
	Rural	Total	
Adilabad	64.3	70.8	152
Hyderabad	97.2 (urban)	97.2	71
Karimnagar	96.6	97	74
Khammam	92.4	94.2	99
Mahabubnagar	76.4	78.4	98
Medak	88	91.3	90
Nalgonda	96	94.8	90
Nizamabad	93.8	92.6	79
Rangareddy	96.2	95.3	78
Warangal	94.3	96	78
<b>Telangana State</b>	<b>87.3</b>	<b>91.5</b>	<b>92</b>

Source: \* NFHS-IV, 2015–16; MMR 2011–13, MMR Bulletin

Statistical evidence clearly states that institutional deliveries and MMR are highly correlated. Institutional deliveries do take care of normal and high-risk pregnancies. The availability of Caesarean-section services, commonly referred as C-section is one of the important surgeries needed in critical cases to save the lives of the mother, child, or at times both. In some places, lack of C-section facilities is the reason for maternal death, but in most places unwarranted profligate use is being made of C-section. Rising C-section rates is a cause for concern both at national and international level.

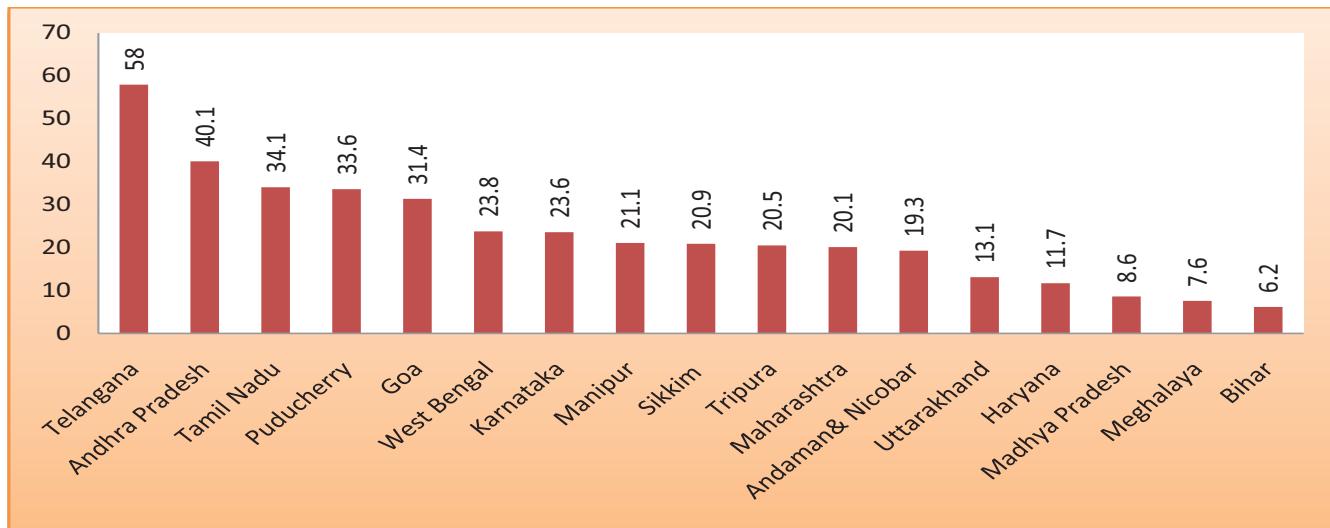
*“There is no justification for any region to have a rate of C-section higher than 10–15 per cent” –WHO*

The WHO Statement of Caesarean Section Rates, 2015, categorically states that, at a population level, Caesarean section rates higher than 10 per cent are not associated with reductions in maternal and new born mortality rates.

*“Caesarean sections are effective in saving maternal and infant lives, but only when they are required for medically indicated reasons.” –WHO*

According to the recently released fact sheets of the National Family Health Survey Round 4 (NFHS-IV) for 17 states and Union territories of India, given below in Figure 13.2, C-section rate is significantly higher in the southern states compared to the northern states. While making considerable improvement on increasing the institutional deliveries to 91.5 per cent (NFHS-IV), Telangana State, with 58 per cent, has the highest C-section rate in the country.

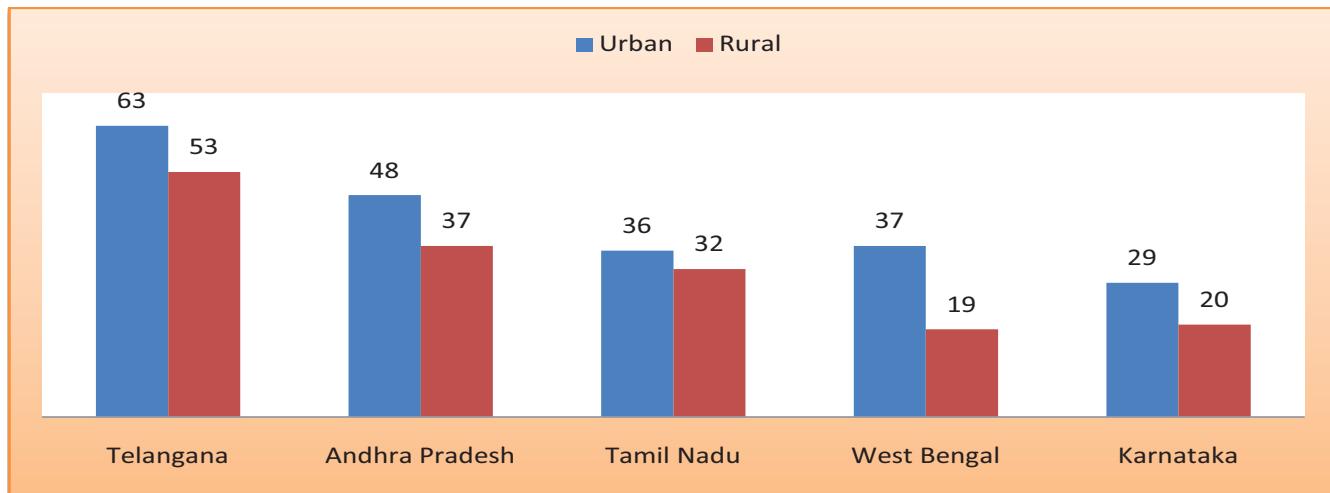
**Figure 13.2: Caesarean Section Rates across States and UTs in India**



Source: Deciphering the determinants and impacts of Rising Rates of Caesarean Section and offering Potential Solutions, CESS & UNICEF, April 2016.

As expected, NFHS-4 data as shown in Figure 13.3 indicates that the C-section rate is higher in urban areas than in rural areas. However, the difference between the rural and urban is not very glaring. Even the C-section rate in rural areas far surpasses the standards set by the WHO.

**Figure 13.3: Caesarean Section Rates in Urban and Rural Areas in Select States in India**

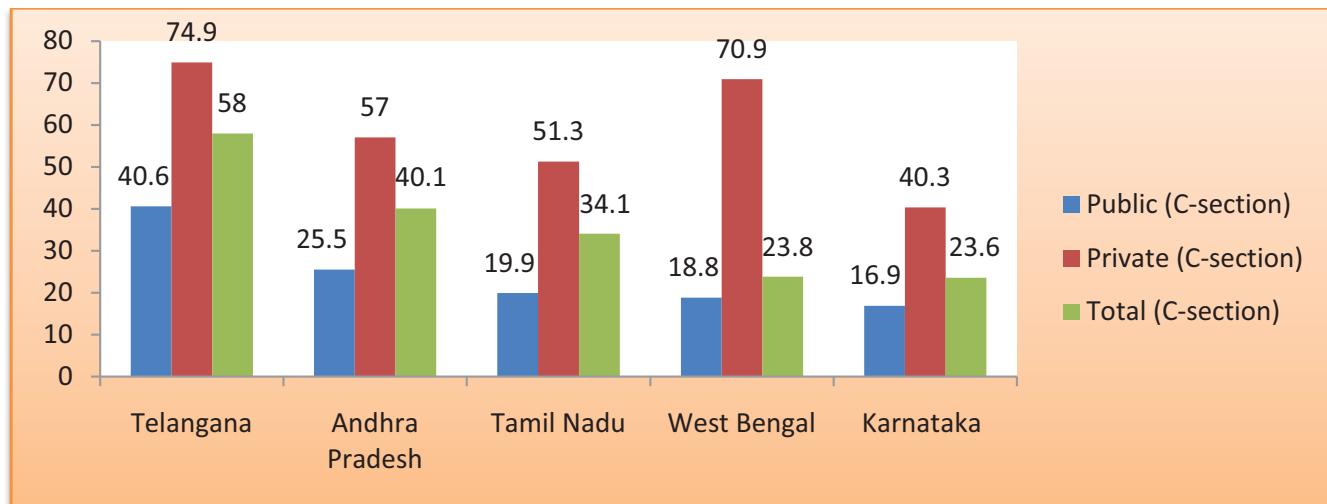


Source: Deciphering the determinants and impacts of Rising Rates of Caesarean Section and offering Potential solutions, CESS & UNICEF, April 2016.

C-section rates in Telangana are the highest, with 63 per cent in urban areas and 53 per cent in rural areas, followed by Andhra Pradesh with 48 per cent and 37 per cent in urban and rural areas respectively. The C-section rate in rural areas of West Bengal at 19 per cent is lower than the other rural areas of southern states.

Further analysis of public and private C-section rates in various states as given below in Figure 13.4, shows that C-section rates are higher in private facilities than in public facilities. Telangana State has the highest C-section rates in private facilities in the country with 74.9 per cent, followed by 70.9 per cent in West Bengal. The C-section rate gap between private and public facilities is very high in all the states.

Figure 13.4: Public, Private and Total C-section rates in Select States in India



Source: Deciphering the determinants and impacts of Rising Rates of Caesarean Section and offering Potential Solutions, CESS & UNICEF, April 2016

### 13.10. C-section Rates among Districts in Telangana State

District-level analysis on C-section rates in Telangana, as shown in Table 13.7, indicates that Karimnagar has the highest C-section rates at 81.1 per cent. Karimnagar rural has the highest rural C-section rates at 77.4 per cent. Karimnagar, Warangal, Khammam, Nalgonda, Rangareddy and Hyderabad districts have higher C-section rates than the State average.

Table 13.7: C-section Rates among Districts in Telangana

Districts	C-section Rates (public + private)	
	Rural	Total
Adilabad	35.2	39.9
Hyderabad	62.2 (urban)	62.2
Karimnagar	77.4	81.1
Khammam	65.1	65.6
Mahabubnagar	31.7	33.5
Medak	46.4	47.1
Nalgonda	66.1	69
Nizamabad	54	50.4
Rangareddy	63.6	58.7
Warangal	71.6	69.2
<b>Telangana State</b>	<b>53.4</b>	<b>58</b>

Source: NFHS-IV

## **Impact of C-sections on Mother and Child**

WHO has categorically stated that Caesarean sections can cause significant and sometimes permanent complications, disability or death, particularly in settings that lack the facilities and/or capacity to properly conduct safe surgery and treat surgical complications.

New medical evidence is also emerging that an unnecessary C-section also deprives the newborn of the protective maternal gift of the vaginal ‘microbiome’ that builds immunity and protects against a host of diseases later on.

To conclude, as stated by WHO, “Caesarean sections are effective in saving maternal and infant lives, but only when they are required for medically indicated reasons.”

### **13.11. Maternal Health Care Services in Telangana State**

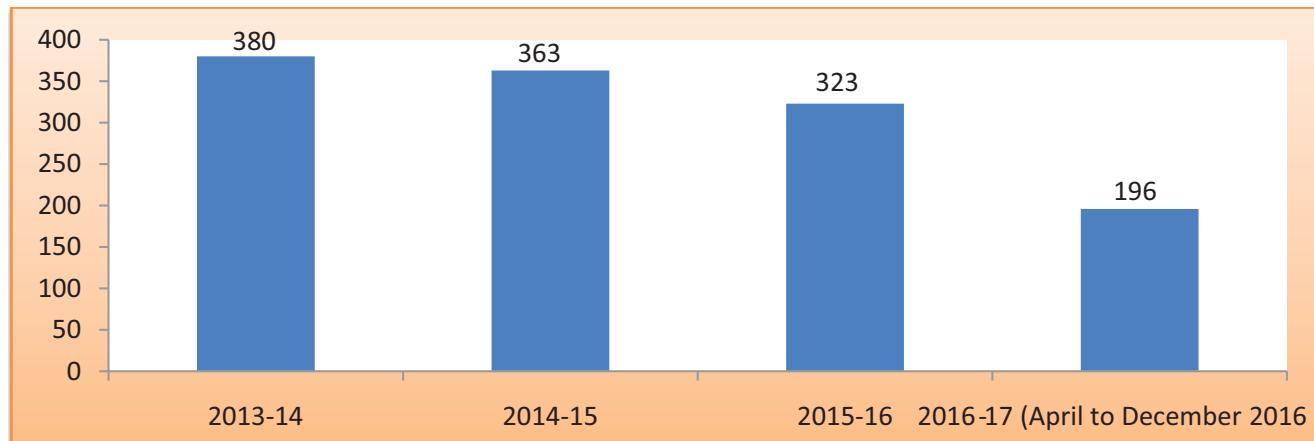
To promote institutional deliveries at public health facilities and to bring down the Maternal Mortality Ratio (MMR), the Telangana State government is strengthening Comprehensive Emergency Obstetric and Neonatal Care (CEMONC) services at various places in the State. Presently there are 66 CEMONC centres in the State to promote institutional deliveries and attend to pregnancy related emergencies. The CEMONC centres provide the services of obstetricians and anaesthetists, and emergency blood transfusion services round the clock.



### **Progress made in Bringing Down Maternal Deaths in Telangana**

As per MMR Bulletin 2011–13, MMR in Telangana is 92. Significant progress has been made by the State in bringing down maternal deaths over a period of three years. As shown in Figure 13.5, there is a significant decline in maternal deaths from 363 (2014–15) to 323 (2015–16). During 2016–17 (April–Dec), the number of maternal deaths has further come down to 196.

**Figure 13.5: Maternal Deaths in Telangana**



Source: Commissionerate Health & Family Welfare, Telangana State, 2017

### Promoting Institutional Deliveries at Public Health in Telangana State

Several initiatives are being taken by the State government in promoting institutional deliveries, at the same time putting a check on unhealthy delivery practices, especially at private health facilities. At hospital level, special incentives are given to Community Health Centres (CHCs) and Area Hospitals (AHs). The CHCs which have achieved a benchmark of 1200 deliveries in a year are given an incentive of Rs. 5000. Similarly, AHs which have achieved a bench mark of 6000 deliveries in a year are given an incentive of Rs. 7500.

A mobile-based application called “ANMOL” for tracking pregnant women and children has been launched. With the help of this application ANMs and doctors can counsel pregnant women on proper diet intake and care to be taken during pregnancy.

To encourage people to come to public health services, the State government has arranged exclusive vehicles called “AmmaVodi” (Mother’s Lap) for dropping back the women after surgery.

Special efforts are being taken by the district collectors to bring down the C-section rates in public and private facilities. Private hospitals were asked to bring down the C-sections at their hospital level and asked to be more transparent on the reasons for conducting C-sections. Unwarranted C-sections call for an explanation. This method of fixing responsibility for conducting C-sections is expected to bring down the number of C-sections at private facilities. District Medical and Health Officers are becoming more vigilant on private nursing homes which are conducting high numbers of C-sections in the districts. These measures are expected to yield better results in near future. A success story on revamping the maternal health system in Medak district is briefed in Box -13.1.

### 13.12. Child Health Care Services in Telangana

The first 28 days of life – the neonatal period – are the most vulnerable time for a child’s survival. Neonatal mortality is becoming increasingly important not only because the share of under-five deaths occurring during the neonatal period has been increasing, but also because the health interventions needed to address the major causes of neonatal deaths generally differ from those needed to address other under-five deaths, and are closely linked to those that are necessary to protect



4. Source: Levels & Trends in Child Mortality, Report 2015, Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation

maternal health<sup>4</sup>.

To strengthen the neonatal care services and to further bring down the Infant Mortality Rate (IMR), the State government has set up 22 Special New-born Care Units (SNCUs), 59 New-born Stabilization Units (NBSUs) and 581 New-born Care Centers (NBCCs). Six more SNCUs will be operational within a short period of time. During the last five years, 30,000 newborns were saved in these 22 SNCUs.

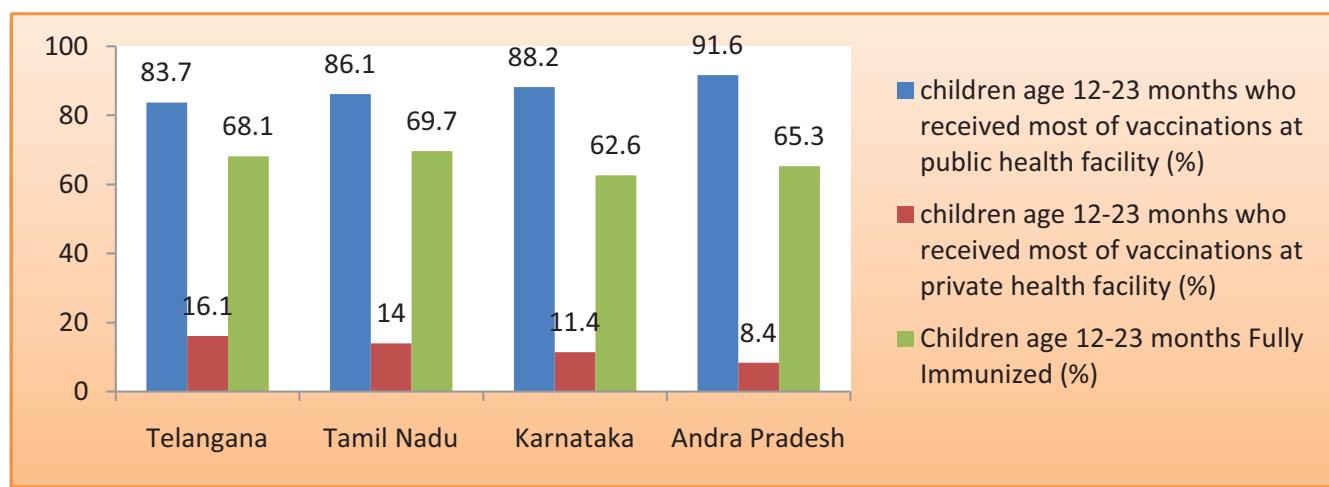
### Full Immunization of Children

Most child deaths are caused by diseases that are readily preventable or treatable with proven, cost-effective and quality-delivered interventions. Infectious diseases and neonatal complications are responsible for the vast majority of under-five deaths globally<sup>5</sup>. To bring down the U5MR and child morbidity, Telangana State is committed on full immunisation of children. As per NFHS-IV report, in rankings on full immunisation of children, Telangana State is in second position among the southern states (except Kerala). As shown in Figure 13.6, Telangana state has 68.1 per cent of children in the age group of 12–23 months who are being fully immunised, after Tamil Nadu with 69.7 per



cent in the first position. Andhra Pradesh and Karnataka are in third and fourth positions with 65.3 per cent and 62.6 per cent, respectively. Telangana State has set a target to achieve 90 per cent full immunisation by 2020.

**Figure 13.6: Child Immunization at Public and Private Facilities among Select States**



Source: NFHS-IV

From the above figure it is evident that the percentage of vaccinations taking place in private facilities is relatively higher in Telangana than other southern states. The state government is keen on improving

5. Source: Levels & Trends in Child Mortality Report 2015, Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation

the intervention of public health facilities in vaccination, as vaccination is being charged in private health facilities whereas it is free in public health facilities.

### **13.13. Communicable Diseases**

India is undergoing an epidemiologic and demographic transition. The life expectancy has increased, with consequent rise in degenerative diseases of aging and life-styles. Nevertheless, communicable diseases are still dominant and constitute major public health issues. The progress made on combating TB and AIDS in the state is given below.

#### **Tuberculosis (TB)**

The WHO Global Tuberculosis (TB) Report, 2015, states that out of an estimated global annual incidence of 9.6 million TB cases, 2.2 million were estimated to have occurred in India. This is 23 per cent of the total TB cases in the world.

India is a signatory to the “End TB Strategy” that calls for a world free of tuberculosis with measurable aims of a 50 per cent and 75 per cent reduction in incidence and related deaths respectively by 2025 and corresponding reductions of 90 and 95 per cent by 2035. During 2016–17 (up to December) the Annual Total TB Case Notification Rate in Telangana State was 330 cases. National average was 111 cases per lakh per year.

Telangana is the first State that has one Drug Resistant TB (DRTB) Centre / Link Ward in every district as a pilot project which became a national guideline in 2016–17. These centres provide treatment and admission services for Drug Resistant TB (both MDR and XDR TB). However, with districts increasing to 31, the State is planning to identify a small ward ( $\geq 2$  beds for male and  $\geq 2$  for female) in each district so that every DRTB case can be treated at the earliest within the district, thus reducing the delay in treatment and stopping the chain of transmission.

#### **Initiatives taken by the State in Detecting and Treating TB Cases**

As a step towards achieving the SDGs and “End TB Strategy”, the Revised National Tuberculosis Control Programme (RNTCP) is adopting newer strategies and tools to ensure universal access to quality TB care. In Telangana State, every registered case is monitored through RNTCP-specific software such as Nikshay, e-SMARTS and e-Lab. The state is encouraging postgraduate students in medical colleges to do research on TB. A fund of Rs. 30,000 is given to each such student for research on an approved topic.

The State TB Cell, in collaboration with NGO partner TB Alert, launched the Tuberculosis Health Action Learning Initiative (THALI) project in Hyderabad district. THALI focuses on vulnerable population living in urban slums and on engagement of private health care providers in TB control. As per the memo issued by Department of Women and Child Welfare (DWCD), children below six years old with tuberculosis are provided with double rations during the course of treatment. So far, more than 50 children have been supported through this intervention which resulted in more than 97 per cent adherence to the treatment.

During 2016–17, the State has provided 168 new two-wheelers for key staff in the TB control programme. These two-wheelers will be used for supervision and monitoring at the field level.

#### **Acquired Immuno-Deficiency Syndrome (AIDS)**

Human Immunodeficiency Virus (HIV) is a retrovirus that eventually causes Acquired Immunodeficiency Syndrome (AIDS). More than 35 million people are living with HIV/AIDS worldwide. The HIV epidemic has been one of the most challenging modern public health problems in India. Provisional estimates put the number of people living with HIV in India at 25 lakhs, of which 2.1 lakh people are in Telangana.

In response to this epidemic, the fourth phase of National AIDS Control Programme (NACP) is being implemented across the country by the National AIDS Control Organisation (NACO). Effective implementation of NACP has resulted in a decreasing trend of HIV prevalence in the country as well as in Telangana State.

During 2016–17, as a part of the Prevention of Parent to Child Transmission (PPTCT) programme, ANMs across the State were trained and capacitated for reaching out to pregnant women, especially in the rural areas, and in promoting HIV screening among them. The new triple drug regimen by WHO was effectively implemented with more than 1500 positive pregnant women for the prevention of mother to child infection by linking all the HIV-positive ANC mothers to comprehensive care, support and treatment services, thereby reducing the vertical transmission rates to less than 2 per cent.

### **13.14. Public Health Infrastructure in Telangana State**

Provision of public health services is vital. A few important reasons are (i) high rural population, (ii) low literacy rates, (iii) low incomes in rural areas. Only people whose motto is welfare can operate in such conditions. Obviously, it is only the public health system which can operate effectively and efficiently. With this backdrop, public health infrastructure needs greater attention in the State. In Table 13.8 given below, existing facilities are compared with the norms set by the Indian Public Health Standards (IPHS). The IPHS has set the requirements for public facilities in a State based on the population of the state. Compared to the required numbers, Telangana State has 69 per cent of Sub centres, 74 per cent of PHCs, 37 per cent of CHCs and 53 per cent of Area Hospitals. Apart from seven District Hospitals, there are five mother and child care hospitals (MCH) and 18 teaching and specialty hospitals operating in the State.

**Table 13.8: Public Health Infrastructure in Telangana**

S. No.	Type of Facility	Telangana (Nos)	As per IPHS Norms* (Nos)	Percentage of meeting the IPHS norms requirements
1	Sub Centres (SCs) (Nos)	4797	7001	69%
2	Primary Health Centres (PHCs)	876	1167	74%
3	Community Health Centres (CHCs)	107	291	37%
4	Sub-district hospitals/Area hospitals	31	58	53%
5	District hospitals	7	31 (one in each district)	23%

Another important aspect is doctor to patient ratio, which is at one doctor for 1700 people, is very poor in the State. Non-availability of specialist doctors is another major concern in public health.

### **13.15. Reforms in Public Health**

A series of reforms are being undertaken by the Telangana State government since its formation in June, 2014. Administrative sanctions are given to many Primary Health Centres and Community Health Centres for upgradation to 50-bedded, 100-bedded and in some cases to 200-bedded hospitals.

During 2016–17, the Government gave 20 district hospitals permission to set up new intensive care units. 34 hospitals have been identified for setting up dialysis centres. Administrative sanction has been given to MCH, Sircilla to upgrade from a zero- to 100-bedded hospital.

Another important government initiative, e-Aushadi, is for the supply of drugs to patients and hospitals through online booking. This has started in all hospitals. This is expected to improve the public drug delivery system in the hospitals. Wellness Centres are being set up under ArogyaSri Scheme.

### 13.16. Outlook

To take full advantage of the demographic dividend, the State requires a healthy and educated population. The State government has set the goal to attain good health and well-being for all people in the State by providing preventive, curative, palliative and rehabilitative services.

As a part of achieving SDGs in the health sector, the State government has set specific targets especially in maternal and child care, for three years, seven years and 15 years as presented below.



To achieve the above stated goals in a phased manner, the government is keen on upgrading and bridging the gap between the actual facilities available and norms set by Indian Public Health Standards (IPHS). In general, the government is keen on finding effective strategies to extend health care and respond to the needs of the people in the State.

#### Box- 13.1: Revamping Public Maternal Delivery System in Medak District: A Success Story

Although institutional deliveries in Medak district is 91.3 per cent (NFHS-IV), the concern is the percentage of maternal deliveries in government hospitals being low at 38 per cent. High percentage of maternal deliveries in private hospitals are leading to very high C-section rates in the district. C-section rates at private health hospitals are 65 percent in the district.

Having known of multiple economic and health consequences of the C-sections, special efforts are being taken by the Medak district collector, to improve maternal deliveries at public health facilities. Apart from on-going initiatives, a pilot project is started in Kowdipally mandal, in which all ANMs have to accompany their ANCs and conduct normal deliveries along with staff nurses under medical supervision. All high-risk deliveries are being planned one month ahead by the doctors at district hospital. As ANMs are now accompanying their ANCs, in one months' time (January, 2017), maternal deliveries at public health have increased by 20 percent in Kowdipally mandal. As this initiative is resulting in significant improvement in maternal deliveries in Kowdipally area, District Collector has extended this model to the entire district.



Maternal Health Awareness Campaign, Medak District.

# EDUCATION

*“ “ Education is the manifestation of the perfection already in man  
- Swami Vivekananda ” ”*

## 14.1. Introduction

Literacy is the stepping stone to acquire skills to enhance one's life. Ability of education to transform one's life is a proven fact and hence plays a determining role in improving the human development as such. Human development approach is about expanding the richness of human life, rather than the richness of the economy in which human beings live. Human Development Index (HDI) is a composite statistic of life expectancy, education and per capita income indicators which are used to rank countries into set tiers of human development. In 2004-05, the HDI value for Telangana was 0.343, which is slightly lower than country value that stands at 0.361. In 2011-12, the HDI value of the state has improved to 0.513. However, the below analysis on literacy and education shows that the state have to work substantially on literacy and education to improve its overall HDI ranking.

The state's vision for education drafts an innovative model of publicly funded education system. This model aims to strengthen the foundation for social development by ensuring access to quality education for all. This is also in line with the Sustainable Development Goals (SDGs) agenda set by United Nations in 2015 with the guiding principle of 'leave no one behind'.

This chapter discusses the status of literacy and education in Telangana state and the various measures taken by the government to improve education in the state.

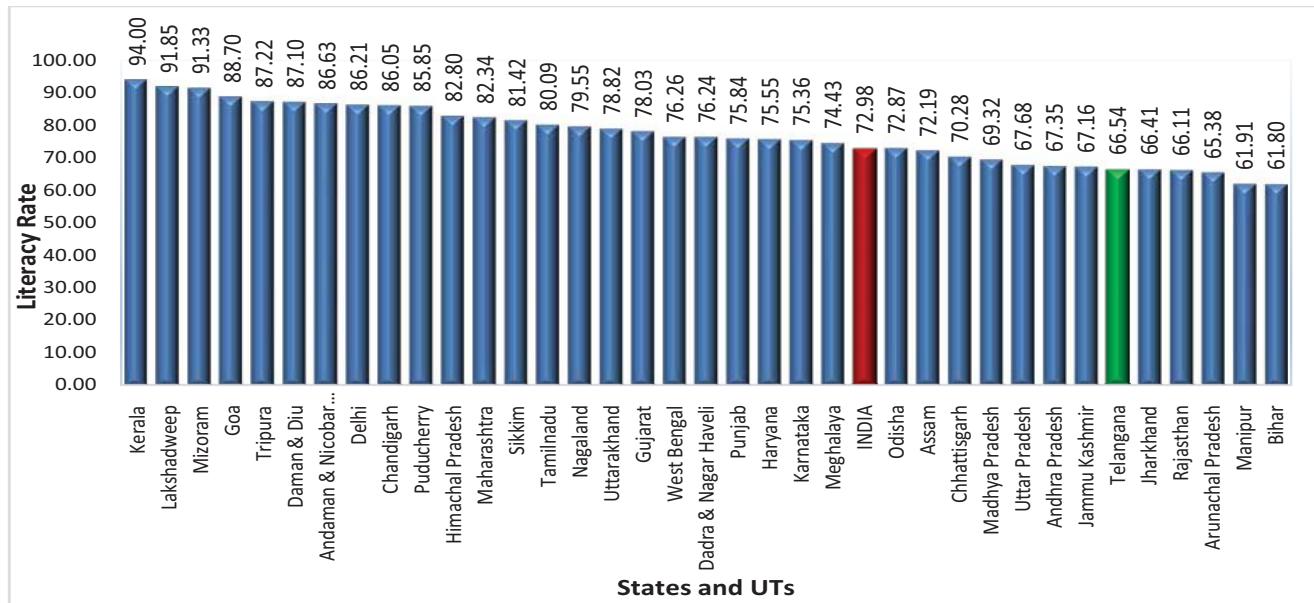
## 14.2. Literacy in India

A person aged seven years and above who can read and write with understanding in any one language is considered as literate. It is widely reckoned that, in modern societies, literacy skills are fundamental to informed decision-making, personal empowerment, and active and passive participation in the local and global social community.

According to the census of 2011, in Telangana State there are 3,11,04,508 persons in the age group of 7 years and above, comprising 1,55,93,698 males and 1,55,10,810 females. The literate part of this population consists of 2,06,96,778 persons, giving an overall literacy rate of 66.5 per cent, which is lower than the

national average of 72.9 per cent. Despite the fast rate of economic growth in the last three decades, the literacy rate in the state is still lower than the all-India average. Figure 14.1 indicates that the state occupies 31<sup>st</sup> position among the states and UTs of the Indian union.

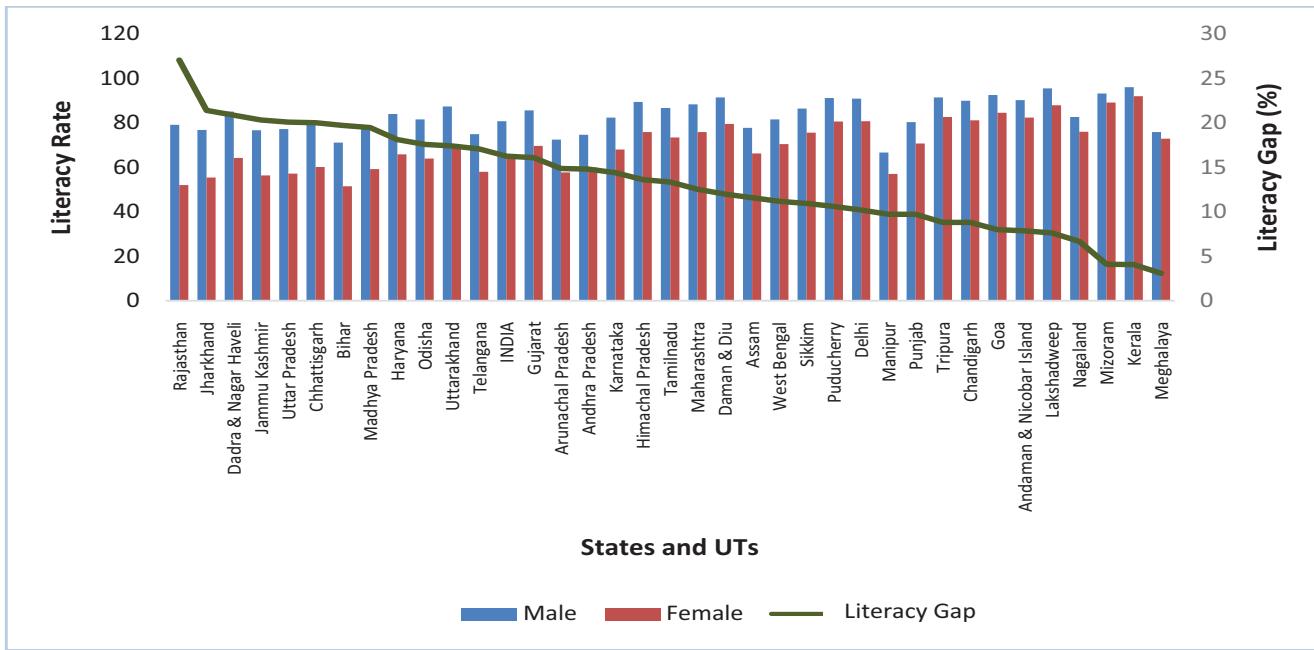
**Figure 14.1: State/UT-wise total literacy rate – Census 2011**



Source: Census-2011

**Disparities in literacy:** In Telangana, there is a wide gap (24 per cent) in literacy rates among urban and rural populations. Urban literacy is 81 per cent while, rural literacy is at 57 per cent. The state shows significant difference in male (75.0 per cent) and female (57.9 per cent) literacy level. At 17.1 per cent, Telangana stands at 12<sup>th</sup> among states and is higher than All India figure of 16.25 per cent. Figure 14.2 depicts state wise male and female literacy rates, and literacy gap.

**Figure 14.2: State-wise male and female literacy rates and literacy gap**



Source: Census-2011

Literacy rates among various social groups also varies in the state. The literacy rate among Schedule Castes (SCs) and Schedule Tribes (STs) groups are lower than state average. Literacy among SC and ST communities is 58.9 and 49.5 per cent respectively. Within each social group also, the literacy level varies between rural and urban population as well as in male and female. It is observed that percentage of people never attended school is highest among STs (17 per cent) and Muslims (16 per cent).<sup>6</sup>

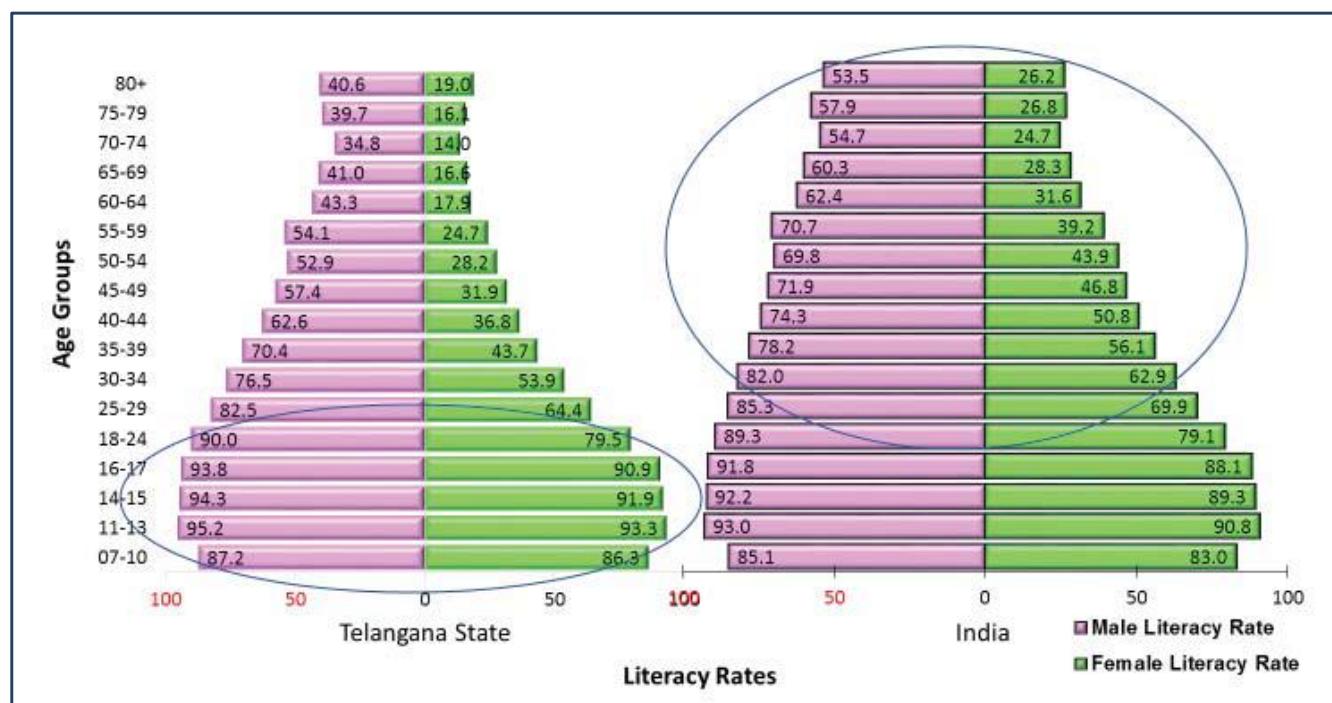
### 14.3. Literacy in Telangana State

**Adult and youth literacy rate:** Compared to the adult literacy rate in India, the youth literacy rate is about 9 per cent higher. Despite this, it is a matter of concern that yet so many people in India cannot even read and write. Despite several initiatives by the government, the numbers of children who do not get education, especially in the rural areas, are still a concern.

Nevertheless, the analysis on gender and age-wise literacy rates for Telangana State revealed a higher literacy rate for the age group of 7–24 years (88.56 per cent) than the all-India literacy rate of 86.98. The data also shows a better situation in the state for males and females in the age group of 18–24 years at 90 per cent and 79.5 per cent respectively. And these figures are higher than the national average of 89.3 per cent and 79.1 per cent respectively, for the corresponding age group and gender.

The national averages are high for those in the age group above 24 years, while averages for the same age groups in the state show low literacy rates. It shows that in Telangana, the younger generation is going to school or able to access education than their elders. Hence, there is a need for focusing on adult education in the state. Figure 14.3 elaborates the comparison of Telangana and India with respect to gender-wise literacy rates by age.

**Figure 14.3: Gender-wise literacy rates by age – Telangana vs India**



Source: Census-2011

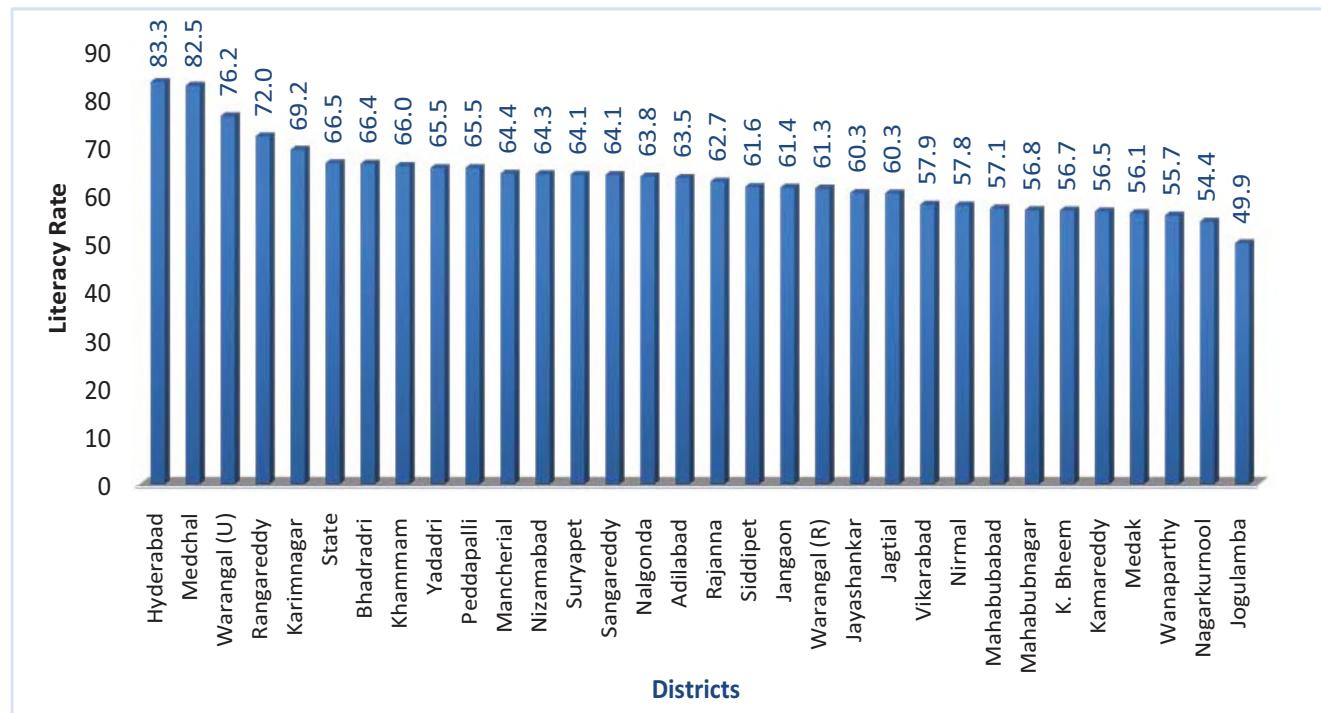
**Spatial patterns in literacy:** In Telangana, the average literacy rate (66.5 per cent) has a wide variation among districts. Among the erstwhile districts, Hyderabad district is at the top with 83.25 per cent and Mahabubnagar at the bottom with literacy rate of 56.06 per cent.

6. Commission of Inquiry Report on Socio-Economic and Educational Conditions of Muslims.

After the re-organization of districts from 10 to 31. Hyderabad district continued to have the distinction of being the most literate district of the state with 83.25 percent. At the other end of the scale, Jogulamba district (which was bifurcated from erstwhile Mahabubnagar District), with 49.87 per cent literacy is the least literate district.

Out of 31 districts, 26 of them have literacy level less than the state average or in other words, 84 per cent districts are lower than the state average. Only five districts viz., Hyderabad (83.25), Medchal (82.49), Warangal Urban (76.17), Rangareddy (71.95) and Karimnagar (69.16) have literacy rate above the state average. And of these, three are urban districts - Hyderabad, Medchal and Warangal (U) districts. It is interesting to note that literacy in these three districts is higher than the national average. Another pattern emerging is that two out of five districts (Medchal and Rangareddy) are located close to Hyderabad, which is the state capital. Thus, high literacy rates are characteristic of areas with high degree of urbanization. The bottom ten districts literacy rates are Vikarabad (57.9), Nirmal (57.8), Mahabubabad (57.1), Mahabubnagar (56.8), Kumarambheem (56.7), Kamareddy (56.5), Medak (56.1), Wanaparthy (55.7), Nagarkurnool (54.4), and the lowest is Jogulamba district 49.9 per cent. The district wise literacy rates are shown in Figure 14.4.

**Figure 14.4: District-wise literacy rates of Telangana State**



Source: Census-2011

An analysis of literacy rates at mandal level shows even wider variations. To classify the literacy levels at mandal, taking state's average (66.5 per cent) as a base, mandals are divided into four categories as; very high (75 per cent and above), high (66 to 75 per cent), moderate (55 to 66 per cent), and low (below 55 per cent). For discussion purposes, the upper two is designated as high literacy areas in a relative sense, third one as moderate literacy areas and the bottom one treated as low literacy areas. The trends emerging from this classification are as follows:

**High literacy mandals:** Of 584 mandals, 108 mandals display literacy level above state average of 65 per cent. Of the 108 mandals, 22 mandals displayed very high literacy level (above 80 percent) and remaining 86 mandals have high literacy level. A list of 20 mandals from the top and bottom positions is provided in the table 14.1.

**Table 14.1: Literacy Rates at Mandals - List of top and bottom 20 mandals:**

Sl. No	District	Mandal	Literacy Rate	Sl. No	District	Mandal	Literacy Rate
<b>TOP 20 MANDALS / WARDS</b>				<b>BOTTOM 20 MANDALS / WARDS</b>			
1	Medchal	Malkajgiri	88.26	1	Sangareddy	Kangti	46.4
2	Medchal	Bachpalle	86.18	2	Mahabubnagar	Maganoor	46.33
3	Medchal	Alwal	86.11	3	Sangareddy	Kalher	46.24
4	Hyderabad	Ward No. 100	86.1	4	Mahabubnagar	Maddur	45.89
5	Hyderabad	Ward No.. 82	85.07	5	Vikarabad	Bomraspeta	45.82
6	Medchal	Kukatpally	84.69	6	Mahabubnagar	Narva	45.63
7	Karimnagar	Karimnagar	84.48	7	Kumurambheem	Chintalamanepally	45.6
8	Medchal	Medipally	84.36	8	Kumurambheem	Penchikalpet	45.31
9	Medchal	Balanagar	84.06	9	Mancherial	Kannepalli	45.09
10	Medchal	Uppal	83.41	10	Nalgonda	Neredugommu	45.03
11	Rangareddy	Hayathnagar	82.94	11	Vikarabad	Doulatabad	44.85
12	Rangareddy	Saroornagar	82.93	12	Kamareddy	Pedda Kodapgal	44.79
13	Bhadradri	Bhadrachalam	82.77	13	Medak	Chegunta (Sankhapur)	44.26
14	Rangareddy	Serilingampally	82.17	14	Mahabubnagar	Damaragidda	43.98
15	Khammam	Khammam Urban	82.02	15	Mancherial	Bheemini	42.91
16	Warangal (U)	Warangal	81.78	16	Jogulamba	Maldakal	41.8
17	Medchal	Qutubullapur	81.65	17	Jogulamba	Dharur	41.09
18	Mahabubnagar	Mahabubnagar Urban	81.27	18	Jayashankar	Palmela	37.81
19	Bhadradri	Kothagudem	81.15	19	Jogulamba	Ghattu	37.59
20	Rangareddy	Balapur	81.1	20	Jogulamba	Kaloor-Timmanadoddi	33.77

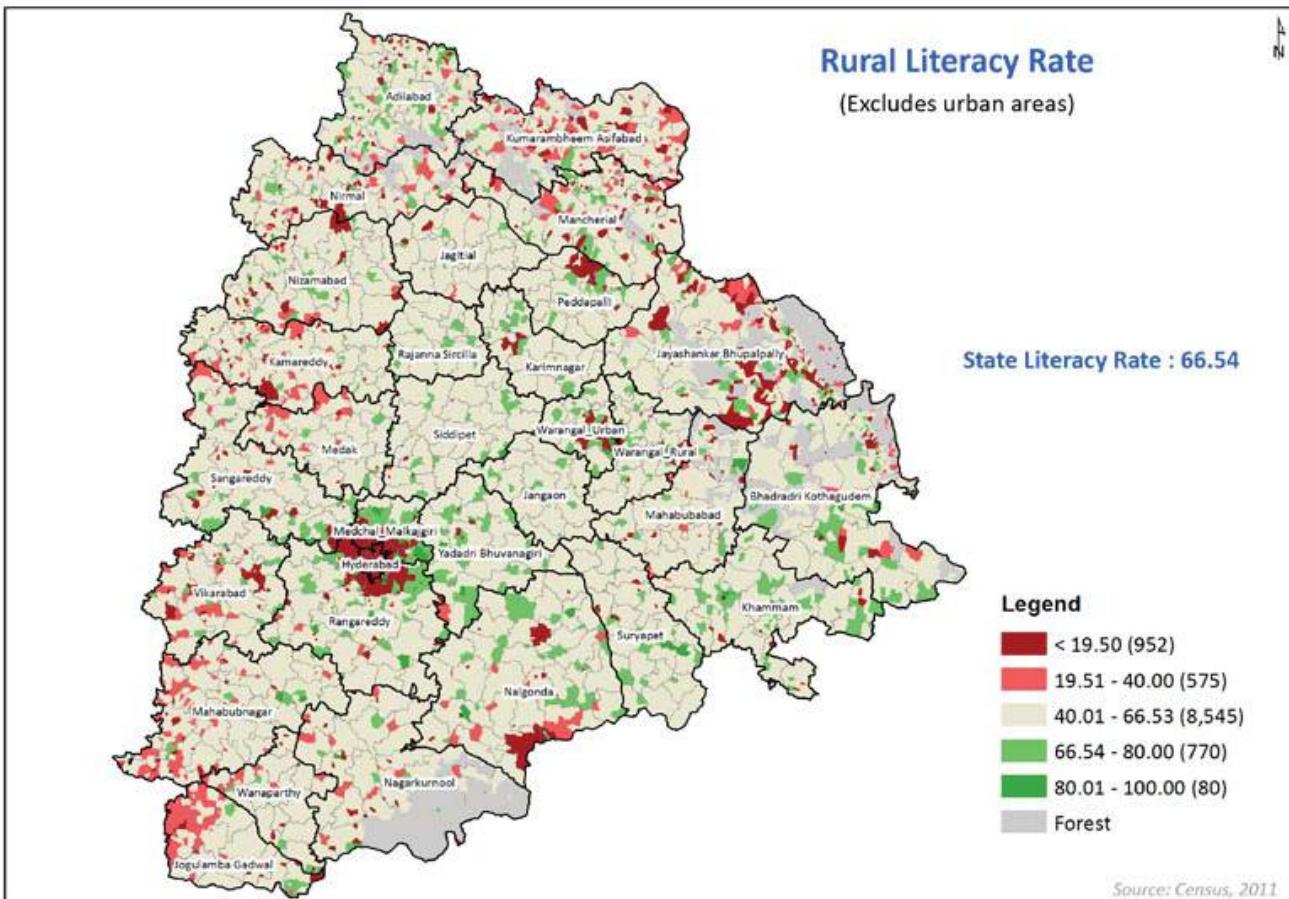
**Moderate literacy mandals:** Mandals falling under this category have a literacy rate of 55 to 66 per cent, and are immediately below the state average of 66.5 per cent.

In the state, 309 mandals fall under this category.

**Low literacy mandals:** This category includes mandals having less than 55 percent literacy rate. In the state, 167 mandals fall under this category. Kallor-Thimmanadoddi mandal in Jogulamba district with 33.77 percent have the lowest literacy rate in Telangana. Incidentally, low literacy levels are observed in areas with least urbanization.

Excluding the urban areas, a further analysis of the disaggregated data up to village level gives a deeper understanding of the spatial variations in literacy among villages. It is observed that, 952 villages have less than 19.50 per cent literacy; and 575 villages have literacy rate ranging from 19.51 to 40 percent. 8,545 villages have literacy rate in the range of 40.01 to 66.53 percent and only 850 villages have literacy above the state average. Map 14.1 gives a picture of village level literacy levels.

### Map 14.1: Rural Literacy Rates in Telangana



## 14.4. Education

Ancient Indian concepts such as ‘Gurukula’, ‘Guru Parampara’ etc., point out that education was an integral part of the child development. In modern world too, it is an un-debated fact that education plays an important role in human development. In fact, the rapid expansion of education over the last decades has greatly contributed to the quality of life, economic and social development in all the societies. Rightly, Telangana state emphasizes on universalizing quality school education and improving standards of higher education.

Over the years, efforts have been made at the national and state level to achieve the goal of ‘Education for All’. The state envisages to promote education; and to provide educational opportunities to every individual. Over the years, the education system has undergone positive progression, influenced by international and national commitments.





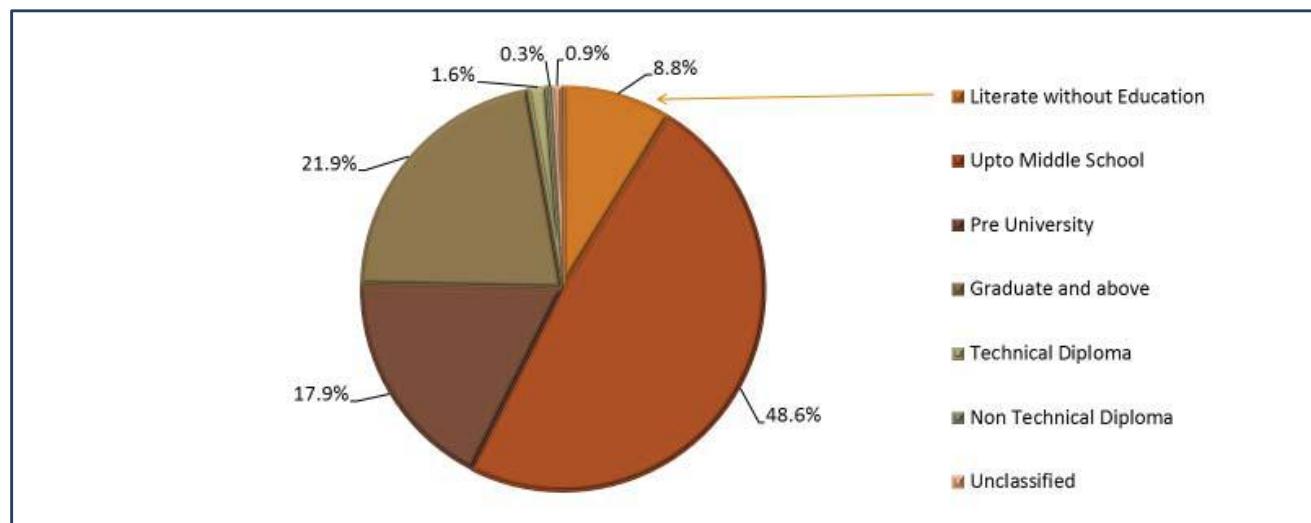
Post Millennium Development Goal period, the world has moved towards Sustainable Development agenda of United Nations. The fourth goal of Sustainable Development Goals (SDG), - 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' by 2030, is a goal which

the state also envisages to achieve. The State of Telangana is, therefore, committed to providing equitable access to quality education; improving ability/capability of the teacher workforce; improving and sustaining the literacy levels; reducing drop-out rates; and enhancing learning outcomes for the students.

#### 14.5. Education in the State

As per census 2011, among the literate population, 48.6 per cent have studied up to middle school, 17.9 per cent did pre-university, 1.6 per cent did technical diploma, 0.3 per cent completed non-technical diploma, 21.9 per cent have graduation and above level of education, 0.9 per cent completed un-classified courses and 8.8 per cent are literates without education. (Figure 14.5).

**Figure 14.5: Level of education among the literate population**

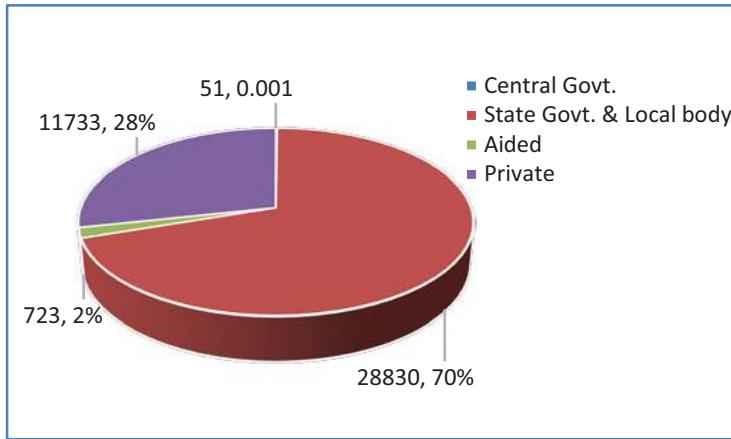


Source: Census-2011

**14.6. Present Status of Education in the State:** Several programmes are being implemented for strengthening school education in the state. Elementary education was brought under ‘Sarva Siksha Abhiyaan’ (SSA) to universalize elementary education. Similarly, secondary education has been brought under the flagship ‘Rashtriya Madhyamik Siksha Abhiyaan’ programme (RMSA). These two schemes have positive effect on improving access to school education, enrolment and retention of children and quality education. The present status on education parameters is discussed hereunder:

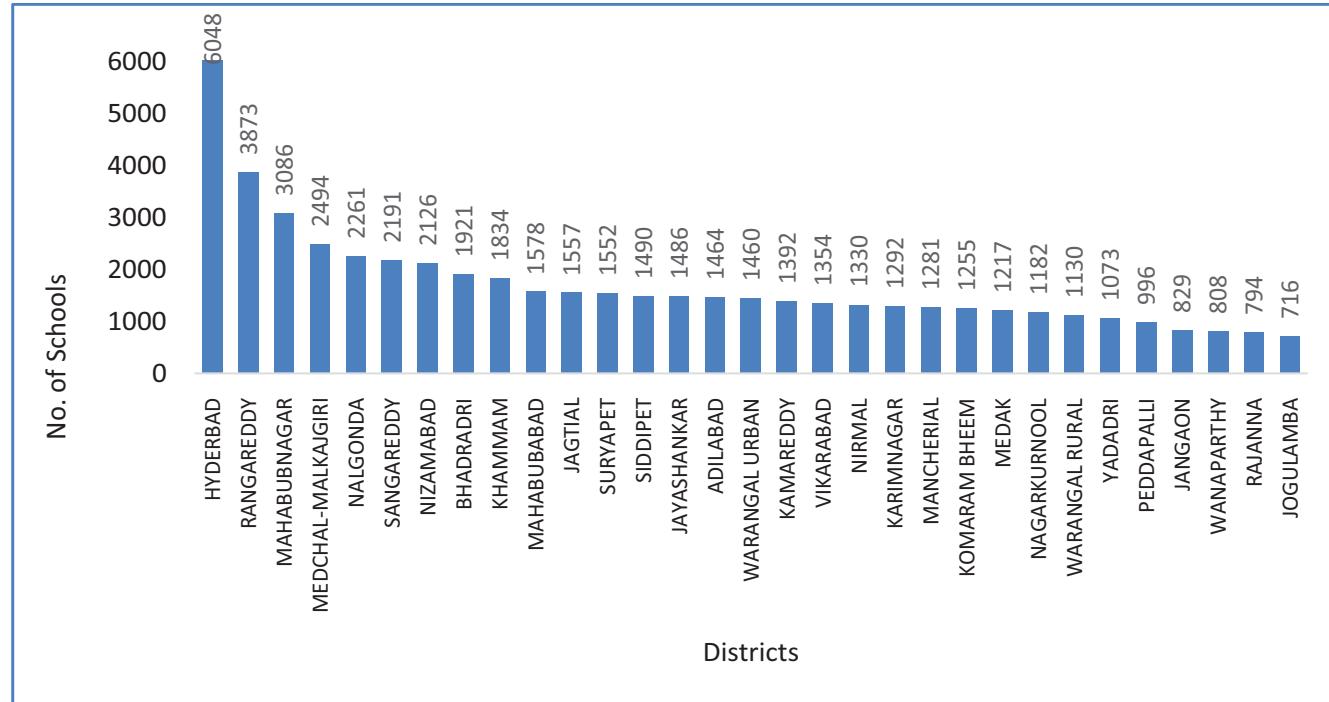
**Universal access to school education:** School facilities were created for achieving universal access to school education. The total number of schools available in the state for catering to primary and secondary education is 41,337 (Figure 14.6). A majority of them are state government and local bodies schools (70 per cent) followed by private unaided schools (28 per cent). In addition, there are central government schools (<1 per cent), private aided schools (2 per cent). The district wise total schools are also provided in figure 14.7, which reveals that the most literate district i.e., Hyderabad has more schools (6048) and the least literate district Jogulambha-Gadwal has lowest number of schools (716).

**Figure 14.6: Schools [n=41,337]**



Source: Provisional data of Education Department, 2016-17

**Figure 14.7: District wise Total Schools**



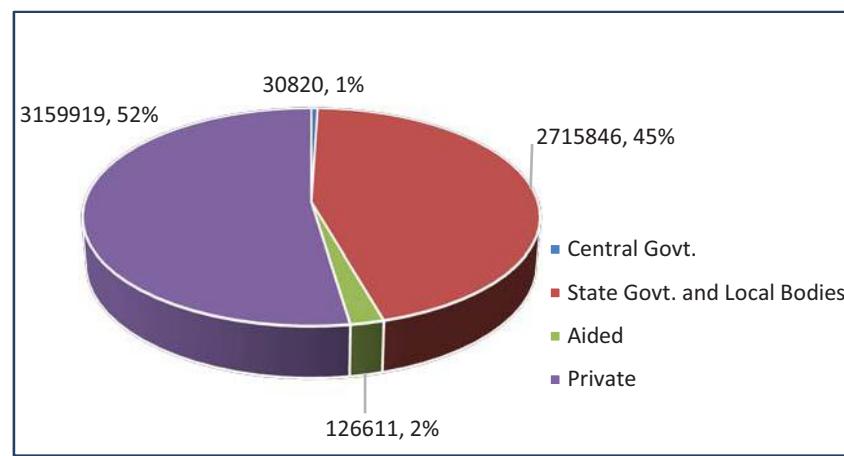
Source: Provisional data of Education Department, 2016-17

**Enrolment:** Enrolment in all types of schools in the state during 2016-17 is 60.33 lakhs. Of these 52 per cent children are enrolled in private schools followed by 45 per cent in state government and local bodies; 2% in aided schools; and 1% in central government schools (Figure 14.8). It is observed that private schools, which account for 28 per cent of all schools in the state, are catering to more than half of children. To improve enrolment in government schools, the state has taken up several initiatives which includes introduction of English medium, development of softskills such as communication, interpersonal, social, knowledge skills.

**Gross Enrolment Rates:** The enrolment rate among 6–10 age group children is 102.48. It is 90.34 in 11–13 age group and 80.2 per cent in 14–15 age group children. The enrolment rates of ST children are slightly higher than SC in the 6–10 age group but it is much lower for other age groups than SC.

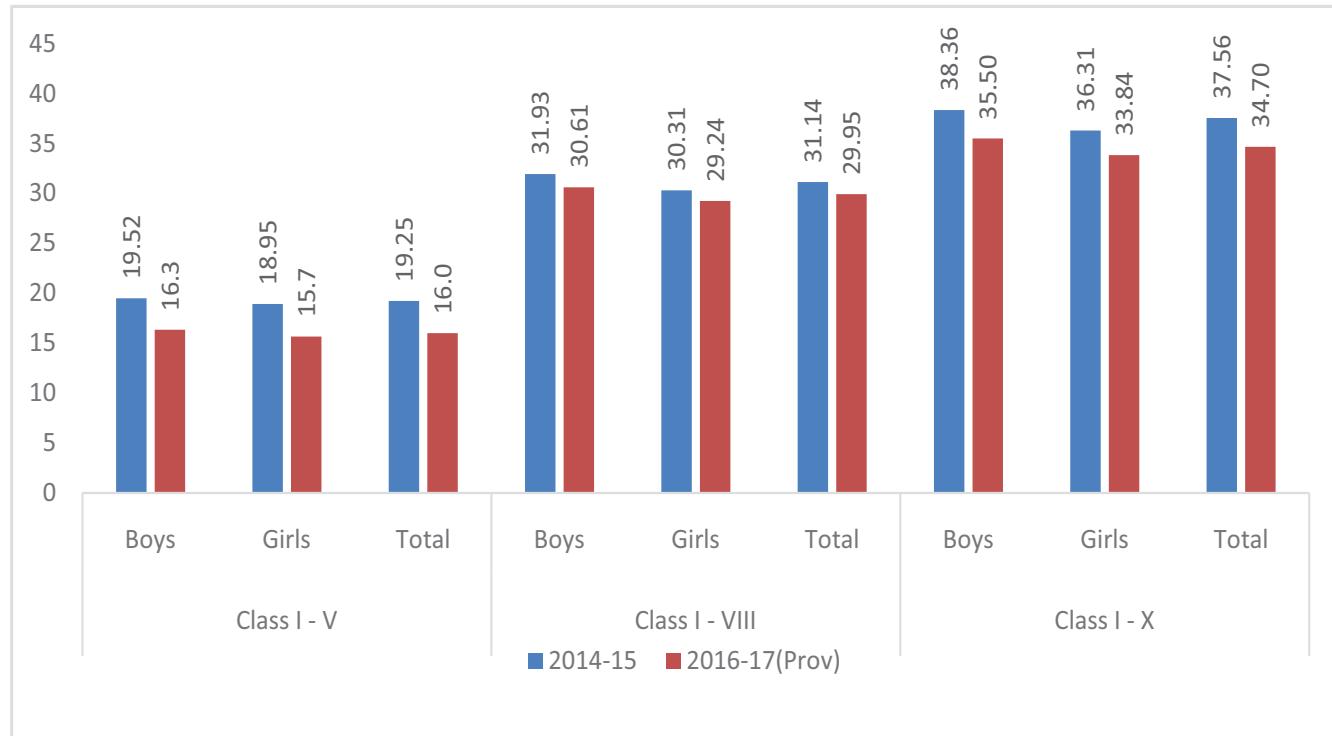
**Dropout Rates:** The dropout rates are decreased in 2016-17 (34.70 per cent) when compared to the year of state formation i.e., 2014-15 (37.56) among the secondary school children (Classes I-X). It is observed that the retention rate has improved in all classes among boys and girls. The government is taking necessary initiatives to improve the retention of children. Figure 14.9 depicts the Class wise dropout rates for both boys and girls for 2014-15 and 2016-17.

**Figure 14.8: Enrolment [n=60.33 lakhs]**



Source: Provisional data of Education Department, 2016-17

**Figure 14.9: Dropout Rates**



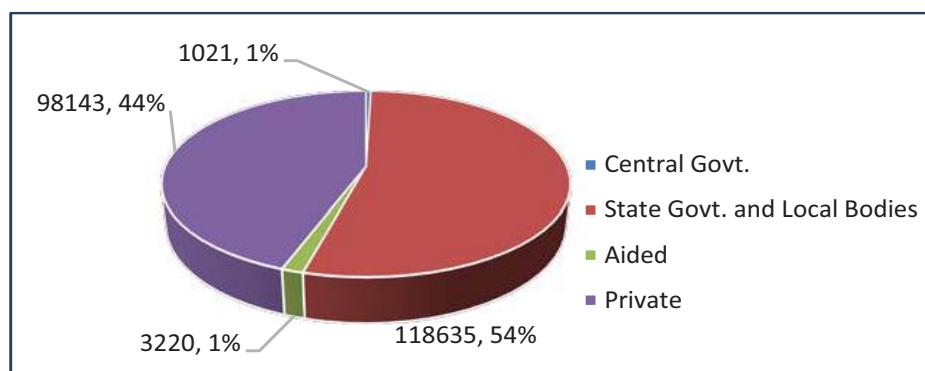
Source: Provisional data of Education Department, 2016-17

**Teachers:** Of the total teachers in the state (both private and public sector together), 55 per cent are in government schools, which constitute 70 per cent of schools in the state. The private and aided schools having 45 per cent of teachers spread over only 30 per cent of total schools. This shows clear disproportion of teacher availability in the public sector. (Figure 14.10)

#### Teacher-pupil Ratio:

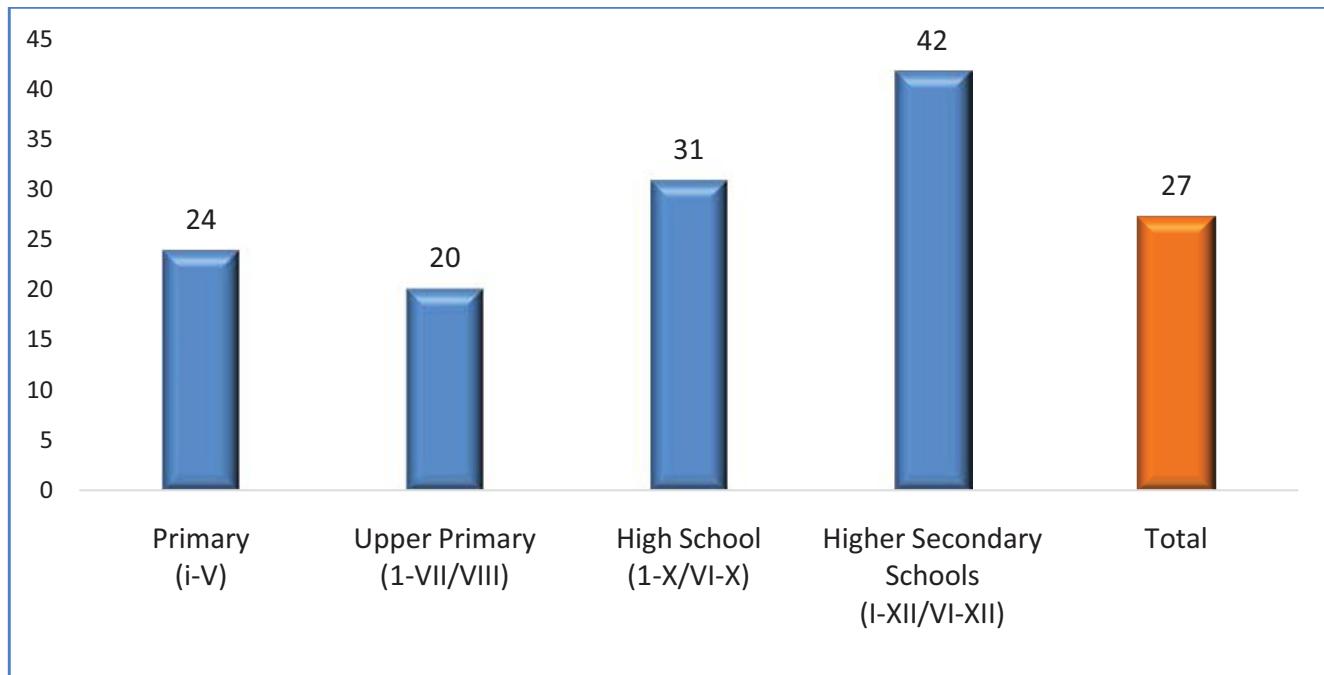
The optimum teacher-pupil ratio can be critical for achieving universal enrolment, retention and to improve the quality of education of children. The state has attempted rationalization of teachers to overcome imbalances in demand-supply of teachers. The teacher-pupil ratio is given in Figure 14.11.

**Figure 14.10 : Teachers [n=2.21 lakhs]**



Source: Provisional data of Education Department, 2016-17

**Figure 14.11: Teacher-pupil Ratio (2016-17)**



Source: Provisional data of Education Department, 2016-17

#### 14.7 Achievements during 2016-17

The Annual Status of Education Report (ASER) 2016<sup>7</sup> has indicated improvement in the quality of education in the state. The key findings of the report are:

- The proportion of children in Standard III who are able to read at least Standard I level text has gone up slightly at the national level, from 40.2 per cent in 2014 to 42.5 per cent in 2016. On this parameter, there was substantial increase in seven states, including Telangana with an improvement of more than seven percentage points since 2014.
- There is improvement in the arithmetic levels of children enrolled in government schools in Standard III in almost all states. Telangana is one of these seven states with an increase of five percentage points or more since 2014.
- The ability to do division among Standard VIII students has continued to drop at the national level<sup>8</sup>. The children in Telangana and from two other states showed an increase of five percentage points or more in this aspect.



7. ASER is the largest annual household survey carried out by Pratham in rural India, which focuses on the status of children's schooling and basic learning. Every year, ASER finds out whether children in rural India go to school, whether they can read simple text and whether they can do basic arithmetic since 2009. The ASER 2016 report was released on 18th January, 2017.

8. This declining trend has been observed since 2010. The proportion of Standard VIII students who could correctly do a three-digit by one-digit division problem was 68.4 per cent in 2010. This number dropped to 44.2 per cent in 2014, and has further declined to 43.3 per cent in 2016.

- At all-India level, 24.5 per cent of children enrolled in Standard V could read simple English sentences in 2016. This number is virtually unchanged since 2009. However, there is improvement since 2014 in nine states including Telangana for the children enrolled in Class V in government schools. The levels of English reading of private schools has also improved.

#### **14.8. Infrastructure and other Facilities:**

The State has also made concerted efforts for improving the teaching learning aids in school i.e., benches, blackboards, teaching aids etc. Among infrastructure, recognizing the fact that lack of functional toilets is one of the reason for dropouts of girls from secondary and higher secondary classes, the state has focused on creating separate toilet facility for both boys and girls. The infrastructure facilities and other services provided under Sarva Siksha Abhiyaan during 2016-17 are:

- Two residential schools and 15 residential hostels are functioning for out-of-school children.
- 2681 out-of-school children are provided with special training to mainstream into regular schools.
- Two sets of uniforms per child have been provided to 10,40,000 children.
- Academic support is provided through 467 Mandal Resource Centres and 1766 Cluster Resource Centres.
- Training conducted at mandal level to 14,914 teachers dealing with Classes I and II and 6318 teachers dealing Classes VI, VII and VIII. Total teachers trained are 21,232. Cluster level training has not yet been initiated.
- Transport allowance provided to 7260 and escort allowance to 5624 CWSN children
- Physiotherapy services are provided to 5258 children with orthopaedic problems
- Home-based education is being provided to 3296 children with severe disability
- School and maintenance grant is released to all government and local body schools.
- Construction of additional classrooms, toilets, compound walls were taken up.
- 391 KGBVs functioning and maintenance is provided regularly.
- Introduction of Bio-metric attendance system for teachers and students of government and local body schools is completed in 25 per cent schools. For KGBVs and all model schools, the process is in progress.
- In December, 2016, keeping in view of the sharp decrease in temperatures experienced in the last years, woolen blankets were supplied to all children of KGBVs, model schools, TSWREIS schools and girls' hostels.

#### **14.9. Kasturba Gandhi Balika Vidyalaya (KGBV)**

To address the gender gap in enrolment (i.e., lower enrolment of girls at the elementary level as compared to boys, especially at the upper-primary levels), the Kasturba Gandhi Balika Vidyalaya (KGBV) scheme was introduced in 2004. The objective of KGBV is to ensure that quality education is feasible and accessible to the girls of disadvantaged groups of society by setting up residential schools with boarding facilities at elementary level. KGBVs will provide educational facilities for girls belonging to Scheduled Castes, Scheduled Tribes, Other Backward Classes, minority communities and families below the poverty line in Educationally Backward Blocks. The scheme provides for a minimum reservation of 75 per cent of the seats for girls belonging to SC, ST, OBC or Minority communities and priority for the remaining 25 per cent, to girls

from families below the poverty line. The state has 398 KGBVs spread across districts. The total number of children admitted in KGBVs during the academic year 2016-17 was 72,583.

#### **14.10. Education and Social Welfare**

Improving access to education for the children of poor and deprived groups is an important priority for the state. Mere literacy (up to primary) is not sufficient for bringing in social development. It needs transition from primary to higher levels with quality education which can fetch reasonable income to facilitate socially upward mobility. In the above context, the state has been providing hostel and residential school facilities, supplying books and other provisions as free, to help remove barriers in accessing and provision of quality education to children of SC, ST and BC communities, and destitute children.

##### **Pre-matric Hostels**

The state has 1,358 welfare hostels to facilitate education of children belonging to schedule tribe, schedule castes, backward caste and economically weaker sections for pursuing pre-matric studies. There are 170 ST hostels, 734 SC hostels and 454 BC hostels in the state. The hostels and residential schools are aimed to provide congenial environment for the children to study, support children who are in difficult circumstances, and reduce dropout rate among SC, ST, BC communities. Overall, 1,34,161 children are admitted in the hostels in the academic year 2016-17. Of which, 30,882 are accommodated in ST hostels, 59,928 joined at SC hostels and 43,351 are in BC hostels.

**Facilities:** In the hostels, the government provides all basic facilities free of cost to the inmates. It includes uniforms, four pairs of dresses, educational aids like books and stationeries, food, and other boarding facilities like bedding and blankets. The boarders are also provided with cosmetics at the rate of Rs.12/- p.m as hair cutting charges and Rs.50/- per month for boys and Rs.55/- per month for girls up to class VII & Rs.75/- per month for girls from class VIII to X class. Also, the hostels keep sports and games materials, and first aid kits. The hostels are provided with diet charges of Rs.750/- per month per boarder for III to VII class, and Rs.850/- per month per boarder for VIII to X class.

**Admission Pattern:** The admission pattern in BC hostels shows that 76% children admitted are from Backward Classes. The rest of the children admitted in BC hostels are children from Scheduled Castes (10%), Scheduled Tribes (5%) and other communities (9%). The admission pattern in residential schools meant for fishermen community is fishermen children (46%), BC-A (7%), BC-B (10%), BC-C (1%), BC-D (7%), BC-E (4%), SC (15%), ST (6%), EBC (1%) and Orphans (3%).

##### **Ashram Schools**

As per Census, 2011, about 31.78 lakh ST population belonging to 32 tribal groups reside in the state. They constitute 9.08 per cent of the total population. Of the 32 tribal groups, four are PvTGs (Particularly vulnerable Tribal Groups – earlier known as Primitive Tribal Groups) viz., Kondareddies, Chenchus, Kolams, Thoties. However, the predominant tribal groups in the State are Lambadas, Koyas, Gonds and Yerukalas.

The state Tribal Welfare Department is implementing multifarious welfare and developmental programmes for the socio-economic development of the tribal with a major focus on education, economic support and land-based schemes. This section discusses on interventions related to education.

Ashram schools are special intervention for improving education of tribal communities. The objective is to provide residential school facility for Scheduled Tribes including for PTGs in an environment conducive to learning to increase the literacy rate among the tribal students and to bring them at par with other population of the country. There are 302 Ashram schools in the state. In 2016-17, the total number of children admitted into Ashram schools is 84,740, which includes 44,849 girls.

## **Post-matric Hostels**

There are 559 post-matric hostels for college going boys and girls in the state. This includes 153 hostels for ST students, 169 hostels for SC students and 246 hostels for BC students. In 2016-17, the total number of inmates in the hostels are 18377, 19077, and 24517 respectively in ST, SC and BC post-matric hostels.

### **14.11. Residential Education for SC, ST, BC and Minorities:**

**Schedule Caste Residential Schools:** Telangana Social Welfare Residential Educational Institutions Society (TSWREIS)



Telangana Social Welfare Residential Educational Institutions Society (TSWREIS) is running 267 residential educational institutions (from 5th standard to undergraduate level) in the state of Telangana. The Society has been working with the noble aim of providing quality education to the needy and deprived children on par with the other advantaged children. The TSWREIS has been catering to the dire educational needs of the marginalized children especially Scheduled Caste (SC) children hailing from the remote rural areas of Telangana. Over the last three decades the

Society has been cruising along the path of glory, and this depth finds reflection in the way the Society is excelling in academics, sports, mountaineering, communication skills, etc

Apart from providing quality education to the children, the Society is making determined efforts to create an environment that builds their confidence levels, leadership and communication skills to meet the challenges of the 21<sup>st</sup> century.

TSWREIS passed-out students getting admission into IITs, NITs, Medical Courses, Community College Initiative Programme (CCIP, USA), Azim Premji University, Tata Institute of Social Sciences (TISS) and many other reputed State and Central Universities.

Seventy-seven students secured top ranks in TS Eamcet III, 2016, and this is one of the major milestones in the history of TSWREI Society.

Ten Students secured admission into prestigious Azim Premji University, Bangalore, which is ranked one of the best educational institutions in the country. 26 students got admission in IITs/NITs and 24 students got through in JEE-2016 who got trained in designated college for IIT coaching at Gowlidoddi, Rangareddy.

A 21-member mountaineering team consisting of 18 women and 3 men scaled the highest mountain Kilimanjaro in Tanzania in South Africa. Four students from TSWREIS and two students from TTWREIS were part of the 21-member team from India.

The students of TSWREIS and TTWREIS created history by scaling Mt. Kilimanjaro and Malavath Poorna from Tadwai school, Nizamabad, led the expedition team. The team which began trekking the mountain on August 10, reached the peak (19,341 feet) on August 13 by night. They unfurled the Tricolor and sang the national anthem on the top of the mountain as part of celebrations marking the 70th India's Independence Day.

### Schedule Tribes Residential Schools: Gurukulam (Telangana Tribal Welfare Residential Institutions Society TTWREI Society):



Telangana Tribal Welfare Residential Institutions Society (TTWREI Society): Telangana Tribal Welfare Residential Institutions Society is running 145 institutions including 51 newly sanctioned Gurukulams. These institutions are functioning with the strength of 34,176 students. About 81 per cent students of TW Residential Schools passed in SSC Public Examinations held in March-2016 against State Average 85.24%. About 86 per cent students of TW Residential Junior Colleges passed in intermediate Public Examinations against 63.0 per cent State Average. 11 students got admissions in IITs, 1 student secured seat in AIIMS, 3 students in Medicine, 41 students secured seat in NIT, 10 students

secured seat in IIIT. Two students from the TTWREIS participated in the 21-member Indian mountaineering team to scale Kilimanjaro in Tanzania in South Africa.

### Backward Classes Residential Schools:

Mahatma Jyotiba Phule Telangana BC Welfare Residential Educational Institutions Society (MJPTBCWREIS) Government have established Mahatma Jyothiba Phule Telangana Backward Classes Welfare Residential Educational Institutions Society in July, 2014. The society runs 37 residential institutions with an aim to provide quality education to the deprived children belonging to Backward Classes and other communities with a sanction strength of 11,720 students.

These institutions includes (i) Residential Schools for boys and girls Vth Class to X Class; (ii) Residential Jr. Colleges for boys and girls Jr.Inter and Sr.Inter; and (iii) Residential Degree College for Women.

Government proposed to start 119 Residential Schools in the State from the academic year 2017-18 with an estimated strength of 28560. Six upgraded Residential Junior Colleges sanctioned during 2016-17 will start functioning from the academic year 2017-18 with an estimated strength of 960.

### Minority Residential Institutions:

Telangana Minorities Residential Educational Institutions Society (TMREIS)

The Society is to provide high quality education for talented children belongs to minorities communities, through pace setting residential schools. It is proposed to establish 120 residential schools in the state. 71 residential schools (39 boys and 32 girls) will be established in the first phase. Remaining schools will be established in the second phase.

The government has also sanctioned 52 post-matric ST hotels, 120 residential



schools for minorities, and additional SC hostels. This academic year 71 schools have started functioning with 12,554 students. The total staff strength in these schools is 1,349 with 710 teaching staff and 639 non-teaching staff.

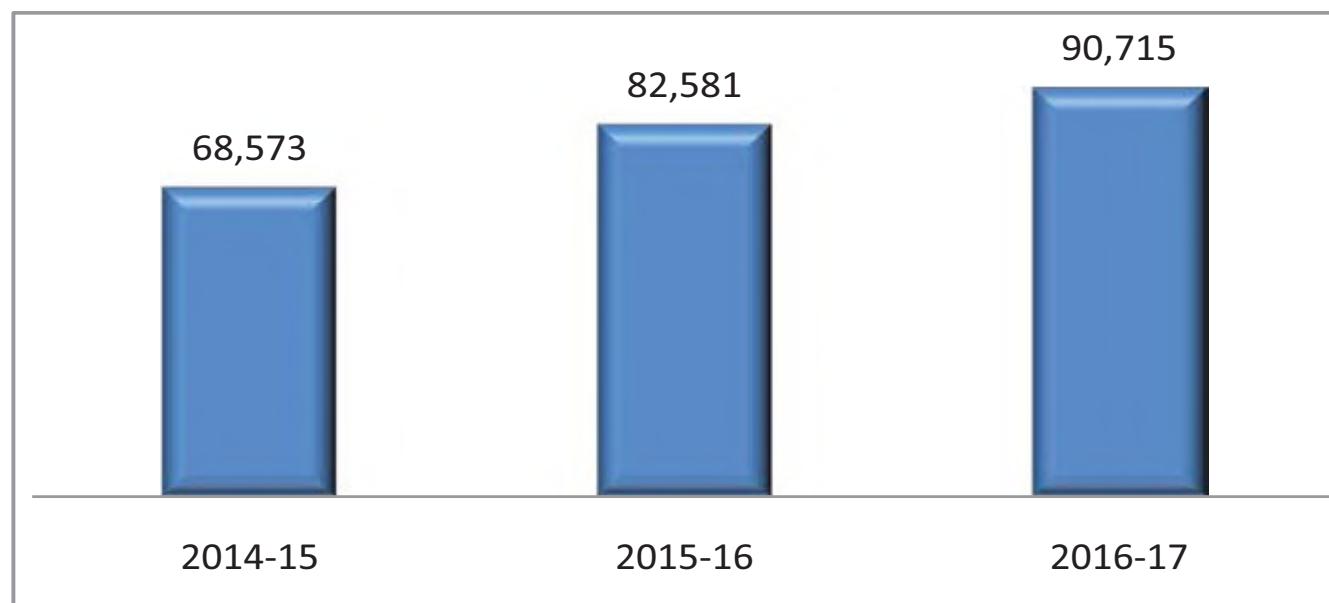
During 2016-17, an amount of Rs. 24.05 crores has been released for taking up minor repairs works in Tribal Welfare Institutions. This will help in improving facilities within tribal welfare institutions in terms of toilets, compound walls, running water supply and maintenance works like electrical repairs. In addition, infrastructure like additional classrooms, dormitories, compound-walls, and staff quarters have also been taken up.

#### **14.12. Intermediate Education**

In Telangana state, there are 2,537 junior colleges or higher secondary institutions with total enrollment of 6.9 lakh students studying in both years. Out of the 2,537 colleges, 404 are government junior colleges (GJCs), 41 are private aided junior colleges and 2,092 are private & other junior colleges. During 2016-17, the following are the major accomplishments for department of intermediate education:

Immediately after the formation of Telangana state, government offered the intermediate education in all government junior colleges as free. From 2015-16, all students in government colleges are getting text books freely from government. This helped to increase the enrolment in government junior colleges (Figure 14.12).

**Figure 14.12: Enrolment in government junior colleges**



Source: Board of Intermediate Education, Telangana.

The Professor Jayashankar Institute of Telangana Intermediate Staff Training Academy is organizing training programs for the junior lecturers and contract faculties of government colleges and aided colleges at the district level.

An Academic Monitoring Committee is also constituted to improve the quality and academic standard in all government and aided junior colleges in the state.

#### **14.13. College Education**

In Telangana state, there are 1,196 degree colleges with an intake capacity of 4.26 lakh students. Out of these 1196 degree colleges, 130 are government degree-colleges (GDCs) and 69 are aided colleges. 84,068

students are enrolled in the government degree college and 59,338 students are enrolled in aided colleges. The department of collegiate education monitors the administrative functions, development needs and academic quality in government and aided colleges. The main objective of department of collegiate education is to ensure quality, equity and access of higher education among the students. The important initiatives by the department of collegiate education in 2016-17 are:

**New Courses:** Every year, on partial self-financing basis, government is introducing need based, job oriented new courses like Biotechnology, Microbiology, Computer Science, Communicative English, Tourism, Advertising and Sales Promotion etc., in government colleges. Based on the demand and availability of facilities, post-graduation (PG) courses, are also introduced on self-financing basis. During 2016-17, 33 new PG courses are sanctioned in 15 colleges, 30 restructured under graduate (UG) courses are sanctioned in 18 colleges and 24 additional conventional UG courses are sanctioned in 14 colleges.

**Employability Enhancement:** The department in collaboration with Telangana Skills and Knowledge Centres (TSKCs) is imparting varied spectrum of skills beyond conventional degrees to make the student confident and self-reliant when he/she enters into employment market. Placement drives are also organized for the benefit of students.

**MANA TV:** MANA TV telecasts educational programmes to enhance academic performance of the students along with creating awareness in career prospects. MANA TV is installed in 95 colleges of Telangana state. In 2016-17 academic year, 134 live programmes, including 7 special live programmes are planned. Also 282 recorded programmes (twice a day) will be telecasted. So far, 122 live telecast programmes are televised.

**Training Programmes:** In 2016-17, the CCE (Continues and Comprehensive Evaluation) has conducted a series of training programmes to the teaching faculty in the 130 Govt. Degree Colleges in Telangana.

## Technical Education

The Department of Technical Education (DTE) is responsible for the diploma, degree and post graduate technical education courses. The Government through DTE implements the policies of the state and also coordinates with All India Council for Technical Education (AICTE) in processing the applications for the establishment of Engineering Colleges, MBA, MCA, B.Pharmacy and Polytechnics and enhancement of sanctioned intake, introduction of new courses etc., in the colleges.

With support from GoI, department has set up sophisticated laboratory equipment, improved residential and training facilities; and thus, created a stimulated industrial environment in polytechnics. It helps to provide hands on experience and immediate job placements at supervisory level.

### 14.14. Student Scholarships

The Government has been implementing different scholarship schemes to eligible students to pursue higher education (Table 14.2).

**Table 14.2: Particulars about different schemes**

Scheme	Particulars
Pre-matric Scholarships	To encourage poor SC children to admit into Hyderabad public school and best available schools  In pre-matric scholarship scheme, the students from ST, SC, BC and minorities are supported. It is to be noted that respective welfare departments will be responsible for implementing the schemes.

Scheme	Particulars
Post-Matric Scholarships	<p>Post-Matric Scholarships are given to pursue higher education. The tuition fee is reimbursed from intermediate to post graduation courses including professional courses.</p> <p>Post matric scholarships contain two schemes. The maintenance Fee (MTF) is credited directly into the account of eligible student online; and Reimbursement Tuition Fee (RTF) is the fee fixed to the educational institution and is credited online to the account of educational institutions. Students with annual family income up to Rs.1.50 lakh in rural areas and Rs.2.00 lakhs in urban areas are eligible for the scheme.</p>
	<p>Economically Backward Community (EBC) students are also supported under this scheme on par with BCs. Economically Backward students from other communities with annual family income up to Rs.1.00 Lakh are also eligible to apply under this scheme.</p>
Admission of Meritorious students into Corporate Junior Colleges	<p>Meritorious students who completed SSC with good ranking will be supported to study in Corporate Junior Colleges. BC and EBC students who obtained 400 and above marks in the 10th class exams are eligible to apply to this scheme.</p> <p>Students studying in Government, Mandal, Municipal / Aided schools, Residential Institutions and also boarders of Government Hostels can apply for the scheme.</p> <p>The District Selection Committee under the Chairmanship of District Collector will select the candidates.</p>
	<p>The maximum fee reimbursed is Rs.35,000/- per annum per student and this includes books, material, mess and other maintenance charges. An additional amount of Rs.3,000 is released towards pocket allowance and maintenance charges to the students account.</p>
Maintenance Fees (MTF) To Students Studying In Other States	<p>Students studying in the 186 Premier Institutions like IIT's, NIT's, IIM's, etc in other states that are recognized by Ministry of Human Resources Development, Government of India are eligible to apply for the scheme.</p> <p>Total number students supported in the above institutions are 1,355.</p>
Support students to pursue studies abroad	<p>The state provides financial assistance to BC students for pursuing higher studies abroad in the countries like USA, UK, Canada, Australia and Singapore under Mahatma Jyothiba Phule BC Overseas Vidya Nidhi; and for SC and ST students under Ambedkar Overseas Vidya Nidhi. The Chief Minister's overseas scholarship scheme was started in 2015-16 for supporting minority students. And 226 minority students have been selected for Spring-2016 course through this scheme (January/February).</p>

#### 14.15. Study Circles for Preparing Competitive Examinations

There are 10 BC study circles functioning in the state to provide free coaching facilities to eligible unemployed

BC graduates and post graduates for appearing various competitive examinations. These study circles have the following admission pattern: 66 per cent admitted are from Backward Classes; 20 per cent from Scheduled Castes; and 14 per cent Scheduled Tribes.

The Government of Telangana have sanctioned and started Telangana Minority Study Circle from the year 2015-16 to prepare minority students for competitive exams leading to employment. The Study Circle has started imparting coaching for Group I, II, III, IV, Staff Selection Commission, Police Recruitment, Civil Services Examinations, etc. So far 1957 candidates registered online and where offered various trainings for TSPSC Group – I, II, Sub-Inspector, Police Constable and also for IELTS (International English Language Testing System).

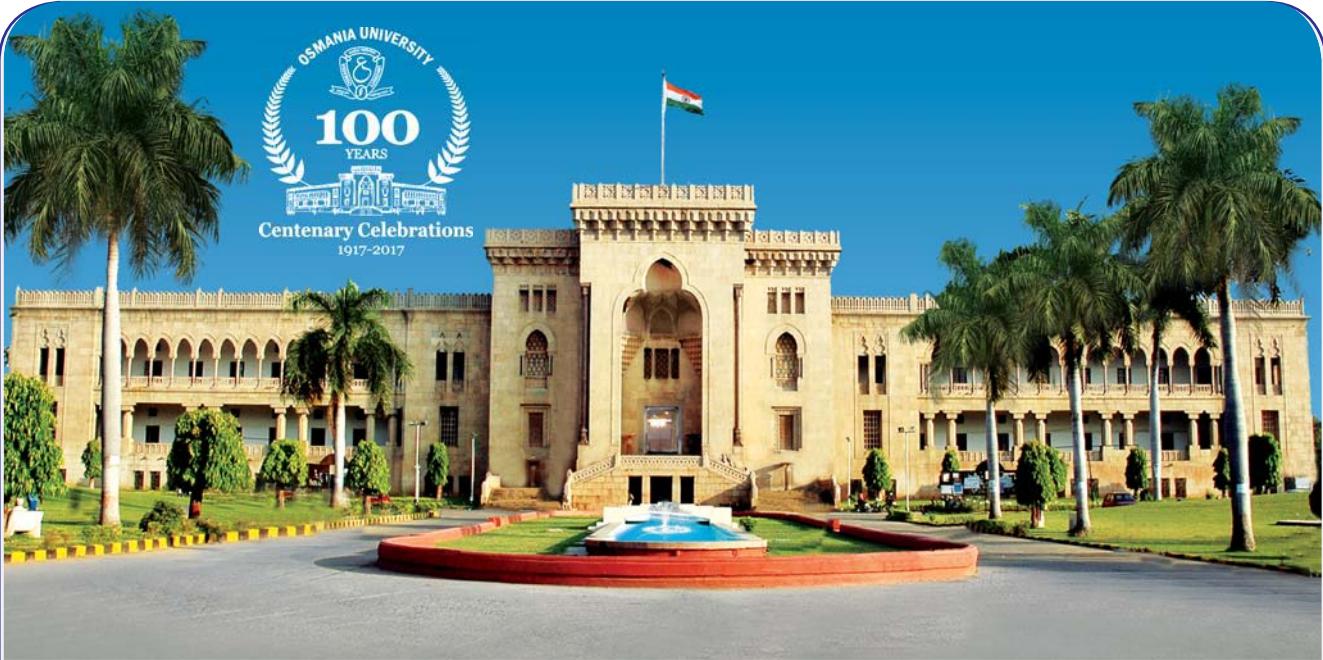
The Government is also planning to sponsor 100 minorities candidates to the topmost institutions for coaching for All-India Services exams on par with SC, ST. It constituted a member search committee to identify and shortlist three to four of the best coaching institutions in Hyderabad; and it recommended four institutes for sponsoring minority candidates in All-India Services exams.

#### **14.16. Centre for Educational Development of Minorities (CEDM):**

The minorities, viz., Muslims, Christians, Sikhs, Buddhists, and Parsees, constitute 14 per cent of the total population of Telangana. To address the socio-economic and educational backwardness of minorities, the government has identified Osmania University as the nodal agency to implement projects for the educational development of minorities in the state. The Osmania University has established the Centre for Educational Development of Minorities (CEDM) at Nizam College in 1994. The Centre is implementing the following three major projects sponsored by the state government (Table 14.3):

**Table 14.3: Features of Centre for Educational Development of Minorities (CEDM) Project**

Project	Features
An integrated project on improving the classroom performance of school children belonging to minorities.	Free special coaching in core subjects – Mathematics, Physical Sciences, Biology, English and Telugu / Social Studies to Class X Urdu- and Telugu-medium minority students at 75 centres covering 2896 students Provides free workbooks and question banks to Class X Urdu-medium coaching and non-coaching students in all districts covering 7000 students The pass percentage of coaching students in SSC-2016 is 76 per cent.
A comprehensive project on improving the participation and performance of minority candidates in admission seeking competitive examinations.	Free coaching and study material for 1892 students for admission seeking courses, viz., POLYCET, EAMCET, DEECET, ICET, EdCET, etc. in Hyderabad and other districts of Telangana with high concentrations of minorities
Chamak Scheme: Free coaching to minorities for job-seeking competitive examinations	Free coaching and study material to 3850 students for competitive examinations, viz., UPSC Civil Services (Prelims), TSPSC Group I, II & IV examinations, NET, DSC, TSTET, VRO/VRA Police recruitment, banking services, etc. Beneficiaries: 3850
	100 minority candidates are being sponsored to reputed private coaching institutes for Civil Services (Prelims-cum-Mains) Examination – 2017 coaching.



### Centenary Celebrations of Osmania University

Osmania University, the beacon light of higher education and a centre of academic excellence, is a public state university located in Hyderabad, India, established in the year 1918. The OU is founded by His Exalted Highness Mir Osman Ali Khan, the Seventh Nizam of Hyderabad State, with the help of chief Architect of Mahbub Ali Khan - Nawab Sarwar Jung. It has the pride of being the seventh oldest university in the country, the third oldest university in South India, and the first to be established in the erstwhile princely State of Hyderabad. It is the first Indian university to have Urdu as a medium of instruction. It was accredited with a 'Five Star' rating by the NAAC in the year 2001. In 2012, the university was placed sixth among the nation's premier universities in Humanities, Sciences and Commerce stream, which secured the University with Potential for Excellence status.

Either prior or after bifurcation of the state of Andhra Pradesh into AP and Telangana, the Osmania University is the largest affiliating University, offering a comprehensive education system with over 66 academic disciplines and 53 departments spread over eight campus colleges.

The OU is one of the largest university systems in the subcontinent with over 3.2 lakh students on its campuses and around 718 affiliated colleges. It is particularly known for its faculty of Engineering and Technology, Law, Arts, Sciences, Commerce and Management departments. Catering to the needs of the society from time to time and to keep pace with the changing socio-economic environment, the University has started encouraging distance mode education too. The University has established linkages with industry for promotion of sponsored research and consultancy in collaboration with many national and international organizations through MoUs.

The University has initiated several measures to enhance student empowerment through various support services such as career guidance, job fairs, healthcare, psychological consulting, mentoring, coaching centre, Sahayam, English Language Training Centre.

The year 2017-18 will be the glorious years in the history of Osmania University as it will be entering in its centenary year. The university has been preparing to mark the celebration of attaining 100 years in 2017.

#### **14.17. Outlook:**

Despite major increases in access to education and improvement in learning outcomes over the past decade, gender inequalities persist. Given the developmental benefits of education – for individual girls, their families and communities, and the wider society – these inequalities represent significant opportunities that are lost. Some of the proposed policy reforms are listed below:

- Instituting a policy on teacher appraisals and linking teacher performance to incentives such as promotions, transfers, increments, teacher awards, etc.
- A policy on attaching pre-Schools/Anganwadies with the existing government primary schools
- A policy on relocation of government schools with low enrolment and merge with nearby schools so as to help the schools utilize resources optimally
- Using technology for online information on performance of teachers, students and school standards at regular intervals.



Residential School for Minorities

# Towards Sustainable Development Goals

*We need to move beyond gross domestic product as our main measure of progress, and fashion a sustainable development index that puts people first*

- Ban Ki-moon

## 15.1. Background

The United Nations' Millennium Development Goals (MDGs) marked a historic and effective global consensual, mobilization to achieve a set of important social priorities worldwide. The MDGs were considered as a 'report card' of the globe's fight against poverty, disease and hunger, for the period 2000 to 2015. While developing, countries made substantial progress towards achievement of the MDGs, the progress was highly variable across goals, countries and regions.

Against this background of the serious shortfall in achievement of the MDGs, the UN and the world's governments were poised to adopt a new round of global goals in the post-MDG period.

The combination of a rising world population and rapidly rising incomes per person in large emerging economies and its after-effects across the world, the lack of governance and social inclusion in many of the world's economies, the increased inequality caused by differences in educational attainment adding to longstanding inequalities across societies are indicative of the urgent need for sustainable change.

The UN General Assembly in September 2015 adopted a global development vision called Transforming our World: The 2030 Agenda for Sustainable Development. The 2030 Agenda is "a plan of action for people, planet and prosperity". It lays out 17 new



Sustainable Development Goals and 169 targets to stimulate global action over the next 15 years on issues critical to humanity and the planet.

Ensuring that ‘no one is left behind’ is at the core of the 2030 Agenda for Sustainable Development, and is a fundamental guiding principle for its implementation. It emphasizes that goals and targets should be met for all nations and peoples and for all segments of society; and highlights the endeavour to reach the furthest behind first. As such, the pledge to leave no one behind relates to the Agenda in its entirety.

### **15.2. SDGs in India**

India is committed to “Transforming our world: the 2030 Agenda for Sustainable Development” (called SDGs) in the September 2015 UN Summit and the SDGs officially came into force from January 1, 2016. NITI Aayog has been entrusted with the role of coordinating the implementation of the SDGs in India. The Ministry of Statistics and Programme Implementation (MoSPI) is in the lead for evolving the indicators reflecting the SDG goals and targets. The global targets have been assigned around 239 measurable indicators to measure the achievement of the goals and to track the progress.

State Governments are beginning to design frameworks for planning, implementation and monitoring of the SDGs at the sub national level. Recently, NITI Aayog has communicated to the state governments to identify nodal departments for each of the SDGs.

### **15.3 SDGs in Telangana State**

In view of India committing to the 2030 Agenda and the SDGs in September 2015, Telangana has committed itself to the attainment of the SDGs in the state. The state aims to align its existing schemes and programs with the SDGs targets and prepare a Vision 2030 document and an action plan for achieving the Goals. The Government of Telangana will have a knowledge partnership with the UN Agency in India i.e., UNICEF and local resource pool such as CESS, CGG etc., for technical support in developing a framework for planning, implementation and monitoring of the SDGs in the state.

SDGs require a fundamentally different approach from governments, development organisations, civil society and other stakeholders and communities. These goals are universal, aim to reach the furthest first by following an integrated approach across economic, social and environmental domains. Involving entire state, including government functionary, private sector, civil society, and citizens is a critical element to move towards SDG implementation.

### **15.4. The Vision of Telangana**

Telangana, the youngest State in the Union of India envisages comprehensive, inclusive and holistic development of its people, in the course of achieving the State’s vision: ‘Bangaru Telangana (Golden Telangana)’. Telangana believes that economic growth is one of the key underpinnings of societal development and provides the means to sustainably improve the lives of millions of people through programmes targeting social welfare and inclusive growth.

It entails sustained efforts for improving infrastructure facilities in both rural and urban parts of the state and providing the facilities that create overall, holistic development of communities from all sections of society. Human resource development through universal education and skill development, provision of accessible, affordable healthcare services and gainful employment and livelihood opportunities for all people in an environment where the rule of law and social justice prevails, is also an important part of Telangana’s vision for 2030, is in line with the SDGs.

## 15.5. Action Plan on SDGs

The Government of Telangana identified ‘Planning Department’ as the nodal department for building coordination among all the stakeholders from government and non government to bring them on one platform to achieve the ambitious 17 goals. Accordingly, to ensure proper emphasis on each SDG, all seventeen ‘Sustainable Development Goals’ have been categorized into four areas of focus (Figure 15.1).

In addition, the Government of Telangana also progressed quite ahead in preparatory arrangements towards implementation, monitoring and achieving these goals. The preparatory work done so far is presented below:

### Mapping of SDGs

About 40 departments were mapped with the 17 goals and all the department were addressed to implement their existing programmes to align with SDGs to monitor and achieve. The matrix showing mapping of departments with SDGs is shown in Table 15.1.

**Table 15.1: Mapping of Departments with SDGs**

Sl. No	SDG	Nodal Department	Line Departments
1	No poverty	1. PR&RD 2. MA&UD	1. PR&RD; 2. MA&UD; 3. Backward Classes Welfare; 4. Minorities Welfare; 5. Scheduled Caste Development; 6. Tribal Welfare
2	Zero hunger	1. Consumer Affairs, Food & Civil Supplies 2. Agriculture and Co-operation	1. Consumer Affairs Food & Civil Supplies 2. School Education; 3. Backward Classes Welfare; 4. Scheduled Castes Development; 5. Tribal Welfare 6. Women and Child Development (WCD) 7. Agriculture and Cooperation; 8. Animal Husbandry and Fisheries; 9. Irrigation and CADA; 10. Horticulture Dept.

Figure 15.1: Classification of SDGs into Four Focus Areas



Sl.	SDG	Nodal Department	Line Departments
3	Good health and well-being	1. Health, Medical & Family Welfare	1. Health, Medical & Family Welfare 2. Women and Child Development
4	Quality education	1. School Education 2. Higher Education	1. School Education; 2. Higher Education; 3. Scheduled Caste Development; 4. BC Welfare 5. Tribal Welfare; 6. Minorities Welfare
5	Gender equality	1. Women and Child Development 2. Social welfare 3. Minorities Welfare	1. WC&DW; 2. Scheduled Caste Development; 3. Minorities Welfare; 4. BC Welfare; 5. PR&RD; 6. MA&UD; 7. Industries and Commerce; 8. Revenue; 9. Tribal Welfare
6	Clean water and sanitation	1. Irrigation and CAD	1. PR&RD; 2. Irrigation and CAD; 3. MA&UD
7	Affordable and clean energy	1. Energy	1. Energy; 2. Transport; 3. MA&UD
8	Decent work and economic growth	1. Labour, Employment, Training and Factories	1. Labour, Employment, Training and Factories
9	Industry, innovation and infrastructure	1. Industries and Commerce	1. Industries and Commerce 2. Information Technology, Electronic and Communications
10	Reduced inequality	1. Scheduled Castes Development	1. Scheduled Castes Development; 2. BC Welfare; 3. Tribal Welfare; 4. Minority Welfare

Sl.	SDG	Nodal Department	Line Departments
11	Sustainable cities and communities	1. Municipal Administration & Urban Development (MA&UD)	1. MA&UD; 2. RWS; 3. Environment, Forest, Science & Technology; 4. Housing
12	Responsible consumption & production	1. Environment, Forest, Science and Technology (EFS&T)	1. Agriculture & Cooperation 2. Agriculture Marketing Dept
13	Climate action	1. Environment, Forest, Science and Technology (EFS&T)	1. EFS&T; 2. Irrigation
14	Life below water	1. Fisheries	1. Fisheries
15	Life on land	1. Environment, Forest, Science and Technology (EFS&T)	1. EFS&T; 2. Irrigation & CAD 3. Agriculture and Cooperation
16	Peace, Justice and strong institutions	1. Home	1. Home; 2. Information Technology, Electronic and Communications 3. Law
17	Partnerships for the goals	1. Finance 2. Industries and in Commerce 3. Planning	1. Finance Department; 2. Industries and Commerce; 3. Information Technology, Electronic & Communications; 4. Planning

#### Mapping of SDGs with Flagship programmes in Telangana State:

Since the formation of the state, the government has taken up various flagship programmes for the welfare of the poorest of the poor in the state. Many of these flagship programmes are some way or other addressing the at least one of the sustainable development goals. Mapping of currently implemented flagship programs in the State with each SDG is given in table-15.2:

**Table 15.2: Mapping of flagship programmes with SDGs:**

Goal No.	Goal	Departments mapped	State Flagship program
1	End poverty in all its forms everywhere	1. PR&RD 2. MA&UD	1. Abhya Hastam: Insurance cum pension scheme for SHG members 2. Veddileni Runalu: Interest free loans to SHG members 3. Aasara Pensions 4. Telangana Rural Inclusive Growth Project (TRIGP)
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Consumer Affairs Food & Civil Supplies Agriculture and Co-operation	1. PDS – six kg rice per head per month at Re.1 2. Arogya Lakshmi and strengthening of Anganwadies 3. Mid-day meal up to class X 4. Sanna Biyyam (Fine Rice) to State Welfare Hostels 5. Assistance to small and marginal farmers towards premium for crop insurance scheme 6. Interest free & Pavala Vaddi crop loans to farmers 7. Farm mechanization, including micro-irrigation 8. Redesigning of irrigation projects to provide irrigation to about one crore acres 9. Mission Kakatiya 10. Telangana as the Seed bowl of India, Crop colonies, polyhouse cultivation
3	Ensure healthy lives and promote well-being for all at all ages	Health, Medical & Family Welfare	1. Aarogyasri Health Care 2. Construction of new medical colleges and hospitals (with Rabo bank) 3. Upgradation and strengthening of Vaidya Vidhana Parishad (VVIP) hospitals 4. Ayurveda, Yoga, Unani, Siddha & Homoeopathy (AYUSH) 5. Ambulance Service 6. Arogya Lakshmi
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	School Education Higher Education	1. Free KG to PG Education to all (proposed) 2. Nutritious meals program for IX & X 3. Residential Schools 4. Welfare Hostels 5. Coaching and skill development for formal and self-employment 6. Coaching & Scholarships for higher studies in foreign universities 7. Prematric scholarships 8. Fees reimbursement 9. Entrepreneurial Development
5	Achieve gender equality and empower all women and girls	1. WCD 2. Social welfare 3. Minorities Welfare	1. ICDS 2. Kalyan Lakshmi 3. Aasara Pensions 4. Aarogya Lakshmi 5. Economic Assistance to Beedi workers 6. SERP – TRIGP 7. Land distribution 8. SHG bank linkage

<b>Goal No.</b>	<b>Goal</b>	<b>Departments mapped</b>	<b>State Flagship program</b>
6	Ensure availability and sustainable management of water and sanitation for all	Irrigation and CAD	<ol style="list-style-type: none"> <li>1. Mission Bhagiratha</li> <li>2. Mission Kakatiya</li> <li>3. Two bedroom houses</li> <li>4. Common effluent treatment plants at the industrial estates/ parks/ clusters</li> </ol>
7	Ensure access to affordable, reliable, sustainable and modern energy for all	Energy	<ol style="list-style-type: none"> <li>1. Make the State power surplus state through increasing the production of thermal, hydro and renewable energy</li> <li>2. High Voltage Distribution System (HVDS) and energy efficiency program</li> </ol>
8	Promote sustained, inclusive and sustainable Economic growth, full and productive employment and decent work for all	Labour, Employment, Training and Factories	<ol style="list-style-type: none"> <li>1. Employment Generation Mission</li> <li>2. Industrial parks for Small and Micro Enterprises</li> <li>3. Telangana State Industrial Project Approval and Self-certification System (TS-iPASS)</li> <li>4. Telangana State Program for Rapid Incubation of Dalit Entrepreneurs (TS-PRIDE)</li> <li>5. Telangana State Handicrafts and Artisans Revival with Technology program (T-HART)</li> <li>6. Telangana State Accelerated SSI Skills Training (T-ASSIST)</li> <li>7. Technology Hub (T-HUB)</li> <li>8. TRIGP</li> <li>9. Rural Technology Centres</li> <li>10. Skill Development</li> <li>11. Entrepreneurial Development</li> </ol>
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Industries and Commerce	<ol style="list-style-type: none"> <li>1. Telangana State Industrial Project Approval and Self-certification System (TS-iPASS)</li> <li>2. Telangana State Program for Rapid Incubation of Dalit Entrepreneurs (TS-PRIDE)</li> <li>3. Telangana State Handicrafts and Artisans Revival with Technology program (T-HART)</li> <li>4. Technology Hub (T-HUB)</li> </ol>
10	Reduce inequality within and among States	Finance	<ol style="list-style-type: none"> <li>1. Land distribution</li> <li>2. SC Development</li> <li>3. Tribal Welfare</li> <li>4. Backward Classes Welfare</li> <li>5. Minorities Welfare</li> <li>6. TS-PRIDE</li> <li>7. Rural Technology centres</li> <li>8. TRIGP</li> </ol>
11	Make cities and human settlements inclusive, safe, resilient and sustainable	Municipal Administration & Urban Development (MA&UD)	<ol style="list-style-type: none"> <li>1. Mission Bhagiratha</li> <li>2. Metro-trains</li> <li>3. Haritha Haram</li> </ol>

<b>Goal No.</b>	<b>Goal</b>	<b>Departments mapped</b>	<b>State Flagship program</b>
12	Ensure sustainable consumption and production Patterns	Environment, Forest, Science and Technology (EFS&T)	<ol style="list-style-type: none"> <li>1. Agriculture marketing</li> <li>2. Godowns and Cold storages</li> <li>3. Micro-irrigation</li> </ol>
13	Take urgent action to combat climate change and its impacts	Environment, Forest, Science and Technology (EFS&T)	<ol style="list-style-type: none"> <li>1. Telangana Ku Haritha Haram</li> <li>2. Afforestation Fund</li> <li>3. Horticulture promotion</li> <li>4. Poly house cultivation</li> <li>5. Micro-irrigation</li> <li>6. Crop colonies and soil and water analysis</li> </ol>
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Animal Husbandry and Fisheries	<ol style="list-style-type: none"> <li>1. Mission Kakatiya</li> <li>2. Large and medium irrigation tanks</li> </ol> <p><i>As the State is landlocked, the targets of this goal are not applicable to Telangana. However, the State is committed to promote fishery in all water storage structures; and conserve common lands and augment fodder and water supply in the common lands for the livestock.</i></p>
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Environment, Forest, Science and Technology (EFS&T)	<ol style="list-style-type: none"> <li>1. Telangana Ku Haritha Haram</li> <li>2. Soil and water analysis and appropriate nutrition and cropping</li> <li>3. Mission Kakatiya</li> <li>4. Afforestation fund</li> </ol>
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	Home	<ol style="list-style-type: none"> <li>1. CC TV Cameras across the state and effective monitoring system</li> <li>2. Reception at the police stations and reforms in the police service</li> <li>3. E Governance and online approval and services</li> <li>4. Right to Information</li> <li>5. All women police stations and teams</li> </ol>
17	Strengthen the means of implementation and revitalize the global partnership for sustainable Development	<ol style="list-style-type: none"> <li>1. Finance</li> <li>2. Industries and Commerce</li> <li>3. Planning</li> <li>4. Industry and Commerce</li> <li>5. Finance</li> </ol>	

### **Preparation of Baseline Information to Ascertain Milestones:**

The Table-15.3 given below provides the specified indicators against each SDG for Telangana State.

**Table-15.3: SDG wise some of the important indicators are listed below:**

Sustainable Development Goals	Indicators
1 No poverty	Poverty headcount ratio at \$1.90 a day (%) Prevalence of undernourishment (%) Cereal yield (t/ha)
2. Zero Hunger	Prevalence of stunting, under- 5s (%) Prevalence of wasting, under-5s (%) Sustainable Nitrogen Management Index (0-1)
3. Good health and wellbeing	Infant mortality per 1000 live births Under 5 mortality (per 1000 live births) Maternal mortality (per 100,000 live births) Institutional Deliveries (%) Neonatal mortality (per 1000 live births) Physician density (per 1000) Incidence of tuberculosis (per 100,000) Traffic deaths (per 100,000) Adolescent fertility (births per 1,000) Subjective wellbeing (0-10) Healthy life expectancy at birth (years) Infants who receive 2 WHO vaccines (%)
4. Quality Education	Expected years of schooling (years) Literacy rate of 15-24-year age group (%) Total Literacy Rate ( $\geq$ 7 Years) % Dropout Rate (I-X class) Net primary school enrolment rate (%)
5. Gender Equality	Women in national parliaments (%) Female years of schooling (% male) Female labor force participation (% male) Unmet demand for contraceptives (%)
6. Clean water and sanitation	Access to improved water (%) ODF Access to improved sanitation (%) Freshwater withdrawal (%)
7. Affordable and Clean Energy	Access to electricity (%) Access to non-solid fuels (%) CO2 from fuels & electricity (MtCO2/TWh)
8 Decent work and Economic Growth	Growth Rate (Current Prices) Unemployment rate (%) Automated teller machines (per 100,000) Adjusted growth rate (%) Child labor (%)

Sustainable Development Goals	Indicators
9. Industry, Innovation and Infrastructure	R&D expenditures (% GDP)
	Logistics Performance Index (1-5)
	Quality of overall infrastructure (1-7)
	Mobile broadband subscriptions (per 100)
	Internet use (%)
10. Reduced Inequalities	Gini index (0-100)
11. Sustainable Cities and Communities	PM2.5 in urban areas ( $\mu\text{g}/\text{m}^3$ )
	Improved water source, piped (%)
12. Responsible consumption and production	Wastewater treated (%)
	Municipal solid waste (kg/person/year)
	CO <sub>2</sub> emissions from energy (TCO <sub>2</sub> /capita)
13. Climate Action	Climate change vulnerability (0-1)
	Forest Cover % of total geographical area
	Ocean Health Index - Clean waters (0-100)
14 Life Below Water	Ocean Health Index - Biodiversity (0-100)
	Ocean Health Index - Fisheries (0-100)
	Marine sites, completely protected (%)
	Fish stocks overexploited or collapsed (%)
15. Life on Land	Red List Index of species survival (0-1)
	Annual change in forest area (%)
	Terrestrial sites, completely protected (%)
16. Peace and Justice -Strong Institutions	Homicides (per 100,000)
	Prison population (per 100,000)
	Feel safe walking at night (%)
	Corruption Perception Index (0-100)
	Registered births (%)
	Government efficiency (1-7)
	Property rights (1-7)
17. Partnerships for the Goals	Official development assistance (% GNI) For high-income countries only
	Tax revenue (% GDP) For low- and middle-income countries only
	Health, Education & R&D spending (% GDP)

## 15.5. Outlook

A team of experts from state, national and international organizations are supporting the respective departments and District Collectors on planning and monitoring of SDG targets and achievement of goals.

A brief orientation on SDGs was provided to the officials in the newly formed districts. This will be further strengthened through series of workshops and trainings involving officials from district and mandal level.

A ‘SDG Monitoring and Policy Support Unit’ will be established under the Planning Department, to steer the actions on SDGs, monitor the progress and provide handholding support to the departments.

The Government is envisaging to develop ‘Vision Document’ for the state (2016-30) aligning with SDGs and the state’s priorities.

**Section V**

**STATISTICAL PROFILE**



## STATISTICAL PROFILE

<b>Sl. No.</b>	<b>Description</b>	<b>Page</b>
1	Gross State Domestic Product of Telangana at Current Prices	201
2	Sectoral Growth Rates of GSDP of Telangana at Current Prices	202
3	Sectoral Contribution of GSVA of Telangana at Current Prices	203
4	Gross State Domestic Product of Telangana at Constant (2011-12) Prices	204
5	Sectoral Growth Rates of GSDP of Telangana at Constant (2011-12) Prices	205
6	Sectoral Contribution of GSVA of Telangana at Constant (2011-12) Prices	206
7	Net State Domestic Product and Per Capita Income of Telangana at Current Prices	207
8	Net State Domestic Product and Per Capita Income of Telangana at Constant (2011-12) Prices	208
9	Gross Domestic Product and Per Capita Income of All India at Current Prices	209
10	Growth rates of Gross Domestic Product and Per Capita Income of All India at Current Prices	209
11	Gross Domestic Product and Per Capita Income of All India at Constant (2011-12) Prices	210
12	Growth rates of Gross Domestic Product and Per Capita Income of All India at Constant (2011-12) Prices	210
13	Gross District Domestic Product and Per Capita Income of Telangana for the year 2015-16	211
14	Demographic details of Telangana	212
15	Enrolment of Children in Schools from 2000-01 to 2016-17	213
16	School Dropout Rates from 2004-05 to 2016-17	214
17	Land Utilisation from 2008-09 to 2015-16	214
18	Season wise Rainfall from 1990-91 to 2016-17	215
19	Area Sown and Production of Food grains from 1955-56 to 2015-16	216
20	Area Sown and Production of Food grains among Major States, 2014-15	217
21	Production of Fish and Prawn from 2008-09 to 2016-17	218
22	Production of Milk, Meat and Eggs from 2013-14 to 2016-17	218
23	Mineral Production and Value of Mineral Produced during the Year 2016-17	219
24	Telangana State Profile	220
25	District Profiles	221



## 1. Gross State Domestic Product of Telangana at Current Prices

Sl. No.	Sector	(Rs. in Crore)					
		2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	54615	67265	77236	75915	77553	92162
1.1	Crops	32368	40570	47159	41625	38679	48859
1.2	Livestock	18848	22785	25399	29513	34363	38522
1.3	Forestry and Logging	1917	2071	2180	2107	2133	2109
1.4	Fishing and Aquaculture	1481	1839	2497	2670	2378	2673
2.	Mining and Quarrying	11061	12685	12386	15419	17238	18892
	<b>Primary</b>	<b>65676</b>	<b>79950</b>	<b>89621</b>	<b>91334</b>	<b>94791</b>	<b>111054</b>
3.	Manufacturing	62152	55431	57148	63537	66778	73235
4.	Electricity, Gas, Water supply and Other Utility Services	7835	5896	8709	7163	6614	6661
5.	Construction	22790	23578	24582	28540	30304	33954
	<b>Secondary</b>	<b>92776</b>	<b>84905</b>	<b>90440</b>	<b>99240</b>	<b>103696</b>	<b>113850</b>
6.	Trade, Repair, Hotels and Restaurants	37478	44547	51275	64946	74815	87868
6.1	Trade and Repair Services	30487	36472	44563	57241	66347	78419
6.2	Hotels and Restaurants	6991	8074	6712	7705	8468	9449
7.	Transport, Storage, Communication & Services related to Broadcasting	25317	29870	32298	36047	41820	48954
7.1	Railways	1614	1756	1930	1997	2059	2088
7.2	Road Transport	14613	17158	18691	20557	24188	28635
7.3	Water Transport	0	0	0	0	0	0
7.4	Air Transport	233	432	345	1207	1586	2171
7.5	Services incidental to Transport	3718	4844	4477	4549	5138	5937
7.6	Storage	175	153	171	198	242	285
7.7	Communication and Services related to Broadcasting	4965	5527	6683	7540	8606	9838
8.	Financial Services	21265	23632	26596	30237	33123	37008
9.	Real estate, Ownership of dwellings and Professional Services	55514	69245	82307	94788	109036	125060
10.	Public Administration	11313	12660	14338	17113	20619	22445
11.	Other Services	26709	30354	35460	41582	48480	54427
	<b>Tertiary</b>	<b>177596</b>	<b>210307</b>	<b>242273</b>	<b>284714</b>	<b>327893</b>	<b>375762</b>
12.	Total GSVA at basic prices	336049	375162	422335	475288	526380	600666
13.	Taxes on Products	32811	37164	40929	44257	60346	63825
14.	Subsidies on products	9427	10833	11078	8367	11095	10197
<b>15.</b>	<b>Gross State Domestic Product</b>	<b>359433</b>	<b>401493</b>	<b>452186</b>	<b>511178</b>	<b>575631</b>	<b>654294</b>

TRE: Third Revised Estimates; SRE: Second Revised Estimates; FRE: First Revised Estimates; and AE: Advance Estimates  
 Totals may not tally due to roundig off

## 2. Sectoral Growth Rates of GSDP of Telangana at Current Prices

Sl. No.	Sector	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	23.2	14.8	-1.7	2.2	18.8
1.1	Crops	25.3	16.2	-11.7	-7.1	26.3
1.2	Livestock	20.9	11.5	16.2	16.4	12.1
1.3	Forestry and Logging	8.0	5.3	-3.3	1.2	-1.2
1.4	Fishing and Aquaculture	24.1	35.8	6.9	-10.9	12.4
2.	Mining and Quarrying	14.7	-2.4	24.5	11.8	9.6
	<b>Primary</b>	<b>21.7</b>	<b>12.1</b>	<b>1.9</b>	<b>3.8</b>	<b>17.2</b>
3.	Manufacturing	-10.8	3.1	11.2	5.1	9.7
4.	Electricity, Gas, Water supply and Other Utility Services	-24.7	47.7	-17.8	-7.7	0.7
5.	Construction	3.5	4.3	16.1	6.2	12.0
	<b>Secondary</b>	<b>-8.5</b>	<b>6.5</b>	<b>9.7</b>	<b>4.5</b>	<b>9.8</b>
6.	Trade, Repair, Hotels and Restaurants	18.9	15.1	26.7	15.2	17.4
6.1	Trade and Repair Services	19.6	22.2	28.5	15.9	18.2
6.2	Hotels and Restaurants	15.5	-16.9	14.8	9.9	11.6
7.	Transport, Storage, Communication & Services related to Broadcasting	18.0	8.1	11.6	16.0	17.1
7.1	Railways	8.8	9.9	3.4	3.1	1.4
7.2	Road Transport	17.4	8.9	10.0	17.7	18.4
7.3	Water Transport	0	0	0	0	0
7.4	Air Transport	85.6	-20.1	249.8	31.4	36.8
7.5	Services incidental to Transport	30.3	-7.6	1.6	12.9	15.6
7.6	Storage	-12.6	11.5	15.9	22.2	17.8
7.7	Communication and Services related to Broadcasting	11.3	20.9	12.8	14.1	14.3
8.	Financial Services	11.1	12.5	13.7	9.5	11.7
9.	Real estate, Ownership of dwellings and Professional Services	24.7	18.9	15.2	15.0	14.7
10.	Public Administration	11.9	13.3	19.3	20.5	8.9
11.	Other Services	13.6	16.8	17.3	16.6	12.3
	<b>Tertiary</b>	<b>18.4</b>	<b>15.2</b>	<b>17.5</b>	<b>15.2</b>	<b>14.6</b>
12.	Total GSVA at basic prices	11.6	12.6	12.5	10.7	14.1
13.	Taxes on Products	13.3	10.1	8.1	36.4	5.8
14.	Subsidies on products	14.9	2.3	-24.5	32.6	-8.1
15.	<b>Gross State Domestic Product</b>	<b>11.7</b>	<b>12.6</b>	<b>13.0</b>	<b>12.6</b>	<b>13.7</b>

### 3. Sectoral Contribution of GSVA of Telangana at Current Prices

Sl. No.	Sector	2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	16.3	17.9	18.3	16.0	14.7	15.3
1.1	Crops	9.6	10.8	11.2	8.8	7.3	8.1
1.2	Livestock	5.6	6.1	6.0	6.2	6.5	6.4
1.3	Forestry and Logging	0.6	0.6	0.5	0.4	0.4	0.4
1.4	Fishing and Aquaculture	0.4	0.5	0.6	0.6	0.5	0.4
2.	Mining and Quarrying	3.3	3.4	2.9	3.2	3.3	3.1
	<b>Primary</b>	<b>19.5</b>	<b>21.3</b>	<b>21.2</b>	<b>19.2</b>	<b>18.0</b>	<b>18.5</b>
3.	Manufacturing	18.5	14.8	13.5	13.4	12.7	12.2
4.	Electricity, Gas, Water supply and Other Utility Services	2.3	1.6	2.1	1.5	1.3	1.1
5.	Construction	6.8	6.3	5.8	6.0	5.8	5.7
	<b>Secondary</b>	<b>27.6</b>	<b>22.6</b>	<b>21.4</b>	<b>20.9</b>	<b>19.7</b>	<b>19.0</b>
6.	Trade, Repair, Hotels and Restaurants	11.2	11.9	12.1	13.7	14.2	14.6
6.1	Trade and Repair Services	9.1	9.7	10.6	12.0	12.6	13.1
6.2	Hotels and Restaurants	2.1	2.2	1.6	1.6	1.6	1.6
7.	Transport, Storage, Communication & Services related to Broadcasting	7.5	8.0	7.6	7.6	7.9	8.1
7.1	Railways	0.5	0.5	0.5	0.4	0.4	0.3
7.2	Road Transport	4.3	4.6	4.4	4.3	4.6	4.8
7.3	Water Transport	0.0	0.0	0.0	0.0	0.0	0.0
7.4	Air Transport	0.1	0.1	0.1	0.3	0.3	0.4
7.5	Services incidental to Transport	1.1	1.3	1.1	1.0	1.0	1.0
7.6	Storage	0.1	0.0	0.0	0.0	0.0	0.0
7.7	Communication and Services related to Broadcasting	1.5	1.5	1.6	1.6	1.6	1.6
8.	Financial Services	6.3	6.3	6.3	6.4	6.3	6.2
9.	Real estate, Ownership of dwellings and Professional Services	16.5	18.5	19.5	19.9	20.7	20.8
10.	Public Administration	3.4	3.4	3.4	3.6	3.9	3.7
11.	Other Services	7.9	8.1	8.4	8.7	9.2	9.1
	<b>Tertiary</b>	<b>52.8</b>	<b>56.1</b>	<b>57.4</b>	<b>59.9</b>	<b>62.3</b>	<b>62.6</b>
12.	<b>Total GSVA at basic prices</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

#### 4. Gross State Domestic Product of Telangana at Constant (2011-12) Prices

Sl. No.	Sector	(Rs. in Crore)					
		2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	54615	59434	61790	55910	52398	58719
1.1	Crops	32368	35541	37233	29555	24885	29620
1.2	Livestock	18848	20351	20827	22516	23936	25461
1.3	Forestry and Logging	1917	1906	1858	1808	1770	1745
1.4	Fishing and Aquaculture	1481	1636	1872	2031	1808	1893
2.	Mining and Quarrying	11061	11541	11278	13908	15022	17364
	<b>Primary</b>	<b>65676</b>	<b>70975</b>	<b>73068</b>	<b>69817</b>	<b>67420</b>	<b>76083</b>
3.	Manufacturing	62152	52983	52899	57252	60802	65119
4.	Electricity, Gas, Water supply and Other Utility Services	7835	5332	7429	6035	5332	5205
5.	Construction	22790	23143	21367	24835	26524	28116
	<b>Secondary</b>	<b>92776</b>	<b>81458</b>	<b>81694</b>	<b>88123</b>	<b>92658</b>	<b>98439</b>
6.	Trade, Repair, Hotels and Restaurants	37478	40266	43576	52765	58584	64306
6.1	Trade and Repair Services	30487	32967	37881	46519	51970	57274
6.2	Hotels and Restaurants	6991	7300	5694	6246	6615	7032
7.	Transport, Storage, Communication & Services related to Broadcasting	25317	27914	28990	31731	35655	39632
7.1	Railways	1614	1675	1792	1729	1705	1729
7.2	Road Transport	14613	15982	16871	18192	20406	22855
7.3	Water Transport	0	0	0	0	0	0
7.4	Air Transport	233	404	306	1060	1386	1849
7.5	Services incidental to Transport	3718	4532	3964	3997	4490	5058
7.6	Storage	175	139	146	161	190	214
7.7	Communication and Services related to Broadcasting	4965	5182	5911	6591	7478	7926
8.	Financial Services	21265	23321	25679	28910	30862	33880
9.	Real estate, Ownership of dwellings and Professional Services	55514	62606	69881	76751	86061	92233
10.	Public Administration	11313	11523	12120	13793	16080	16504
11.	Other Services	26709	26990	29213	32079	35793	38017
	<b>Tertiary</b>	<b>177596</b>	<b>192620</b>	<b>209459</b>	<b>236030</b>	<b>263036</b>	<b>284572</b>
12.	Total GSVA at basic prices	336049	345053	364221	393970	423114	459094
13.	Taxes on Products	32811	34209	35183	36996	50574	60530
14.	Subsidies on products	9427	9972	9522	6994	9299	8338
15.	<b>Gross State Domestic Product</b>	<b>359433</b>	<b>369290</b>	<b>389882</b>	<b>423972</b>	<b>464389</b>	<b>511286</b>

## 5. Sectoral Growth Rates of GSDP of Telangana at Constant (2011-12) Prices

Sl. No.	Sector	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	8.8	4.0	-9.5	-6.3	12.1
1.1	Crops	9.8	4.8	-20.6	-15.8	19.0
1.2	Livestock	8.0	2.3	8.1	6.3	6.4
1.3	Forestry and Logging	-0.6	-2.5	-2.7	-2.1	-1.4
1.4	Fishing and Aquaculture	10.4	14.4	8.5	-11.0	4.7
2.	Mining and Quarrying	4.3	-2.3	23.3	8.0	15.6
	<b>Primary</b>	<b>8.1</b>	<b>2.9</b>	<b>-4.4</b>	<b>-3.4</b>	<b>12.8</b>
3.	Manufacturing	-14.8	-0.2	8.2	6.2	7.1
4.	Electricity, Gas, Water supply and Other Utility Services	-31.9	39.3	-18.8	-11.7	-2.4
5.	Construction	1.6	-7.7	16.2	6.8	6.0
	<b>Secondary</b>	<b>-12.2</b>	<b>0.3</b>	<b>7.9</b>	<b>5.1</b>	<b>6.2</b>
6.	Trade, Repair, Hotels and Restaurants	7.4	8.2	21.1	11.0	9.8
6.1	Trade and Repair Services	8.1	14.9	22.8	11.7	10.2
6.2	Hotels and Restaurants	4.4	-22.0	9.7	5.9	6.3
7.	Transport, Storage, Communication & Services related to Broadcasting	10.3	3.9	9.5	12.4	11.2
7.1	Railways	3.8	7.0	-3.5	-1.4	1.5
7.2	Road Transport	9.4	5.6	7.8	12.2	12.0
7.3	Water Transport	0	0	0	0	0
7.4	Air Transport	73.6	-24.3	247.1	30.8	33.4
7.5	Services incidental to Transport	21.9	-12.5	0.8	12.3	12.6
7.6	Storage	-20.8	4.9	10.8	17.9	12.6
7.7	Communication and Services related to Broadcasting	4.4	14.1	11.5	13.5	6.0
8.	Financial Services	9.7	10.1	12.6	6.8	9.8
9.	Real estate, Ownership of dwellings and Professional Services	12.8	11.6	9.8	12.1	7.2
10.	Public Administration	1.9	5.2	13.8	16.6	2.6
11.	Other Services	1.0	8.2	9.8	11.6	6.2
	<b>Tertiary</b>	<b>8.5</b>	<b>8.7</b>	<b>12.7</b>	<b>11.4</b>	<b>8.2</b>
12.	Total GSVA at basic prices	2.7	5.6	8.2	7.4	8.5
13.	Taxes on Products	4.3	2.8	5.2	36.7	19.7
14.	Subsidies on products	5.8	-4.5	-26.5	33.0	-10.3
15.	<b>Gross State Domestic Product</b>	<b>2.7</b>	<b>5.6</b>	<b>8.7</b>	<b>9.5</b>	<b>10.1</b>

## 6. Sectoral Contribution of GSVA of Telangana at Constant (2011-12) Prices

Sl. No.	Sector	2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	16.3	17.2	17.0	14.2	12.4	12.8
1.1	Crops	9.6	10.3	10.2	7.5	5.9	6.5
1.2	Livestock	5.6	5.9	5.7	5.7	5.7	5.5
1.3	Forestry and Logging	0.6	0.6	0.5	0.5	0.4	0.4
1.4	Fishing and Aquaculture	0.4	0.5	0.5	0.5	0.4	0.4
2.	Mining and Quarrying	3.3	3.3	3.1	3.5	3.6	3.8
	<b>Primary</b>	<b>19.5</b>	<b>20.6</b>	<b>20.1</b>	<b>17.7</b>	<b>15.9</b>	<b>16.6</b>
3.	Manufacturing	18.5	15.4	14.5	14.5	14.4	14.2
4.	Electricity, Gas, Water supply and Other Utility Services	2.3	1.5	2.0	1.5	1.3	1.1
5.	Construction	6.8	6.7	5.9	6.3	6.3	6.1
	<b>Secondary</b>	<b>27.6</b>	<b>23.6</b>	<b>22.4</b>	<b>22.4</b>	<b>21.9</b>	<b>21.4</b>
6.	Trade, Repair, Hotels and Restaurants	11.2	11.7	12.0	13.4	13.8	14.0
6.1	Trade and Repair Services	9.1	9.6	10.4	11.8	12.3	12.5
6.2	Hotels and Restaurants	2.1	2.1	1.6	1.6	1.6	1.5
7.	Transport, Storage, Communication & Services related to Broadcasting	7.5	8.1	8.0	8.1	8.4	8.6
7.1	Railways	0.5	0.5	0.5	0.4	0.4	0.4
7.2	Road Transport	4.3	4.6	4.6	4.6	4.8	5.0
7.3	Water Transport	0.0	0.0	0.0	0.0	0.0	0.0
7.4	Air Transport	0.1	0.1	0.1	0.3	0.3	0.4
7.5	Services incidental to Transport	1.1	1.3	1.1	1.0	1.1	1.1
7.6	Storage	0.1	0.0	0.0	0.0	0.0	0.0
7.7	Communication and Services related to Broadcasting	1.5	1.5	1.6	1.7	1.8	1.7
8.	Financial Services	6.3	6.8	7.1	7.3	7.3	7.4
9.	Real estate, Ownership of dwellings and Professional Services	16.5	18.1	19.2	19.5	20.3	20.1
10.	Public Administration	3.4	3.3	3.3	3.5	3.8	3.6
11.	Other Services	7.9	7.8	8.0	8.1	8.5	8.3
	<b>Tertiary</b>	<b>52.8</b>	<b>55.8</b>	<b>57.5</b>	<b>59.9</b>	<b>62.2</b>	<b>62.0</b>
12.	<b>Total GSVA at basic prices</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 7. Net State Domestic Product and Per Capita Income of Telangana at Current Prices

Sl. No.	Sector	(Rs. in Crore)					
		2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	51358	63500	72872	71085	72744	86180
1.1	Crops	29554	37322	43423	37458	34512	43595
1.2	Livestock	18595	22477	25053	29134	33984	38097
1.3	Forestry and Logging	1896	2053	2161	2089	2115	2090
1.4	Fishing and Aquaculture	1312	1647	2234	2404	2133	2398
2.	Mining and Quarrying	9734	11146	10331	12736	14239	15606
	<b>Primary</b>	<b>61092</b>	<b>74646</b>	<b>83203</b>	<b>83821</b>	<b>86983</b>	<b>101786</b>
3.	Manufacturing	52925	46102	47857	53631	56367	61817
4.	Electricity, Gas, Water supply and Other Utility Services	5215	3864	5873	4717	4356	4387
5.	Construction	21727	22348	23105	26828	28486	31917
	<b>Secondary</b>	<b>79867</b>	<b>72314</b>	<b>76836</b>	<b>85176</b>	<b>89208</b>	<b>98121</b>
6.	Trade, Repair, Hotels and Restaurants	35916	42603	49461	62740	72290	84912
6.1	Trade and Repair Services	29216	34881	43061	55426	64251	75941
6.2	Hotels and Restaurants	6700	7722	6400	7313	8040	8971
7.	Transport, Storage, Communication & Services related to Broadcasting	20860	24928	26470	29274	33967	39786
7.1	Railways	1356	1479	1599	1664	1716	1740
7.2	Road Transport	12051	14353	15610	17139	20164	23871
7.3	Water Transport						
7.4	Air Transport	192	361	169	994	1306	1787
7.5	Services incidental to Transport	3066	4053	3882	4080	4609	5325
7.6	Storage	150	133	145	166	202	238
7.7	Communication and Services related to Broadcasting	4045	4549	5065	5231	5971	6825
8.	Financial Services	20929	23214	26154	29711	32547	36365
9.	Real estate, Ownership of dwellings and Professional Services	49920	62077	72922	83629	96199	110337
10.	Public Administration	8748	9872	11175	13599	16715	18196
11.	Other Services	24421	27945	32816	38795	45250	50800
	<b>Tertiary</b>	<b>160794</b>	<b>190638</b>	<b>218997</b>	<b>257748</b>	<b>296969</b>	<b>340396</b>
12.	Total GSVA at basic prices	301754	337598	379036	426746	473161	540302
13.	Taxes on Products	32811	37164	40929	44257	60346	63825
14.	Subsidies on products	9427	10833	11078	8367	11095	10197
15.	<b>Net State Domestic Product</b>	<b>325138</b>	<b>363929</b>	<b>408887</b>	<b>462636</b>	<b>522412</b>	<b>593930</b>
16.	Population ('000)	35682	36040	36401	36766	37134	37505
17.	<b>Per Capita NSDP (Rupees)</b>	<b>91121</b>	<b>100979</b>	<b>112328</b>	<b>125832</b>	<b>140683</b>	<b>158360</b>

## 8. Net State Domestic Product and Per Capita Income of Telangana at Constant (2011-12) Prices

Sl. No.	Sector	(Rs. in Crore)					
		2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1.	Agriculture, Forestry and Fishing	51358	55959	58074	52014	48508	54165
1.1	Crops	29554	32548	34071	26225	21554	25656
1.2	Livestock	18595	20066	20521	22190	23610	25114
1.3	Forestry and Logging	1896	1890	1841	1792	1754	1730
1.4	Fishing and Aquaculture	1312	1455	1641	1808	1590	1665
2.	Mining and Quarrying	9734	10076	9396	11536	12460	14403
	<b>Primary</b>	<b>61092</b>	<b>66035</b>	<b>67470</b>	<b>63550</b>	<b>60968</b>	<b>68567</b>
3.	Manufacturing	52925	44011	44218	48180	51167	54800
4.	Electricity, Gas, Water supply and Other Utility Services	5215	3494	4768	3787	3346	3266
5.	Construction	21727	21970	19977	23274	25511	27042
	<b>Secondary</b>	<b>79867</b>	<b>69475</b>	<b>68964</b>	<b>75241</b>	<b>80024</b>	<b>85108</b>
6.	Trade, Repair, Hotels and Restaurants	35916	38432	41924	50810	56328	61835
6.1	Trade and Repair Services	29216	31465	36516	44913	50099	55212
6.2	Hotels and Restaurants	6700	6967	5408	5897	6230	6623
7.	Transport, Storage, Communication & Services related to Broadcasting	20860	23168	23008	25463	28599	31852
7.1	Railways	1356	1416	1490	1432	1411	1432
7.2	Road Transport	12051	13299	13520	15075	16909	18938
7.3	Water Transport						
7.4	Air Transport	192	336	142	865	1131	1508
7.5	Services incidental to Transport	3066	3771	3403	3567	4010	4517
7.6	Storage	150	119	122	133	157	176
7.7	Communication and Services related to Broadcasting	4045	4226	4331	4391	4981	5280
8.	Financial Services	20929	22916	25259	28422	30341	33309
9.	Real estate, Ownership of dwellings and Professional Services	49920	55873	61291	66823	73596	78873
10.	Public Administration	8748	8844	9175	10635	12398	12726
11.	Other Services	24421	24695	26767	29569	32994	35044
	<b>Tertiary</b>	<b>160794</b>	<b>173928</b>	<b>187423</b>	<b>211722</b>	<b>234256</b>	<b>253637</b>
12.	Total GSVA at basic prices	301754	309437	323857	350512	375249	407312
13.	Taxes on Products	32811	34209	35183	36996	50574	60530
14.	Subsidies on products	9427	9972	9522	6994	9299	8338
15.	<b>Net State Domestic Product</b>	<b>325138</b>	<b>333674</b>	<b>349518</b>	<b>380514</b>	<b>416524</b>	<b>459504</b>
16.	Population ('000)	35682	36040	36401	36766	37134	37505
17.	<b>Per Capita NSDP (Rupees)</b>	<b>91121</b>	<b>92584</b>	<b>96019</b>	<b>103496</b>	<b>112168</b>	<b>122518</b>

## 9. Gross Domestic Product and Per Capita Income of All India at Current Prices

Sl. No.	Sector	(Rs. in crore)					
		2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (2nd AE)
1	2	3	4	5	6	7	8
1	Agriculture, Forestry and Fishing	1501816	1680798	1932692	2067935	2172910	2382289
2	Mining and Quarrying	261035	285776	295716	313844	296041	309178
	<b>Primay Sector</b>	<b>1762851</b>	<b>1966574</b>	<b>2228408</b>	<b>2381779</b>	<b>2468951</b>	<b>2691467</b>
3	Manufacturing	1409986	1572830	1713445	1883929	2065093	2278149
4	Electricity, Gas, Water Supply and Other utility services	186668	215164	259840	279456	321765	338396
5	Construction	777363	847492	919269	977992	1000459	1064068
	<b>Secondary Sector</b>	<b>2374017</b>	<b>2635486</b>	<b>2892554</b>	<b>3141377</b>	<b>3387317</b>	<b>3680613</b>
6	Trade, Hotels, Transport, Communication and services related to Broadcasting	1413116	1664083	1874443	2095338	2294367	2538162
7	Financial, Real estate and Professional Services	1530691	1776023	2069386	2363327	2632432	2896300
8	Public administration, Defence and Other Services	1025981	1163149	1301475	1488594	1668871	1944244
	<b>Tertiary Sector</b>	<b>3969788</b>	<b>4603255</b>	<b>5245304</b>	<b>5947259</b>	<b>6595670</b>	<b>7378706</b>
9	GVA at Basic Prices	8106656	9205315	10366266	11470415	12451938	13750786
	<b>Gross Domestic Product</b>	<b>8736039</b>	<b>9946636</b>	<b>11236635</b>	<b>12433749</b>	<b>13675331</b>	<b>15251028</b>
	<b>Per Capita Income (Rupees)</b>	<b>63460</b>	<b>71011</b>	<b>79146</b>	<b>86513</b>	<b>94178</b>	<b>103818</b>

## 10. Growth rates of Gross Domestic Product and Per Capita Income of All India at Current Prices

Sl. No.	Sector	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (2nd AE)
1	2	3	4	5	6	7
1	Agriculture, Forestry and Fishing	11.9	15.0	7.0	5.1	9.6
2	Mining and Quarrying	9.5	3.5	6.1	-5.7	4.4
	<b>Primay Sector</b>	<b>11.6</b>	<b>13.3</b>	<b>6.9</b>	<b>3.7</b>	<b>9.0</b>
3	Manufacturing	11.5	8.9	9.9	9.6	10.3
4	Electricity, Gas, Water Supply and Other utility services	15.3	20.8	7.5	15.1	5.2
5	Construction	9.0	8.5	6.4	2.3	6.4
	<b>Secondary Sector</b>	<b>11.0</b>	<b>9.8</b>	<b>8.6</b>	<b>7.8</b>	<b>8.7</b>
6	Trade, Hotels, Transport, Communication and services related to Broadcasting	17.8	12.6	11.8	9.5	10.6
7	Financial, Real estate and Professional Services	16.0	16.5	14.2	11.4	10.0
8	Public administration, Defence and Other Services	13.4	11.9	14.4	12.1	16.5
	<b>Tertiary Sector</b>	<b>16.0</b>	<b>13.9</b>	<b>13.4</b>	<b>10.9</b>	<b>11.9</b>
9	GVA at Basic Prices	13.6	12.6	10.7	8.6	10.4
	<b>Gross Domestic Product</b>	<b>13.9</b>	<b>13.0</b>	<b>10.7</b>	<b>10.0</b>	<b>11.5</b>
	<b>Per Capita Income</b>	<b>11.9</b>	<b>11.5</b>	<b>9.3</b>	<b>8.9</b>	<b>10.2</b>

Source: Central Statistics Office (CSO), MOSPI, GOI.

## 11. Gross Domestic Product and Per Capita Income of All India at Constant (2011-12) Prices

Sl. No.	Sector	(Rs. in crore)					
		2011-12 (TRE)	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (2nd AE)
1	2	3	4	5	6	7	8
1	Agriculture, Forestry and Fishing	1501816	1524398	1609061	1604259	1616461	1687064
2	Mining and Quarrying	261035	259479	267629	307077	344972	349351
	<b>Primay Sector</b>	<b>1762851</b>	<b>1783877</b>	<b>1876690</b>	<b>1911336</b>	<b>1961433</b>	<b>2036415</b>
3	Manufacturing	1409986	1492763	1568508	1685844	1863835	2007564
4	Electricity, Gas, Water Supply and Other utility services	186668	191413	199153	213477	224323	239203
5	Construction	777363	781947	805484	829966	852821	879525
	<b>Secondary Sector</b>	<b>2374017</b>	<b>2466123</b>	<b>2573145</b>	<b>2729287</b>	<b>2940979</b>	<b>3126292</b>
6	Trade, Hotels, Transport, Communication and services related to Broadcasting	1413116	1549490	1654305	1796490	1988512	2133851
7	Financial, Real estate and Professional Services	1530691	1679124	1864320	2070948	2294193	2443633
8	Public administration, Defence and Other Services	1025981	1069615	1110790	1201286	1284603	1428124
	<b>Tertiary Sector</b>	<b>3969788</b>	<b>4298229</b>	<b>4629415</b>	<b>5068724</b>	<b>5567308</b>	<b>6005608</b>
9	GVA at Basic Prices	8106656	8548229	9079250	9709347	10469720	11168315
	<b>Gross Domestic Product</b>	<b>8736039</b>	<b>9215125</b>	<b>9817822</b>	<b>10522686</b>	<b>11357529</b>	<b>12165481</b>
	<b>Per Capita Income (Rupees)</b>	<b>63460</b>	<b>65568</b>	<b>68717</b>	<b>72712</b>	<b>77524</b>	<b>82112</b>

## 12. Growth rates of Gross Domestic Product and Per Capita Income of All India at Constant (2011-12) Prices

Sl. No.	Sector	2012-13 (TRE)	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (2nd AE)
1	2	3	4	5	6	7
1	Agriculture, Forestry and Fishing	1.5	5.6	-0.3	0.8	4.4
2	Mining and Quarrying	-0.6	3.1	14.7	12.3	1.3
	<b>Primay Sector</b>	<b>1.2</b>	<b>5.2</b>	<b>1.8</b>	<b>2.6</b>	<b>3.8</b>
3	Manufacturing	5.9	5.1	7.5	10.6	7.7
4	Electricity, Gas, Water Supply and Other utility services	2.5	4.0	7.2	5.1	6.6
5	Construction	0.6	3.0	3.0	2.8	3.1
	<b>Secondary Sector</b>	<b>3.9</b>	<b>4.3</b>	<b>6.1</b>	<b>7.8</b>	<b>6.3</b>
6	Trade, Hotels, Transport, Communication and services related to Broadcasting	9.7	6.8	8.6	10.7	7.3
7	Financial, Real estate and Professional Services	9.7	11.0	11.1	10.8	6.5
8	Public administration, Defence and Other Services	4.3	3.8	8.1	6.9	11.2
	<b>Tertiary Sector</b>	<b>8.3</b>	<b>7.7</b>	<b>9.5</b>	<b>9.8</b>	<b>7.9</b>
9	GVA at Basic Prices	5.4	6.2	6.9	7.8	6.7
	<b>Gross Domestic Product</b>	<b>5.5</b>	<b>6.5</b>	<b>7.2</b>	<b>7.9</b>	<b>7.1</b>
	<b>Per Capita Income</b>	<b>3.3</b>	<b>4.8</b>	<b>5.8</b>	<b>6.6</b>	<b>5.9</b>

### 13. Gross District Domestic Product and Per Capita Income of Telangana for the year 2015-16

Sl. No.	District	Current Prices		Constant (2011-12) Prices	
		GDDP (Rs. in Lakhs)	Per Capita Income (Rupees)	GDDP (Rs. in Lakhs)	Per Capita Income (Rupees)
1	2	3	4	5	6
01	Adilabad	819500	98819	669690	79907
02	Kumuram Bheem	542797	89947	443800	72687
03	Mancherial	931324	97677	770069	79944
04	Nirmal	753509	91424	584784	70171
05	Nizamabad	1671608	91738	1319579	71754
06	Jagital	887601	77669	654190	56636
07	Peddapalli	1076533	113164	928419	96717
08	Jayashankar	799212	96305	626886	74592
09	Bhadradri Kothagudem	1575407	123112	1332553	103073
10	Mahabubabad	759371	84464	566488	62232
11	Warangal Rural	796301	96076	611197	72899
12	Warangal Urban	1001230	79753	810725	64038
13	Karimnagar	1195121	101224	957959	80683
14	Rajanna Sircilla	545855	84593	430146	66044
15	Kamareddy	887347	78853	685582	60301
16	Sangareddy	3116045	169481	2639183	142331
17	Medak	979992	110149	775988	86260
18	Siddipet	1400800	120909	1095498	93639
19	Jangaon	575646	88269	439067	66469
20	Yadadri Bhuvanagiri	1041258	119989	835583	95161
21	Medchal-Malkajgiri	4760420	162327	4106435	139166
22	Hyderabad	13638776	299997	11077580	240777
23	Rangareddy	8235855	288408	6650205	228696
24	Vikarabad	928795	85865	720622	65947
25	Mahabubnagar	1467534	84172	1168881	66319
26	Jogulamba Gadwal	602141	85183	442956	61981
27	Wanaparthy	553277	83196	417038	62102
28	Nagarkurnool	806873	81147	618904	61548
29	Nalgonda	2039847	108065	1607281	84049
30	Suryapet	1370474	106641	1084646	83367
31	Khammam	1802701	109975	1366983	82603
<b>GSDP/PCI</b>		<b>57563149</b>	<b>140683</b>	<b>46438919</b>	<b>112168</b>

## 14. Demographic details of Telangana

### a. Population of Telangana State from 1961 to 2011

(in Nos.)

Year	1961	1971	1981	1991	2001	2011
Telangana	12,711,785	1,58,17,895	20,181,085	2,60,89,074	3,09,87,271	35,003,674
India	43,92,34,771	54,81,59,652	68,33,29,097	84,64,21,039	1,02,86,10,328	1,21,08,54,977

### b. Percentage of Urban Population to total Population from 1971 to 2011

Year	1961	1971	1981	1991	2001	2011
Telangana	-	20.99	25.27	30.18	31.79	38.88
India	-	17.98	19.51	22.87	25.49	31.15

### c. Percentage of Decadal Population Growth Rate from 1951-61 to 2001-2011

Year	1951-61	1961-71	1971-81	1981-91	1991-01	2001-2011
Telangana	16.48	24.60	27.59	29.27	18.77	13.58
India	-	24.80	24.66	23.85	21.54	17.69

### d. Density of Population from 1961 to 2011

Year	1961	1971	1981	1991	2001	2011
Telangana	111	138	176	227	270	312
India	144	177	216	273	325	382

### e. Sex Ratio of Population from 1961 to 2011

Year	1961	1971	1981	1991	2001	2011
Telangana	975	969	971	967	971	988
India	941	930	934	927	933	943

### f. Literacy Rate of Population from 1961 to 2011

Year	1961	1971	1981	1991	2001	2011
Telangana	17.34	20.7	26.49	41.3	58.00	66.54
India	28.3	34.45	43.57	52.21	64.84	72.99

Source: Census of India

## 15. Enrolment of Children in Schools from 2000-01 to 2016-17

<b>Year</b>	<b>Pre-Primary</b>	<b>I-V Classes</b>	<b>VI-VIII Classes</b>	<b>IX-X Classes</b>	<b>XI-XII Classes</b>	<b>Total</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
2000-01	2,01,671	37,46,763	9,21,461	9,38,079	3,393	58,11,367
2001-02	2,75,831	37,37,428	9,98,912	10,24,986	2,956	60,40,113
2002-03	2,89,652	38,88,456	10,81,467	11,08,541	3,081	63,71,197
2003-04	2,90,767	36,88,865	11,19,506	12,01,439	3,567	63,04,144
2004-05	2,17,362	35,77,528	11,80,486	12,97,082	4,171	62,76,629
2005-06	3,23,621	34,36,306	12,56,075	13,93,142	4,079	64,13,223
2006-07	4,23,452	34,42,831	12,78,285	14,66,126	3,680	66,14,374
2007-08	4,19,329	33,58,789	12,36,830	15,41,091	4,035	65,60,074
2008-09	4,26,829	33,32,610	11,93,274	15,88,178	4,607	65,45,498
2009-10	2,55,699	33,28,545	11,54,606	15,83,438	11,023	63,33,311
2010-11	2,31,939	32,97,475	11,69,852	15,47,789	8,801	62,55,856
2011-12	2,25,741	32,56,509	11,95,855	15,44,896	11,063	62,34,064
2012-13	2,31,107	31,72,977	11,75,147	15,34,496	15,657	61,29,384
2013-14	1,83,223	32,06,958	17,38,259	10,25,861	24,194	61,78,495
2014-15	1,67,396	31,91,573	17,27,617	10,35,186	31,638	61,53,410
2015-16	94,892	32,46,976	17,58,209	10,58,128	33,577	61,91,872
2016-17 (P)	133,740	31,08,997	17,08,975	10,48,814	32,670	60,33,196

Note:- In 2013-14 enrolment is given for (VI-VIII) and (IX-X) classes instead of (VI-VII) & (VIII-X) classes.

Source: Commissiner of School Education, Hyderabad.

## 16. School Dropout Rates from 2004-05 to 2016-17

Year	Class I - V			Class I - VIII			Class I - X		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10
2004-05	37.30	37.06	37.17	54.85	55.73	55.25	61.20	61.86	61.47
2005-06	30.37	30.17	30.27	53.50	54.41	53.93	61.40	62.06	61.69
2006-07	32.81	33.34	33.08	43.38	44.29	43.82	63.03	63.56	63.27
2007-08	26.19	25.28	25.75	36.79	37.66	37.22	65.24	65.31	65.27
2008-09	23.74	22.82	23.29	39.29	40.20	39.74	64.59	64.68	64.63
2009-10	23.45	22.09	22.79	31.95	31.59	31.78	55.90	56.76	56.33
2010-11	25.61	24.20	24.92	29.39	28.06	28.74	48.65	47.77	48.22
2011-12	24.28	23.23	23.77	28.11	25.30	26.74	49.42	49.11	49.27
2012-13	24.28	24.56	24.42	33.98	31.35	32.69	42.71	41.59	42.16
2013-14	22.60	22.02	22.32	33.72	31.34	32.56	39.05	37.33	38.21
2014-15	19.52	18.95	19.25	31.93	30.31	31.14	38.36	36.31	37.56
2015-16	16.60	16.10	16.30	29.88	28.93	29.42	38.18	35.75	36.99
2016-17 (P)	16.30	15.70	16.00	30.61	29.24	29.95	35.50	33.84	34.70

Source: Commissioner of School Education, Hyderabad.

## 17. Land Utilisation from 2008-09 to 2015-16

(Area in Lakh Hects. )

Year	Forest	Barren and Uncultivable Land	Land put to Non-Agricultural Uses	Permanent Pastures and Other Grazing Lands	Misc. Tree Crops and Groves not included in Net Area Sown	Culturable Waste	Other Fallow Lands	Current Fallow	Net Area Sown	Geo-graphical Area
1	2	3	4	5	6	7	8	9	10	11
2008-09	27.43	6.26	8.19	3.09	1.16	1.71	7.88	16.79	42.33	114.84
2009-10	27.43	6.18	8.24	3.08	1.16	1.70	8.08	19.38	39.59	114.84
2010-11	27.43	6.17	8.71	3.03	1.14	1.67	7.80	13.97	44.92	114.84
2011-12	27.43	6.17	8.82	3.02	1.14	1.65	8.26	12.36	45.99	114.84
2012-13	27.43	6.17	8.86	3.02	1.14	1.74	7.91	12.03	46.54	114.84
2013-14	27.43	6.15	8.95	3.01	1.14	1.78	7.17	9.60	49.61	114.84
2014-15	25.40	6.07	8.85	2.99	1.12	1.82	8.05	14.01	43.77	112.08
2015-16	25.40	6.07	8.92	2.99	1.12	1.82	8.22	15.79	41.75	112.08

Source: Directorate of Economics and Statistics, Telangana.

## 18. Season wise Rainfall from 1990-91 to 2016-17

Sl. No.	Year	South-West Monsoon (June to September)		North-East Monsoon (October to December)		Winter Period (January to February)		Hot-Weather Period (March to May)		Total	
		Actual	% Dev. over normal	Actual	% Dev. over normal	Actual	% Dev. over normal	Actual	% Dev. over normal	Actual	% Dev. over normal
1	2	3	4	5	6	7	8	9	10	11	12
	<b>Normal</b>	<b>715.1</b>		<b>129.2</b>		<b>11.5</b>		<b>50.8</b>		<b>906.6</b>	
1	1990-91	653.1	-8.7	140.5	8.7	6.9	-40	31.1	-38.8	831.6	-8.3
2	1991-92	578.1	-19.2	50.5	-60.9	1.2	-89.6	14.9	-70.7	644.7	-28.9
3	1992-93	489.6	-31.5	82.5	-36.1	0	-100	43.3	-14.8	615.4	-32.1
4	1993-94	480.3	-32.8	106.5	-17.6	7.2	-37.4	16.7	-67.1	610.7	-32.6
5	1994-95	436.1	-39	166.1	28.6	39.5	243.5	49.7	-2.2	691.4	-23.7
6	1995-96	512.6	-28.3	240.3	86	1.3	-88.7	21.9	-56.9	776.1	-14.4
7	1996-97	643.5	-10	95.4	-26.2	13.4	16.5	52.1	2.6	804.5	-11.3
8	1997-98	481.3	-32.7	126.5	-2.1	12.3	7	26.6	-47.6	646.7	-28.7
9	1998-99	745.1	4.2	78.4	-39.3	4.7	-59.1	46.5	-8.5	874.7	-3.5
10	1999-2K	574.3	-19.7	37.6	-70.9	6.7	-41.7	33.4	-34.3	652	-28.1
11	2000-01	827.1	15.7	23.1	-82.1	3.3	-71.3	37.4	-26.4	891	-1.7
12	2001-02	582.3	-18.6	134.8	4.3	19	65.2	32.6	-35.8	768.8	-15.2
13	2002-03	488.3	-31.7	86	-33.4	2.7	-76.5	23.9	-53	600.9	-33.7
14	2003-04	672.6	-5.9	103	-20.3	29.7	158.3	50.4	-0.8	855.8	-5.6
15	2004-05	455.8	-36.3	76.4	-40.9	37.4	225.2	44.4	-12.6	614	-32.3
16	2005-06	808.2	13	172.3	33.4	0	-100	137.1	169.9	1117.6	23.3
17	2006-07	728.9	1.9	65.4	-49.4	0.6	-94.8	9.4	-81.5	804.2	-11.3
18	2007-08	734.6	2.7	61.6	-52.3	19.6	70.4	124.2	144.5	940	3.7
19	2008-09	755.2	5.6	38.6	-70.1	0	-100	27.1	-46.7	820.9	-9.5
20	2009-10	494.9	-30.8	122	-5.6	18.8	63.5	46.1	-9.3	681.7	-24.8
21	2010-11	894.4	25.1	152.6	18.1	10.1	-12.2	43.7	-14	1100.8	21.4
22	2011-12	601.1	-15.9	24	-81.4	8	-30.4	27.5	-45.9	660.6	-27.1
23	2012-13	707.2	-1.1	141.8	9.8	34.5	200	33.3	-34.4	916.8	1.1
24	2013-14	851.5	19.1	243.2	88.2	1.3	-88.7	116.2	128.7	1212.2	33.7
	<b>Normal</b>	<b>713.5</b>		<b>129.5</b>		<b>11.5</b>		<b>50.8</b>		<b>905.3</b>	
25	2014-15	494.7	-30.7	54.4	-58.0	13.0	13.0	120.0	136.2	682.1	-24.7
26	2015-16	611.2	-14.3	27.5	-78.8	1.5	-87.0	76.9	51.4	717.1	-20.8
27	2016-17	912.2	27.85	70.6	-45.5						

Source: Directorate of Economics and Statistics, Telangana.

## 19. Area Sown and Production of Food grains from 1955-56 to 2015-16

Sl. No.	Year	Area (Lakh Hects)	Production (Lakh Tonnes)	Sl. No.	Year	Area (Lakh Hects)	Production (Lakh Tonnes)
1	2	3	4	1	2	3	4
1	1955-56	35.35	13.78	32	1986-87	32.02	29.11
2	1956-57	36.52	14.54	33	1987-88	34.93	36.78
3	1957-58	35.64	16.60	34	1988-89	35.39	43.42
4	1958-59	37.28	22.03	35	1989-90	35.32	48.43
5	1959-60	37.85	21.48	36	1990-91	34.10	48.20
6	1960-61	35.92	19.28	37	1991-92	32.33	43.21
7	1961-62	40.50	25.60	38	1992-93	28.39	39.08
8	1962-63	40.06	23.04	39	1993-94	28.03	39.90
9	1963-64	39.69	23.63	40	1994-95	27.76	41.60
10	1964-65	38.84	24.75	41	1995-96	27.73	39.78
11	1965-66	37.92	21.73	42	1996-97	30.56	53.05
12	1966-67	38.25	22.80	43	1997-98	25.90	35.26
13	1967-68	39.01	25.66	44	1998-99	32.47	60.94
14	1968-69	37.80	19.92	45	1999-00	30.77	52.47
15	1969-70	41.15	26.66	46	2000-01	33.39	64.63
16	1970-71	42.12	26.75	47	2001-02	29.64	55.31
17	1971-72	37.39	21.17	48	2002-03	26.67	39.48
18	1972-73	38.07	19.30	49	2003-04	29.93	57.99
19	1973-74	43.17	32.68	50	2004-05	24.97	41.68
20	1974-75	41.92	33.70	51	2005-06	31.31	75.29
21	1975-76	43.79	35.77	52	2006-07	30.81	65.21
22	1976-77	39.82	30.20	53	2007-08	30.09	81.34
23	1977-78	40.34	33.83	54	2008-09	31.72	82.48
24	1978-79	43.87	41.15	55	2009-10	26.49	51.90
25	1979-80	38.41	34.32	56	2010-11	34.44	92.60
26	1980-81	38.71	37.09	57	2011-12	31.09	75.01
27	1981-82	41.61	42.37	58	2012-13	28.36	82.42
28	1982-83	40.31	43.46	59	2013-14	34.56	107.49
29	1983-84	41.79	41.15	60	2014-15	26.13	72.18
30	1984-85	36.38	32.08	61	2015-16	21.80	51.45
31	1985-86	34.64	32.23				

Source: Directorate of Economics and Statistics, Telangana.

## 20. Area Sown and Production of Food grains among Major States, 2014-15

Sl. No.	State	Area		Production		Yield	
		(in '000 Hectares)	Rank	(in '000 Tonnes)	Rank	(Kgs., per Hectare)	Rank
1	2	3	4	5	6	7	8
1	Uttar Pradesh	20,078	1	39,594	1	1,972	10
2	Madhya Pradesh	15,462	2	28,687	2	1,855	14
3	Rajasthan	12,835	3	19,622	4	1,529	18
4	Maharashtra	11,450	4	11,312	9	988	21
5	Karnataka	7,193	5	12,138	8	1,687	17
6	Bihar	6,725	6	13,209	7	1,964	11
7	Punjab	6,585	7	26,698	3	4,054	1
8	West Bengal	6,128	8	16,532	5	2,698	6
9	Odisha	5,166	9	8,981	12	1,738	16
10	Chattisgarh	5,058	10	7,461	13	1,475	19
11	Haryana	4,445	11	15,235	6	3,427	2
12	Andhra Pradesh	3,963	12	10,494	10	2,648	7
13	Tamilnadu	3,538	13	9,624	11	2,720	5
14	Gujarat	3,527	14	7,109	15	2,016	9
15	Assam	2,701	15	5,459	16	2,021	8
16	Telangana	2,613	16	7,218	14	2,763	4
17	Jharkhand	2,553	17	4,777	17	1,872	13
18	Jammu & Kashmir	957	18	1,220	20	1,275	20
19	Uttarakhand	898	19	1,626	18	1,811	15
20	Himachal Pradesh	755	20	1,432	19	1,896	12
21	Kerala	200	21	564	21	2,823	3
<b>All India</b>		<b>1,22,830</b>		<b>2,48,992</b>		<b>2,028</b>	

Source : Directorate of Economics and Statistics, Telangana

## 21. Production of Fish and Prawn from 2008-09 to 2016-17

Sl. No.	Year	Inland Fish (Tonnes)	Fresh Water Prawn (Tonnes)	Total
1	2	3	4	5
1	2008-09	1,49,049	2,242	1,51,291
2	2009-10	1,33,613	2,008	1,35,621
3	2010-11	1,33,587	2,206	1,35,793
4	2011-12	1,96,708	3,774	2,00,482
5	2012-13	2,14,591	5,037	2,19,628
6	2013-14	2,43,037	6,596	2,49,633
7	2014-15	2,60,010	8,352	2,68,362
8	2015-16	2,28,185	8,567	2,36,752
9	2016-17 (Upto Dec., 2016)	1,15,008	2,132	1,17,140

Source: Commissioner of Fisheries, Telangana.

## 22. Production of Milk, Meat and Eggs from 2013-14 to 2016-17

Sl. No.	Year	Milk (in '000 MTs)	Meat (in '000 MTs)	Eggs (in Cr. Nos.)
1	2	3	4	5
1	2013-14	3924	446	1006
2	2014-15	4207	505	1061
3	2015-16	4442	542	1120
4	2016-17	4665	586	1177

Source: Director of Animal Husbandry, Telangana.

**23. Mineral Production and Value of Mineral Produced during the Year 2016-17  
(From April to December, 2016)**

Sl. No.	Mineral	Unit	Production	Value (Rs. Lakhs)
1	2	3	4	5
<b>I. Major Minerals</b>				
1	Coal	Tonnes	4,26,81,190	6,25,706
2	Lime Stone	Tonnes	1,98,60,275	78,845
3	Manganese Ore	Tonnes	7,282	222
4	Stowing Sand	Tonnes	22,94,262	2,635
	<b>Total</b>			<b>7,07,408</b>
<b>II. Minor Minerals</b>				
1	Amethyst	Tonnes	-	-
2	Barytes	Tonnes	12,579	472
3	Dolomite	Tonnes	3,94,704	1,646
4	Feldspar	Tonnes	5,08,657	1,516
5	Fire Clay	Tonnes	-	-
6	Latarite	Tonnes	31,40,669	8,260
7	Mica	Tonnes	-	-
8	Quartz	Tonnes	3,96,823	1,202
9	Silica Sand	Tonnes	-	-
10	Shale	Tonnes	18,000	26
11	White Clay	Tonnes	51,320	111
12	Yellow Ochre	Tonnes	-	-
	<b>Total</b>			<b>13,233</b>
<b>III. Other Minor</b>				
1	Black Granite	M3	3,10,806	1,59,338
2	Colour Granite	M3	5,52,600	1,78,372
3	Gravel / Earth	M3	2,83,53,011	97,880
4	Fuller's Earth	Tonnes	2,48,534	2,574
5	Lime Stone Slabs	M2	25,75,328	13,336
6	Limekankar	Tonnes	-	-
7	Mosaic Chips	Tonnes	13,450	102
8	Marble	Tonnes	-	-
9	Road Metal	M3	3,16,18,439	2,72,889
10	Ordinary Sand	M3	16,94,247	7,990
	<b>Total</b>			<b>7,32,483</b>
	<b>Grand Total</b>			<b>14,53,123</b>

Source: Director, Mines and Geology, Telangana.

## State Profile : TELANGANA

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	83,03,612	Child Population	38,99,166
Persons	3,50,03,674	Scheduled Castes Population	54,08,800
Males	1,76,11,633	Percentage of SC population	15.45
Females	1,73,92,041	Scheduled Tribes Population	31,77,940
Rural	2,13,95,009	Percentage of ST population	9.08
Urban	1,36,08,665	Sex Ratio (Females per 1000 Males)	988
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	2,06,96,778	Persons	66.54
Males	1,17,01,729	Males	75.04
Females	89,95,049	Females	57.99
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	1,63,41,942	Cultivators	3,151,389
Main Workers	1,37,19,879	Agricultural Labourers	59,15,151
Marginal Workers	26,22,063	Workers in Household Industries	776,529
Non Workers	1,86,61,732	Other Workers	64,98,873
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	48,80,293	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	41,60,419	Individual Household Latrines	16,63,839
3. Sheep	1,28,35,761	Safe Drinking Water Sources	1,85,147
4. Goat	45,75,695	Electricity (Domestic Connections)	95,04,305
5. Others	6,20,723	Electricity (Agricultural Connections)	20,80,706
Total	2,70,72,891	Primary Schools	21,948
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		<b>Upper Primary Schools</b>	
1. Old Age	13,23,764	High Schools	11,333
2. Disabled	4,55,835	Colleges	4,655
3. Widow	13,32,919	Primary Health Centres	683
4. Weavers	34,138	Primary Health Sub-Centres	4,797
5. Toddy Tappers	57,434	Post Offices	5,835
6. Anti-Retrovirul Therapy Patients	32,714	Telephone Connections	5,10,070
7. F.A. to Beedi Workers	3,47,581	RTC Fleet of Buses	10,482
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	
Fair Price Shops	17,159	Earthern Roads (Length in Kms.)	18,235
Priority Household Cards	79,72,968	Bank Branches	5,332
Anthyodaya Food Security Cards	5,55,823	SC Hostels	875
Annapoorna Cards	5,040	ST Hostels	472
		BC Hostels	700
		Anganwadi Centres	35,700
		Self Help Groups	4,26,705

## District Profile : ADILABAD

<b>POPULATION:</b>		<b>Nos.</b>	<b>Nos.</b>	
Households		1,56,683	Child Population	87,292
Persons		7,08,972	Scheduled Castes Population	99,422
Males		3,56,407	Percentage of SC population	14.02
Females		3,52,565	Scheduled Tribes Population	2,24,622
Rural		5,41,226	Percentage of ST population	31.68
Urban		1,67,746	Sex Ratio (Females per 1000 Males)	989
<b>LITERACY:</b>				
<b>Literates</b>		<b>Nos.</b>	<b>Literacy rate</b>	
Persons		3,94,491	Persons	63.46
Males		2,28,689	Males	73.48
Females		1,65,802	Females	53.40
<b>WORKERS:</b>		<b>Nos.</b>	<b>Type of workers</b>	
Total Workers		3,49,121	Cultivators	
Main Workers		2,97,999	Agricultural Labourers	1,19,664
Marginal Workers		51,122	Workers in Household Industries	10,313
Non Workers		3,59,851	Other Workers	92,781
<b>LIVESTOCK POPULATION:</b>		<b>Nos.</b>	<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle		2,73,387	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes		51,366	Individual Household Latrines	28,298
3. Sheep		21,057	Safe Drinking Water Sources	9,000
4. Goat		1,05,771	Electricity (Domestic Connections)	1,51,936
5. Others		5,751	Electricity (Agricultural Connections)	17,948
Total		4,57,332	Primary Schools	987
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		<b>Nos.</b>	Upper Primary Schools	
1.Old Age		24,746	High Schools	226
2.Disabled		6,719	Colleges	79
3.Widow		27,611	Primary Health Centres	22
4.Weavers		23	Primary Health Sub-Centres	130
5.Toddy Tappers		35	Post Offices	154
6.Anti-Retroviral Therapy Patients		747	Telephone Connections	3,456
7.F.A. to Beedi Workers		5,078	RTC Fleet of Buses	171
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		<b>Nos.</b>	Gravel Roads (Length in Kms.)	
Fair Price Shops		376	Earthern Roads (Length in Kms.)	699
Priority Household Cards		1,68,325	Bank Branches	34
Anthyodaya Food Security Cards		12,926	SC Hostels	23
Annapoorna Cards		274	ST Hostels	54
<b>IMPORTANT TOWNS:</b>		<b>Population</b>	BC Hostels	
Adilabad		1,17,167	Anganwadi Centres	1,256
			Self Help Groups	9,456

## District Profile : KUMURAM BHEEM

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,20,420	Child Population	66,206
Persons	5,15,812	Scheduled Castes Population	81,596
Males	2,58,197	Percentage of SC population	15.82
Females	2,57,615	Scheduled Tribes Population	1,33,627
Rural	4,28,828	Percentage of ST population	25.91
Urban	86,984	Sex Ratio (Females per 1000 Males)	998
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	2,55,002	Persons	56.72
Males	1,47,911	Males	65.99
Females	1,07,091	Females	47.50
<b>WORKERS:</b>		<b>Type of workers</b>	<b>Nos.</b>
Total Workers	2,53,001	Cultivators	88,045
Main Workers	1,80,989	Agricultural Labourers	99,667
Marginal Workers	72,012	Workers in Household Industries	7,490
Non Workers	2,62,811	Other Workers	57,799
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	2,77,680	<b>Amenities available in villages</b>	
2. Buffaloes	47,262	Individual Household Latrines	21,957
3. Sheep	83,813	Safe Drinking Water Sources	6,109
4. Goat	1,84,203	Electricity (Domestic Connections)	1,01,064
5. Others	1,305	Electricity (Agricultural Connections)	6,672
Total	5,94,263	Primary Schools	905
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	
1.Old Age	19,914	High Schools	145
2.Disabled	6,481	Colleges	35
3.Widow	19,452	Primary Health Centres	18
4.Weavers	453	Primary Health Sub-Centres	109
5.Toddy Tappers	107	Post Offices	128
6.Anti-Retroviral Therapy Patients	0	Telephone Connections	1,603
7.F.A. to Beedi Workers	46	RTC Fleet of Buses	80
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	
Fair Price Shops	294	Earthern Roads (Length in Kms.)	704
Priority Household Cards	1,23,466	Bank Branches	38
Anthyodaya Food Security Cards	12,096	SC Hostels	9
Annapoorna Cards	23	ST Hostels	46
<b>IMPORTANT TOWNS:</b>		BC Hostels	
	Population	Anganwadi Centres	973
Kaghaznagar	57,583	Self Help Groups	7,303

## District Profile : MANCHERIAL

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,06,983	Child Population	73,725
Persons	8,07,037	Scheduled Castes Population	1,99,493
Males	4,08,272	Percentage of SC population	24.72
Females	3,98,765	Scheduled Tribes Population	56,969
Rural	4,53,190	Percentage of ST population	7.06
Urban	353,847	Sex Ratio (Females per 1000 Males)	977
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	4,71,856	Persons	64.35
Males	2,69,729	Males	72.96
Females	2,02,127	Females	55.59
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	3,44,785	Cultivators	45,831
Main Workers	2,57,651	Agricultural Labourers	1,48,377
Marginal Workers	87,134	Workers in Household Industries	8,423
Non Workers	4,62,252	Other Workers	1,42,154
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	2,11,945	<b>Amenities available in villages</b>	
2. Buffaloes	96,960	Individual Household Latrines	27,198
3. Sheep	2,96,133	Safe Drinking Water Sources	6,396
4. Goat	1,45,376	Electricity (Domestic Connections)	1,85,999
5. Others	4,859	Electricity (Agricultural Connections)	31,118
Total	7,55,273	Primary Schools	589
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	
1.Old Age	34,469	High Schools	269
2.Disabled	12,090	Colleges	84
3.Widow	36,899	Primary Health Centres	16
4.Weavers	277	Primary Health Sub-Centres	130
5.Toddy Tappers	860	Post Offices	133
6.Anti-Retroviral Therapy Patients	0	Telephone Connections	5,272
7.F.A. to Beedi Workers	1,993	RTC Fleet of Buses	144
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	
Fair Price Shops	423	Earthern Roads (Length in Kms.)	414
Priority Household Cards	1,97,343	Bank Branches	98
Anthyodaya Food Security Cards	15,061	SC Hostels	23
Annapoorna Cards	192	ST Hostels	17
<b>IMPORTANT TOWNS:</b>		Population	BC Hostels
1. Mancherial	86,911		14
2. Mandamarri	52,352	Anganwadi Centres	969
3. Bellampalli	55,841	Self Help Groups	11,277

### District Profile : NIRMAL

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,65,763	Child Population	82,769
Persons	7,09,418	Scheduled Castes Population	1,08,085
Males	3,46,721	Percentage of SC population	15.24
Females	3,62,697	Scheduled Tribes Population	80,576
Rural	5,57,736	Percentage of ST population	11.36
Urban	1,51,682	Sex Ratio (Females per 1000 Males)	1,046
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	3,61,998	Persons	57.77
Males	2,10,021	Males	69.03
Females	1,51,977	Females	47.14
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	3,76,760	Cultivators	1,03,498
Main Workers	3,29,821	Agricultural Labourers	1,17,204
Marginal Workers	46,939	Workers in Household Industries	58,435
Non Workers	3,32,658	Other Workers	97,623
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	2,11,507	<b>Amenities available in villages</b>	
2. Buffaloes	1,22,219	Individual Household Latrines	22,603
3. Sheep	2,80,211	Safe Drinking Water Sources	5,906
4. Goat	1,24,979	Electricity (Domestic Connections)	1,67,496
5. Others	10,451	Electricity (Agricultural Connections)	48,230
Total	7,49,367	Primary Schools	599
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	
1.Old Age	33,234	High Schools	207
2.Disabled	10,066	Colleges	69
3.Widow	36,264	Primary Health Centres	16
4.Weavers	31	Primary Health Sub-Centres	110
5.Toddy Tappers	244	Post Offices	132
6.Anti-Retroviral Therapy Patients	0	Telephone Connections	2,282
7.F.A. to Beedi Workers	56,520	RTC Fleet of Buses	229
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	
Fair Price Shops	389	Earthern Roads (Length in Kms.)	656
Priority Household Cards	1,87,335	Bank Branches	93
Anthyodaya Food Security Cards	11,754	SC Hostels	21
Annapoorna Cards	36	ST Hostels	17
<b>IMPORTANT TOWNS:</b>		Population	BC Hostels
1. Nirmal	88,433	Anganwadi Centres	926
2. Bhainsa	49,764	Self Help Groups	11,097

### District Profile : NIZAMABAD

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	3,69,031	Child Population	1,69,621
Persons	15,71,022	Scheduled Castes Population	2,17,267
Males	7,68,477	Percentage of SC population	13.83
Females	8,02,545	Scheduled Tribes Population	1,07,035
Rural	11,06,272	Percentage of ST population	6.81
Urban	4,64,750	Sex Ratio (Females per 1000 Males)	1,044

**LITERACY:**

<b>Literates</b>		<b>Literacy rate</b>	
Persons	9,00,436	Persons	64.25
Males	5,04,933	Males	74.08
Females	3,95,503	Females	54.95

**WORKERS:**

		<b>Type of workers</b>	
Total Workers	7,62,566	Cultivators	1,44,090
Main Workers	6,56,342	Agricultural Labourers	2,31,941
Marginal Workers	1,06,224	Workers in Household Industries	1,26,712
Non Workers	8,08,456	Other Workers	2,59,823

**LIVESTOCK POPULATION:**

		<b>Amenities available in villages</b>	
1. Cattle	1,27,011	Individual Household Latrines	70,469
2. Buffaloes	2,18,206	Safe Drinking Water Sources	8,595
3. Sheep	4,48,018	Electricity (Domestic Connections)	4,22,763
4. Goat	1,86,969	Electricity (Agricultural Connections)	1,49,416
5. Others	13,379	Primary Schools	866
Total	9,93,583	Upper Primary Schools	334

**SOCIAL SECURITY (AASARA) PENSIONS:**

1.Old Age	62,381	High Schools	513
2.Disabled	18,955	Colleges	158
3.Widow	66,795	Primary Health Centres	22
4.Weavers	208	Primary Health Sub-Centres	224
5.Toddy Tappers	1,001	Post Offices	292
6.Anti-Retroviral Therapy Patients	1,769	Telephone Connections	13,309
7.F.A. to Beedi Workers	77,259	RTC Fleet of Buses	433

**PUBLIC DISTRIBUTION SYSTEM:**

Fair Price Shops	746	Gravel Roads (Length in Kms.)	616
Priority Household Cards	3,53,485	Earthern Roads (Length in Kms.)	648
Anthyodaya Food Security Cards	20,101	Bank Branches	240
Annapoorna Cards	1,126	SC Hostels	46
ST Hostels			7

**IMPORTANT TOWNS:**

	<b>Population</b>		
1. Nizamabad	3,11,152	Anganwadi Centres	1,500
2. Bodhan	77,573	Self Help Groups	23,884
3. Armur	154,326		

### District Profile : JAGTIAL

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,53,619	Child Population	93,272
Persons	9,85,417	Scheduled Castes Population	1,64,596
Males	4,84,079	Percentage of SC population	16.70
Females	5,01,338	Scheduled Tribes Population	23,351
Rural	7,64,081	Percentage of ST population	2.37
Urban	2,21,336	Sex Ratio (Females per 1000 Males)	1,036
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	5,37,636	Persons	60.26
Males	3,07,947	Males	70.60
Females	2,29,689	Females	50.38
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	5,36,436	Cultivators	1,11,345
Main Workers	4,73,029	Agricultural Labourers	1,77,530
Marginal Workers	63,407	Workers in Household Industries	89,897
Non Workers	4,48,981	Other Workers	1,57,664
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	97,956	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	1,30,385	Individual Household Latrines	1,15,681
3. Sheep	4,05,918	Safe Drinking Water Sources	5,291
4. Goat	1,01,429	Electricity (Domestic Connections)	2,67,097
5. Others	13,912	Electricity (Agricultural Connections)	1,13,165
Total	7,49,600	Primary Schools	563
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	284
1.Old Age	52,939	High Schools	343
2.Disabled	16,676	Colleges	99
3.Widow	38,621	Primary Health Centres	17
4.Weavers	1,389	Primary Health Sub-Centres	151
5.Toddy Tappers	3,012	Post Offices	189
6.Anti-Retroviral Therapy Patients	607	Telephone Connections	3,360
7.F.A. to Beedi Workers	79,323	RTC Fleet of Buses	254
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	625
Fair Price Shops	598	Earthern Roads (Length in Kms.)	372
Priority Household Cards	2,75,790	Bank Branches	107
Anthyodaya Food Security Cards	14,695	SC Hostels	19
Annapoorna Cards	170	ST Hostels	5
<b>IMPORTANT TOWNS:</b>		BC Hostels	16
1.Jagtial	1,03,930	Anganwadi Centres	1,065
2.Koratla	66,504	Self Help Groups	14,805
3.Metpalli	50,902		

### District Profile : PEDDAPALLI

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,09,677	Child Population	66,812
Persons	7,95,332	Scheduled Castes Population	1,54,855
Males	3,99,325	Percentage of SC population	19.47
Females	3,96,007	Scheduled Tribes Population	14,945
Rural	4,91,319	Percentage of ST population	1.88
Urban	3,04,013	Sex Ratio (Females per 1000 Males)	992
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	4,77,361	Persons	65.52
Males	2,68,587	Males	73.68
Females	2,08,774	Females	57.36
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	3,45,214	Cultivators	46,115
Main Workers	2,74,990	Agricultural Labourers	1,59,967
Marginal Workers	70,224	Workers in Household Industries	8,207
Non Workers	4,50,118	Other Workers	1,30,925
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	97,831	<b>Amenities available in villages</b>	
2. Buffaloes	1,02,798	Individual Household Latrines	84,293
3. Sheep	3,78,473	Safe Drinking Water Sources	4,443
4. Goat	91,650	Electricity (Domestic Connections)	2,06,547
5. Others	7,490	Electricity (Agricultural Connections)	61,719
Total	6,78,242	Primary Schools	405
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	147
1.Old Age	31,815	High Schools	236
2.Disabled	12,345	Colleges	88
3.Widow	26,339	Primary Health Centres	15
4.Weavers	670	Primary Health Sub-Centres	105
5.Toddy Tappers	1,915	Post Offices	156
6.Anti-Retroviral Therapy Patients	1,484	Telephone Connections	4,365
7.F.A. to Beedi Workers	652	RTC Fleet of Buses	192
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	285
Fair Price Shops	418	Earthern Roads (Length in Kms.)	473
Priority Household Cards	1,98,895	Bank Branches	90
Anthyodaya Food Security Cards	12,433	SC Hostels	21
Annapoorna Cards	182	ST Hostels	2
<b>IMPORTANT TOWNS:</b>		BC Hostels	13
		Anganwadi Centres	706
Ramagundam	2,42,979	Self Help Groups	12,759

## District Profile : JAYASHANKAR

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,89,622	Child Population	67,851
Persons	7,11,434	Scheduled Castes Population	1,38,490
Males	3,54,203	Percentage of SC population	19.47
Females	3,57,231	Scheduled Tribes Population	1,23,544
Rural	6,57,554	Percentage of ST population	17.37
Urban	53,880	Sex Ratio (Females per 1000 Males)	1,009

<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	3,88,247	Persons	60.33
Males	2,23,575	Males	70.05
Females	1,64,672	Females	50.76

<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	3,83,849	Cultivators	87,346
Main Workers	3,23,765	Agricultural Labourers	2,36,408
Marginal Workers	60,084	Workers in Household Industries	5,035
Non Workers	3,27,585	Other Workers	55,060

<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	1,89,469	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	1,28,391	Individual Household Latrines	31,820
3. Sheep	2,93,914	Safe Drinking Water Sources	5,959
4. Goat	1,45,487	Electricity (Domestic Connections)	1,44,768
5. Others	8,100	Electricity (Agricultural Connections)	48,042
Total	7,65,361	Primary Schools	709

<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1.Old Age	36,526	High Schools	235
2.Disabled	9,772	Colleges	69
3.Widow	34,516	Primary Health Centres	25
4.Weavers	838	Primary Health Sub-Centres	179
5.Toddy Tappers	1,625	Post Offices	271
6.Anti-Retroviral Therapy Patients	0	Telephone Connections	1,240
7.F.A. to Beedi Workers	105	RTC Fleet of Buses	69

<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	506	Earthern Roads (Length in Kms.)	1,005
Priority Household Cards	1,88,542	Bank Branches	57
Anthyodaya Food Security Cards	17,112	SC Hostels	29
Annapoorna Cards	44	ST Hostels	51
		BC Hostels	13

<b>IMPORTANT TOWNS:</b>		<b>Population</b>	<b>Anganwadi Centres</b>
Bhupalapalli	42,387	Self Help Groups	15,809

## District Profile : BHADRADRI KOTHAGUDEM

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,79,190	Child Population	1,07,326
Persons	10,69,261	Scheduled Castes Population	1,43,482
Males	5,32,390	Percentage of SC population	13.42
Females	5,36,871	Scheduled Tribes Population	3,92,034
Rural	7,30,178	Percentage of ST population	36.66
Urban	3,39,083	Sex Ratio (Females per 1000 Males)	1,008
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	6,38,699	Persons	66.40
Males	3,51,411	Males	73.56
Females	2,87,288	Females	59.33
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	5,17,111	Cultivators	89,435
Main Workers	4,33,981	Agricultural Labourers	2,62,753
Marginal Workers	83,130	Workers in Household Industries	8,446
Non Workers	5,52,150	Other Workers	1,56,477
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	2,81,235	<b>Amenities available in villages</b>	
2. Buffaloes	1,61,741	Individual Household Latrines	59,868
3. Sheep	1,04,288	Safe Drinking Water Sources	10,667
4. Goat	2,25,171	Electricity (Domestic Connections)	2,72,987
5. Others	16,975	Electricity (Agricultural Connections)	0,29,951
Total	7,89,410	Primary Schools	1,085
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		<b>Upper Primary Schools</b>	
1.Old Age	38,804	High Schools	268
2.Disabled	11,632	Colleges	119
3.Widow	43,625	Primary Health Centres	29
4.Weavers	19	Primary Health Sub-Centres	240
5.Toddy Tappers	130	Post Offices	219
6.Anti-Retrovirul Therapy Patients	787	Telephone Connections	8,585
7.F.A. to Beedi Workers	1	RTC Fleet of Buses	291
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		<b>Gravel Roads (Length in Kms.)</b>	
Fair Price Shops	442	Earthern Roads (Length in Kms.)	945
Priority Household Cards	2,57,265	Bank Branches	114
Anthyodaya Food Security Cards	17,580	SC Hostels	32
Annapoorna Cards	4	ST Hostels	64
<b>IMPORTANT TOWNS:</b>		<b>Population</b>	<b>Nos.</b>
1. Kothagudem	79,819	BC Hostels	28
2. Manugur	32,091	Anganwadi Centres	2,060
3. Palwancha	80,199	Self Help Groups	18,121
4. Yellandu	35,056		

## District Profile : MAHABUBABAD

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,95,889	Child Population	81,082
Persons	7,74,549	Scheduled Castes Population	1,04,508
Males	3,88,058	Percentage of SC population	13.49
Females	3,86,491	Scheduled Tribes Population	2,92,778
Rural	6,98,173	Percentage of ST population	37.80
Urban	76,376	Sex Ratio (Females per 1000 Males)	996
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	3,96,198	Persons	57.13
Males	2,29,809	Males	66.52
Females	1,66,389	Females	47.81
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	4,07,484	Cultivators	1,22,597
Main Workers	3,40,803	Agricultural Labourers	2,04,458
Marginal Workers	66,681	Workers in Household Industries	7,427
Non Workers	3,67,065	Other Workers	73,002
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	1,93,903	<b>Amenities available in villages</b>	
2. Buffaloes	1,09,028	Individual Household Latrines	36,440
3. Sheep	3,85,025	Safe Drinking Water Sources	3,019
4. Goat	1,34,477	Electricity (Domestic Connections)	1,53,923
5. Others	11,566	Electricity (Agricultural Connections)	73,394
Total	8,33,999	Primary Schools	797
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	
1.Old Age	42,074	High Schools	224
2.Disabled	14,264	Colleges	97
3.Widow	38,381	Primary Health Centres	17
4.Weavers	320	Primary Health Sub-Centres	168
5.Toddy Tappers	2,697	Post Offices	167
6.Anti-Retroviral Therapy Patients	0	Telephone Connections	1,716
7.F.A. to Beedi Workers	7	RTC Fleet of Buses	157
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	
Fair Price Shops	553	Earthern Roads (Length in Kms.)	425
Priority Household Cards	2,15,524	Bank Branches	61
Anthyodaya Food Security Cards	14,692	SC Hostels	23
Annapoorna Cards	2	ST Hostels	26
<b>IMPORTANT TOWNS:</b>		BC Hostels	
	Population	Anganwadi Centres	1,437
Mahabubabad	42,851	Self Help Groups	15,499

## District Profile : WARANGAL RURAL

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,87,525	Child Population	67,134
Persons	7,18,537	Scheduled Castes Population	1,28,568
Males	3,60,315	Percentage of SC population	17.89
Females	3,58,222	Scheduled Tribes Population	1,05,300
Rural	6,68,324	Percentage of ST population	14.65
Urban	50,213	Sex Ratio (Females per 1000 Males)	994

**LITERACY:**

<b>Literates</b>		<b>Literacy rate</b>	
Persons	3,99,070	Persons	61.26
Males	2,33,711	Males	71.90
Females	1,65,359	Females	50.67

**WORKERS:**

		<b>Type of workers</b>	
Total Workers	3,76,612	Cultivators	98,880
Main Workers	3,17,224	Agricultural Labourers	2,00,721
Marginal Workers	59,388	Workers in Household Industries	7,612
Non Workers	3,41,925	Other Workers	69,399

**LIVESTOCK POPULATION:**
**AMENITIES AND INFRASTRUCTURAL FACILITIES:**

		<b>Amenities available in villages</b>	<b>Nos.</b>
1. Cattle	1,02,517	Individual Household Latrines	55,188
2. Buffaloes	1,27,478	Safe Drinking Water Sources	5,761
3. Sheep	4,48,133	Electricity (Domestic Connections)	1,47,718
4. Goat	78,814	Electricity (Agricultural Connections)	67,698
5. Others	11,358	Primary Schools	498
Total	7,68,300	Upper Primary Schools	141

**SOCIAL SECURITY (AASARA) PENSIONS:**

1. Old Age	40,028	High Schools	263
2. Disabled	12,499	Colleges	99
3. Widow	33,261	Primary Health Centres	17
4. Weavers	1,448	Primary Health Sub-Centres	146
5. Toddy Tappers	3,046	Post Offices	171
6. Anti-Retroviral Therapy Patients	0	Telephone Connections	1,575
7. F.A. to Beedi Workers	1,652	RTC Fleet of Buses	192

**PUBLIC DISTRIBUTION SYSTEM:**

Fair Price Shops	458	Earthern Roads (Length in Kms.)	219
Priority Household Cards	2,05,581	Bank Branches	66
Anthyodaya Food Security Cards	12,203	SC Hostels	22
Annapoorna Cards	15	ST Hostels	8

**IMPORTANT TOWNS:**

	<b>Population</b>		
Narsampet	30,963	Anganwadi Centres	918

## District Profile : WARANGAL URBAN

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,69,180	Child Population	1,00,918
Persons	10,80,858	Scheduled Castes Population	1,96,046
Males	5,41,301	Percentage of SC population	18.14
Females	5,39,557	Scheduled Tribes Population	33,306
Rural	3,40,351	Percentage of ST population	3.08
Urban	7,40,507	Sex Ratio (Females per 1000 Males)	997
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	7,46,460	Persons	76.17
Males	4,12,868	Males	84.40
Females	3,33,592	Females	67.98
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	4,39,640	Cultivators	43,818
Main Workers	3,81,382	Agricultural Labourers	1,20,682
Marginal Workers	58,258	Workers in Household Industries	16,094
Non Workers	6,41,218	Other Workers	2,59,046
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
<b>1. Cattle</b>		<b>Amenities available in villages</b>	<b>Nos.</b>
1. Cattle	49,918	Individual Household Latrines	4,170
2. Buffaloes	70,599	Safe Drinking Water Sources	1,413
3. Sheep	2,93,815	Electricity (Domestic Connections)	3,66,159
4. Goat	50,783	Electricity (Agricultural Connections)	41,144
5. Others	21,233	Primary Schools	375
Total	4,86,348	Upper Primary Schools	181
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1. Old Age	36,795	High Schools	450
2. Disabled	13,728	Colleges	229
3. Widow	38,491	Primary Health Centres	11
4. Weavers	2,417	Primary Health Sub-Centres	82
5. Toddy Tappers	2,317	Post Offices	133
6. Anti-Retrovirul Therapy Patients	2,703	Telephone Connections	13,952
7. F.A. to Beedi Workers	6,597	RTC Fleet of Buses	417
<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	449	Gravel Roads (Length in Kms.)	101
Priority Household Cards	1,95,595	Earthern Roads (Length in Kms.)	279
Anthyodaya Food Security Cards	9,746	Bank Branches	185
Annapoorna Cards	23	SC Hostels	30
		ST Hostels	7
<b>IMPORTANT TOWNS:</b>			
	<b>Population</b>	Anganwadi Centres	789
Warangal	7,04,570	Self Help Groups	6,554

## District Profile : KARIMNAGAR

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,58,485	Child Population	89,079
Persons	10,05,711	Scheduled Castes Population	1,86,648
Males	5,04,620	Percentage of SC population	18.56
Females	5,01,091	Scheduled Tribes Population	12,779
Rural	6,96,727	Percentage of ST population	1.27
Urban	3,08,984	Sex Ratio (Females per 1000 Males)	993
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	6,33,980	Persons	69.16
Males	3,57,364	Males	77.94
Females	2,76,616	Females	60.38
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	4,63,920	Cultivators	78,516
Main Workers	3,90,385	Agricultural Labourers	1,86,363
Marginal Workers	73,535	Workers in Household Industries	18,694
Non Workers	5,41,791	Other Workers	1,80,347
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	84,399	<b>Amenities available in villages</b>	
2. Buffaloes	1,00,892	Individual Household Latrines	117,836
3. Sheep	4,10,703	Safe Drinking Water Sources	10,224
4. Goat	83,224	Electricity (Domestic Connections)	3,09,030
5. Others	13,765	Electricity (Agricultural Connections)	91,361
Total	6,92,983	Primary Schools	453
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	
1. Old Age	47,489	High Schools	379
2. Disabled	18,295	Colleges	165
3. Widow	30,315	Primary Health Centres	16
4. Weavers	2,538	Primary Health Sub-Centres	142
5. Toddy Tappers	3,395	Post Offices	203
6. Anti-Retrovirul Therapy Patients	2,658	Telephone Connections	7,682
7. F.A. to Beedi Workers	7,563	RTC Fleet of Buses	311
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	
Fair Price Shops	482	Earthern Roads (Length in Kms.)	343
Priority Household Cards	2,98,675	Bank Branches	485
Anthyodaya Food Security Cards	18,436	SC Hostels	33
Annapoorna Cards	50	ST Hostels	4
<b>IMPORTANT TOWNS:</b>		BC Hostels	
		Population	Anganwadi Centres
Karimnagar		2,89,821	Self Help Groups
			777
			14,929

### District Profile : RAJANNA SIRCILLA

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,38,992	Child Population	48,751
Persons	5,52,037	Scheduled Castes Population	1,02,110
Males	2,74,109	Percentage of SC population	18.50
Females	2,77,928	Scheduled Tribes Population	22,990
Rural	4,35,145	Percentage of ST population	4.16
Urban	1,16,892	Sex Ratio (Females per 1000 Males)	1,014
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	3,15,611	Persons	62.71
Males	1,82,946	Males	73.47
Females	1,32,665	Females	52.17
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	2,98,663	Cultivators	66,751
Main Workers	2,53,918	Agricultural Labourers	1,01,737
Marginal Workers	44,745	Workers in Household Industries	46,647
Non Workers	2,53,374	Other Workers	83,528
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	46,233	<b>Amenities available in villages</b>	
2. Buffaloes	66,481	Individual Household Latrines	95,338
3. Sheep	2,37,002	Safe Drinking Water Sources	3,266
4. Goat	72,258	Electricity (Domestic Connections)	1,35,896
5. Others	9,364	Electricity (Agricultural Connections)	64,543
Total	4,31,338	Primary Schools	354
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	87
1. Old Age	30,114	High Schools	206
2. Disabled	9,985	Colleges	64
3. Widow	20,547	Primary Health Centres	13
4. Weavers	3,652	Primary Health Sub-Centres	91
5. Toddy Tappers	1,922	Post Offices	120
6. Anti-Retrovirul Therapy Patients	0	Telephone Connections	2,157
7. F.A. to Beedi Workers	37,997	RTC Fleet of Buses	130
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	463
Fair Price Shops	344	Earthern Roads (Length in Kms.)	448
Priority Household Cards	1,53,487	Bank Branches	57
Anthyodaya Food Security Cards	13,708	SC Hostels	13
Annapoorna Cards	222	ST Hostels	1
<b>IMPORTANT TOWNS:</b>		BC Hostels	10
	Population	Anganwadi Centres	587
Sircilla	83,186	Self Help Groups	9,164

### District Profile : KAMAREDDY

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,22,513	Child Population	1,11,666
Persons	9,72,625	Scheduled Castes Population	1,53,302
Males	4,78,389	Percentage of SC population	15.76
Females	4,94,236	Scheduled Tribes Population	81,656
Rural	8,49,003	Percentage of ST population	8.40
Urban	1,23,622	Sex Ratio (Females per 1000 Males)	1,033

<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	4,86,559	Persons	56.51
Males	2,83,542	Males	67.37
Females	2,03,017	Females	46.13

<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	4,94,181	Cultivators	1,33,267
Main Workers	3,96,449	Agricultural Labourers	2,13,224
Marginal Workers	97,732	Workers in Household Industries	44,358
Non Workers	4,78,444	Other Workers	1,03,332

<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	2,06,321	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	1,81,405	Individual Household Latrines	48,274
3. Sheep	4,70,824	Safe Drinking Water Sources	6,214
4. Goat	2,90,026	Electricity (Domestic Connections)	2,10,720
5. Others	20,599	Electricity (Agricultural Connections)	0,82,132
Total	11,69,175	Primary Schools	732

<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1. Old Age	47,760	High Schools	286
2. Disabled	17,109	Colleges	79
3. Widow	47,064	Primary Health Centres	19
4. Weavers	630	Primary Health Sub-Centres	201
5. Toddy Tappers	659	Post Offices	199
6. Anti-Retrovirul Therapy Patients	1,013	Telephone Connections	4,277
7. F.A. to Beedi Workers	28,729	RTC Fleet of Buses	237

<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	578	Earthern Roads (Length in Kms.)	459
Priority Household Cards	2,28,573	Bank Branches	125
Anthyodaya Food Security Cards	16,467	SC Hostels	31
Annapoorna Cards	1,091	ST Hostels	7
		BC Hostels	26

<b>IMPORTANT TOWNS:</b>		<b>Population</b>	<b>Anganwadi Centres</b>
Kamareddy	80,315	Self Help Groups	17,937

### District Profile : SANGAREDDY

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	3,29,208	Child Population	1,94,974
Persons	15,27,628	Scheduled Castes Population	2,76,971
Males	7,77,235	Percentage of SC population	18.13
Females	7,50,393	Scheduled Tribes Population	86,710
Rural	9,97,663	Percentage of ST population	5.68
Urban	5,29,965	Sex Ratio (Females per 1000 Males)	965
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	8,53,960	Persons	64.08
Males	4,94,705	Males	73.04
Females	3,59,255	Females	54.84
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	6,88,156	Cultivators	1,09,650
Main Workers	5,55,359	Agricultural Labourers	2,98,990
Marginal Workers	132,797	Workers in Household Industries	17,234
Non Workers	8,39,472	Other Workers	2,62,282
<b>LIVESTOCK POPULATION:</b> <b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>			
1. Cattle	1,93,506	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	1,83,082	Individual Household Latrines	82,928
3. Sheep	3,02,177	Safe Drinking Water Sources	6,465
4. Goat	3,05,431	Electricity (Domestic Connections)	2,24,515
5. Others	41,179	Electricity (Agricultural Connections)	64,002
Total	10,25,375	Primary Schools	911
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	361
1. Old Age	52,575	High Schools	410
2. Disabled	14,111	Colleges	140
3. Widow	57,851	Primary Health Centres	30
4. Weavers	748	Primary Health Sub-Centres	198
5. Toddy Tappers	644	Post Offices	262
6. Anti-Retrovirul Therapy Patients	2,048	Telephone Connections	15,827
7. F.A. to Beedi Workers	77	RTC Fleet of Buses	439
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	279
Fair Price Shops	812	Earthern Roads (Length in Kms.)	502
Priority Household Cards	3,32,486	Bank Branches	150
Anthyodaya Food Security Cards	27,147	SC Hostels	45
Annapoorna Cards	117	ST Hostels	10
<b>IMPORTANT TOWNS:</b>	<b>Population</b>	<b>BC Hostels</b>	<b>34</b>
1. Sangareddy	72,344	Anganwadi Centres	1,504
2. Zahirabad	71,166	Self Help Groups	17,764
3. Sadasiyipet	47,920		

### District Profile : MEDAK

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,68,677	Child Population	93,874
Persons	7,67,428	Scheduled Castes Population	1,27,970
Males	3,78,654	Percentage of SC population	16.68
Females	3,88,774	Scheduled Tribes Population	72,900
Rural	7,08,574	Percentage of ST population	9.50
Urban	58,854	Sex Ratio (Females per 1000 Males)	1,027
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	3,77,984	Persons	56.12
Males	2,23,069	Males	67.51
Females	1,54,915	Females	45.15
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	3,85,810	Cultivators	1,29,530
Main Workers	3,18,666	Agricultural Labourers	1,62,827
Marginal Workers	67,144	Workers in Household Industries	15,811
Non Workers	3,81,618	Other Workers	77,642
<b>LIVESTOCK POPULATION:</b> <b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>			
1. Cattle	1,42,374	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	1,40,147	Individual Household Latrines	60,588
3. Sheep	3,70,880	Safe Drinking Water Sources	7,541
4. Goat	1,66,561	Electricity (Domestic Connections)	1,75,678
5. Others	11,498	Electricity (Agricultural Connections)	88,951
Total	8,31,460	Primary Schools	645
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	185
1. Old Age	35,959	High Schools	216
2. Disabled	8,591	Colleges	89
3. Widow	39,879	Primary Health Centres	19
4. Weavers	431	Primary Health Sub-Centres	160
5. Toddy Tappers	651	Post Offices	122
6. Anti-Retrovirul Therapy Patients	0	Telephone Connections	2,141
7. F.A. to Beedi Workers	8,108	RTC Fleet of Buses	103
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	300
Fair Price Shops	515	Earthern Roads (Length in Kms.)	368
Priority Household Cards	1,94,575	Bank Branches	91
Anthyodaya Food Security Cards	13,010	SC Hostels	23
Annapoorna Cards	87	ST Hostels	8
<b>IMPORTANT TOWNS:</b>		BC Hostels	20
	Population	Anganwadi Centres	1,076
Medak	46,880	Self Help Groups	13,798

### District Profile : SIDDIPET

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,38,049	Child Population	1,03,852
Persons	10,12,065	Scheduled Castes Population	1,87,508
Males	5,04,141	Percentage of SC population	18.53
Females	5,07,924	Scheduled Tribes Population	25,010
Rural	8,73,013	Percentage of ST population	2.47
Urban	1,39,052	Sex Ratio (Females per 1000 Males)	1,008
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	5,59,573	Persons	61.61
Males	3,26,013	Males	72.30
Females	2,33,560	Females	51.08
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	5,09,563	Cultivators	1,56,467
Main Workers	4,44,757	Agricultural Labourers	1,71,665
Marginal Workers	64,806	Workers in Household Industries	40,520
Non Workers	5,02,502	Other Workers	1,40,911
<b>LIVESTOCK POPULATION:</b> <b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>			
1. Cattle	1,63,578	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	1,67,387	Individual Household Latrines	1,27,666
3. Sheep	5,51,526	Safe Drinking Water Sources	6,167
4. Goat	1,45,909	Electricity (Domestic Connections)	2,71,284
5. Others	16,396	Electricity (Agricultural Connections)	96,698
Total	10,44,796	Primary Schools	660
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	183
1. Old Age	56,371	High Schools	369
2. Disabled	14,416	Colleges	151
3. Widow	46,547	Primary Health Centres	33
4. Weavers	2,159	Primary Health Sub-Centres	190
5. Toddy Tappers	2,334	Post Offices	226
6. Anti-Retrovirul Therapy Patients	701	Telephone Connections	4,271
7. F.A. to Beedi Workers	29,679	RTC Fleet of Buses	283
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	632
Fair Price Shops	681	Earthern Roads (Length in Kms.)	504
Priority Household Cards	2,62,364	Bank Branches	81
Anthyodaya Food Security Cards	18,877	SC Hostels	30
Annapoorna Cards	90	ST Hostels	3
<b>IMPORTANT TOWNS:</b>		BC Hostels	28
	Population	Anganwadi Centres	1,150
Siddipet	66,737	Self Help Groups	14,765

## District Profile : JANGAON

**POPULATION:**

	<b>Nos</b>		<b>Nos.</b>
Households	1,39,238	Child Population	55,056
Persons	5,66,376	Scheduled Castes Population	1,19,796
Males	2,83,648	Percentage of SC population	21.15
Females	2,82,728	Scheduled Tribes Population	62,662
Rural	4,95,019	Percentage of ST population	11.06
Urban	71,357	Sex Ratio (Females per 1000 Males)	997

**LITERACY:**

<b>Literates</b>		<b>Literacy rate</b>	
Persons	3,14,134	Persons	61.44
Males	1,81,739	Males	71.21
Females	1,32,395	Females	51.69

**WORKERS:**

	<b>Type of workers</b>		
Total Workers	2,87,493	Cultivators	85,388
Main Workers	2,30,367	Agricultural Labourers	1,29,784
Marginal Workers	57,126	Workers in Household Industries	7,764
Non Workers	2,78,883	Other Workers	64,557

**LIVESTOCK POPULATION:**
**AMENITIES AND INFRASTRUCTURAL FACILITIES:**

	<b>Amenities available in villages</b>	<b>Nos.</b>
1. Cattle	1,26,588	Individual Household Latrines
2. Buffaloes	1,08,615	Safe Drinking Water Sources
3. Sheep	4,76,437	Electricity (Domestic Connections)
4. Goat	96,007	Electricity (Agricultural Connections)
5. Others	10,488	Primary Schools
Total	8,18,135	Upper Primary Schools

**SOCIAL SECURITY (AASARA) PENSIONS:**

	<b>Amenities available in villages</b>	<b>Nos.</b>
1. Old Age	32,394	High Schools
2. Disabled	11,207	Colleges
3. Widow	25,499	Primary Health Centres
4. Weavers	1,592	Primary Health Sub-Centres
5. Toddy Tappers	3,197	Post Offices
6. Anti-Retrovirul Therapy Patients	401	Telephone Connections
7. F.A. to Beedi Workers	1,781	RTC Fleet of Buses

**PUBLIC DISTRIBUTION SYSTEM:**

	<b>Gravel Roads (Length in Kms.)</b>	<b>366</b>
Fair Price Shops	355	Earthern Roads (Length in Kms.)
Priority Household Cards	1,52,093	Bank Branches
Anthyodaya Food Security Cards	10,628	SC Hostels
Annapoorna Cards	107	ST Hostels

**IMPORTANT TOWNS:**

	<b>Population</b>	<b>Anganwadi Centres</b>	<b>732</b>
Jangaon	52,394	Self Help Groups	11,382

### District Profile : YADADRI BHUVANAGIRI

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,80,677	Child Population	76,632
Persons	7,39,448	Scheduled Castes Population	1,28,568
Males	3,74,719	Percentage of SC population	17.39
Females	3,64,729	Scheduled Tribes Population	43,318
Rural	6,16,283	Percentage of ST population	5.86
Urban	1,23,165	Sex Ratio (Females per 1000 Males)	973
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	4,34,319	Persons	65.53
Males	2,53,858	Males	75.82
Females	1,80,461	Females	55.20
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	3,57,353	Cultivators	62,589
Main Workers	2,94,020	Agricultural Labourers	1,48,335
Marginal Workers	63,333	Workers in Household Industries	16,736
Non Workers	3,82,095	Other Workers	1,29,693
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	98,045	<b>Amenities available in villages</b>	
2. Buffaloes	1,63,708	Individual Household Latrines	62,820
3. Sheep	4,23,626	Safe Drinking Water Sources	3,893
4. Goat	1,23,021	Electricity (Domestic Connections)	1,91,627
5. Others	8,203	Electricity (Agricultural Connections)	85,404
Total	8,16,603	Primary Schools	487
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	
1. Old Age	36,929	High Schools	272
2. Disabled	12,018	Colleges	115
3. Widow	30,307	Primary Health Centres	18
4. Weavers	3,209	Primary Health Sub-Centres	129
5. Toddy Tappers	5,518	Post Offices	190
6. Anti-Retroviral Therapy Patients	0	Telephone Connections	3,023
7. F.A. to Beedi Workers	758	RTC Fleet of Buses	108
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	
Fair Price Shops	461	Earthern Roads (Length in Kms.)	421
Priority Household Cards	1,91,295	Bank Branches	98
Anthyodaya Food Security Cards	13,235	SC Hostels	21
Annapoorna Cards	2	ST Hostels	6
<b>IMPORTANT TOWNS:</b>		BC Hostels	
	Population	Anganwadi Centres	864
Bhongir	53,339	Self Help Groups	14,828

## District Profile : MEDCHAL - MALKAJGIRI

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	5,98,112	Child Population	2,87,714
Persons	24,60,095	Scheduled Castes Population	2,31,874
Males	12,56,883	Percentage of SC population	9.43
Females	12,03,212	Scheduled Tribes Population	55,656
Rural	2,09,828	Percentage of ST population	2.26
Urban	22,50,267	Sex Ratio (Females per 1000 Males)	957
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	17,91,702	Persons	82.48
Males	9,68,890	Males	87.43
Females	8,22,812	Females	77.31
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	9,64,732	Cultivators	26,675
Main Workers	8,06,363	Agricultural Labourers	44,980
Marginal Workers	1,58,369	Workers in Household Industries	38,872
Non Workers	14,95,363	Other Workers	8,54,205
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	29,135	<b>Amenities available in villages</b>	
2. Buffaloes	67,354	Individual Household Latrines	39,957
3. Sheep	92,977	Safe Drinking Water Sources	1,909
4. Goat	39,913	Electricity (Domestic Connections)	10,47,202
5. Others	63,712	Electricity (Agricultural Connections)	18,755
Total	2,93,091	Primary Schools	444
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		<b>Upper Primary Schools</b>	
1. Old Age	31,345	High Schools	880
2. Disabled	17,663	Colleges	444
3. Widow	46,123	Primary Health Centres	11
4. Weavers	142	Primary Health Sub-Centres	105
5. Toddy Tappers	405	Post Offices	51
6. Anti-Retroviral Therapy Patients	0	Telephone Connections	73,417
7. F.A. to Beedi Workers	86	RTC Fleet of Buses	1,054
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		<b>Gravel Roads (Length in Kms.)</b>	
Fair Price Shops	636	Earthern Roads (Length in Kms.)	77
Priority Household Cards	4,57,507	Bank Branches	397
Anthyodaya Food Security Cards	18,393	SC Hostels	10
Annapoorna Cards	112	ST Hostels	1
<b>IMPORTANT TOWNS:</b>		<b>Population</b>	<b>BC Hostels</b>
1. Jawaharnagar	44,562	Anganwadi Centres	793
2. Boduppal	43,692	Self Help Groups	7,775
3. Medchal	35,611		

## District Profile : HYDERABAD

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	8,49,051	Child Population	4,69,126
Persons	39,43,323	Scheduled Castes Population	2,47,927
Males	20,18,575	Percentage of SC population	6.29
Females	19,24,748	Scheduled Tribes Population	48,937
Rural	-	Percentage of ST population	1.24
Urban	39,43,323	Sex Ratio (Females per 1000 Males)	954
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	28,92,155	Persons	83.25
Males	15,42,688	Males	86.99
Females	13,49,467	Females	79.35
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	14,13,297	Cultivators	28,308
Main Workers	10,96,081	Agricultural Labourers	23,029
Marginal Workers	3,17,216	Workers in Household Industries	46,157
Non Workers	25,30,026	Other Workers	13,15,803
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	18,150	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	27,714	Individual Household Latrines	8,55,229
3. Sheep	13,181	Safe Drinking Water Sources	8,68,186
4. Goat	39,970	Electricity (Domestic Connections)	14,69,633
5. Others	61,105	Electricity (Agricultural Connections)	86
Total	1,60,120	Primary Schools	1,565
		Upper Primary Schools	559
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1. Old Age	54,082	High Schools	1,328
2. Disabled	24,570	Colleges	656
3. Widow	82,389	Primary Health Centres	85
4. Weavers	5	Primary Health Sub-Centres	53
5. Toddy Tappers	0	Post Offices	147
6. Anti-Retrovirul Therapy Patients	8,316	Telephone Connections	2,39,550
7. F.A. to Beedi Workers	40	RTC Fleet of Buses	1,686
<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	854	Gravel Roads (Length in Kms.)	1,432
Priority Household Cards	5,43,264	Earthern Roads (Length in Kms.)	-
Anthyodaya Food Security Cards	33,852	Bank Branches	1,129
Annapoorna Cards	291	SC Hostels	26
		ST Hostels	7
<b>IMPORTANT TOWNS:</b>		Population	BC Hostels
1. Greater Hyderabad Municipal Corporation	69,93,262	Anganwadi Centres	914
2. Secunderabad(Contonment)	2,17,910	Self Help Groups	-

### District Profile : RANGAREDDY

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	5,59,150	Child Population	2,97,841
Persons	24,26,243	Scheduled Castes Population	3,34,337
Males	12,43,967	Percentage of SC population	13.78
Females	11,82,276	Scheduled Tribes Population	1,38,298
Rural	10,26,113	Percentage of ST population	5.70
Urban	14,00,130	Sex Ratio (Females per 1000 Males)	950
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	15,29,945	Persons	71.88
Males	8,59,096	Males	78.87
Females	6,70,849	Females	64.55
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	10,22,641	Cultivators	165,705
Main Workers	8,65,358	Agricultural Labourers	2,13,624
Marginal Workers	157,283	Workers in Household Industries	29,544
Non Workers	14,03,602	Other Workers	6,13,768
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	2,34,453	<b>Amenities available in villages</b>	
2. Buffaloes	165,586	Individual Household Latrines	96,553
3. Sheep	5,35,821	Safe Drinking Water Sources	4,252
4. Goat	2,44,538	Electricity (Domestic Connections)	9,60,744
5. Others	48,727	Electricity (Agricultural Connections)	1,00,395
Total	12,29,125	Primary Schools	974
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	613
1. Old Age	61,449	High Schools	923
2. Disabled	25,994	Colleges	513
3. Widow	71,532	Primary Health Centres	31
4. Weavers	697	Primary Health Sub-Centres	232
5. Toddy Tappers	1,857	Post Offices	325
6. Anti-Retroviral Therapy Patients	0	Telephone Connections	54,159
7. F.A. to Beedi Workers	17	RTC Fleet of Buses	1,370
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	704
Fair Price Shops	911	Earthern Roads (Length in Kms.)	902
Priority Household Cards	4,81,441	Bank Branches	488
Anthyodaya Food Security Cards	35,592	SC Hostels	43
Annapoorna Cards	45	ST Hostels	7
<b>IMPORTANT TOWNS:</b>		BC Hostels	37
1. Farooqnagar	45,675	Anganwadi Centres	1,600
2. Shamshabad	32,583	Self Help Groups	21,425

## District Profile : VIKARABAD

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,94,956	Child Population	1,14,901
Persons	9,27,140	Scheduled Castes Population	1,79,730
Males	4,63,350	Percentage of SC population	19.39
Females	4,63,790	Scheduled Tribes Population	94,623
Rural	8,02,171	Percentage of ST population	10.21
Urban	1,24,969	Sex Ratio (Females per 1000 Males)	1,001
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	4,70,374	Persons	57.91
Males	2,73,236	Males	67.58
Females	1,97,138	Females	48.32
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	4,70,152	Cultivators	1,65,202
Main Workers	3,87,125	Agricultural Labourers	1,91,597
Marginal Workers	83,027	Workers in Household Industries	10,727
Non Workers	4,56,988	Other Workers	1,02,626
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	1,99,894	<b>Amenities available in villages</b>	
2. Buffaloes	81,263	Individual Household Latrines	24,947
3. Sheep	1,75,298	Safe Drinking Water Sources	5,496
4. Goat	2,38,186	Electricity (Domestic Connections)	1,78,574
5. Others	29,032	Electricity (Agricultural Connections)	51,409
Total	7,23,673	Primary Schools	778
		Upper Primary Schools	186
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1. Old Age	39,306	High Schools	275
2. Disabled	12,423	Colleges	72
3. Widow	47,396	Primary Health Centres	20
4. Weavers	174	Primary Health Sub-Centres	156
5. Toddy Tappers	458	Post Offices	146
6. Anti-Retrovirul Therapy Patients	1,069	Telephone Connections	3,710
7. F.A. to Beedi Workers	52	RTC Fleet of Buses	260
<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	598	Gravel Roads (Length in Kms.)	431
Priority Household Cards	2,05,649	Earthern Roads (Length in Kms.)	1,087
Anthyodaya Food Security Cards	27,342	Bank Branches	92
Annapoorna Cards	42	SC Hostels	25
		ST Hostels	11
<b>IMPORTANT TOWNS:</b>		Population	BC Hostels
1. Vikarabad	53,143	Anganwadi Centres	1,107
2. Tandur	65,115	Self Help Groups	14,850

## District Profile : MAHABUBNAGAR

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	3,00,508	Child Population	1,96,382
Persons	14,86,777	Scheduled Castes Population	2,17,465
Males	7,45,101	Percentage of SC population	14.63
Females	7,41,676	Scheduled Tribes Population	1,32,131
Rural	11,78,574	Percentage of ST population	8.89
Urban	3,08,203	Sex Ratio (Females per 1000 Males)	995
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	7,32,708	Persons	56.78
Males	4,29,914	Males	66.77
Females	3,02,794	Females	46.83
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	7,40,057	Cultivators	1,81,963
Main Workers	6,25,646	Agricultural Labourers	3,11,713
Marginal Workers	114,411	Workers in Household Industries	25,267
Non Workers	7,46,720	Other Workers	2,21,114
<b>LIVESTOCK POPULATION:</b> <b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>			
1. Cattle	2,45,043	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	1,34,259	Individual Household Latrines	15,670
3. Sheep	17,83,759	Safe Drinking Water Sources	9,345
4. Goat	2,43,819	Electricity (Domestic Connections)	2,57,680
5. Others	47,172	Electricity (Agricultural Connections)	82,140
Total	24,54,052	Primary Schools	1,082
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	329
1. Old Age	62,678	High Schools	397
2. Disabled	20,994	Colleges	130
3. Widow	71,059	Primary Health Centres	28
4. Weavers	3,228	Primary Health Sub-Centres	218
5. Toddy Tappers	1,434	Post Offices	285
6. Anti-Retrovirul Therapy Patients	2,785	Telephone Connections	8,201
7. F.A. to Beedi Workers	2,581	RTC Fleet of Buses	247
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	1,057
Fair Price Shops	809	Earthern Roads (Length in Kms.)	870
Priority Household Cards	3,38,960	Bank Branches	164
Anthyodaya Food Security Cards	27,429	SC Hostels	37
Annapoorna Cards	257	ST Hostels	6
<b>IMPORTANT TOWNS:</b>	<b>Population</b>	BC Hostels	25
1. Mahabubnagar	1,57,733	Anganwadi Centres	1,889
2. Narayanpet	41,752	Self Help Groups	18,493

## District Profile : JOGULAMBA GADWAL

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,32,261	Child Population	83,728
Persons	6,09,990	Scheduled Castes Population	1,20,639
Males	3,09,274	Percentage of SC population	19.78
Females	3,00,716	Scheduled Tribes Population	9,376
Rural	5,46,813	Percentage of ST population	1.54
Urban	63,177	Sex Ratio (Females per 1000 Males)	972
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	2,62,455	Persons	49.87
Males	1,59,704	Males	60.05
Females	1,02,751	Females	39.48
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	3,28,086	Cultivators	85,048
Main Workers	3,02,499	Agricultural Labourers	1,83,459
Marginal Workers	25,587	Workers in Household Industries	8,441
Non Workers	2,81,904	Other Workers	51,138
<b>LIVESTOCK POPULATION:</b> <b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>			
1. Cattle	1,03,891	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	59,587	Individual Household Latrines	6,253
3. Sheep	3,95,165	Safe Drinking Water Sources	2,245
4. Goat	73,419	Electricity (Domestic Connections)	92,452
5. Others	17,172	Electricity (Agricultural Connections)	31,602
Total	6,49,234	Primary Schools	297
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	139
1. Old Age	24,932	High Schools	142
2. Disabled	9,875	Colleges	44
3. Widow	27,042	Primary Health Centres	9
4. Weavers	2,090	Primary Health Sub-Centres	93
5. Toddy Tappers	361	Post Offices	109
6. Anti-Retrovirul Therapy Patients	0	Telephone Connections	1,554
7. F.A. to Beedi Workers	51	RTC Fleet of Buses	111
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	474
Fair Price Shops	333	Earthern Roads (Length in Kms.)	499
Priority Household Cards	1,40,833	Bank Branches	54
Anthyodaya Food Security Cards	10,174	SC Hostels	17
Annapoorna Cards	143	ST Hostels	1
<b>IMPORTANT TOWNS:</b>		BC Hostels	12
		Population	Anganwadi Centres
Gadwal	63,177	Self Help Groups	3,880

### District Profile : WANAPARTHY

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,23,544	Child Population	72,377
Persons	5,77,758	Scheduled Castes Population	93,182
Males	2,94,833	Percentage of SC population	16.13
Females	2,82,925	Scheduled Tribes Population	46,062
Rural	4,85,470	Percentage of ST population	7.97
Urban	92,288	Sex Ratio (Females per 1000 Males)	960
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	2,81,331	Persons	55.67
Males	1,68,792	Males	65.73
Females	1,12,539	Females	45.27
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	2,96,149	Cultivators	60,914
Main Workers	2,63,124	Agricultural Labourers	1,44,713
Marginal Workers	33,025	Workers in Household Industries	8,749
Non Workers	2,81,609	Other Workers	81,773
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	87,615	<b>Amenities available in villages</b>	
2. Buffaloes	65,143	Individual Household Latrines	13,939
3. Sheep	7,44,137	Safe Drinking Water Sources	2,856
4. Goat	73,381	Electricity (Domestic Connections)	1,08,511
5. Others	19,970	Electricity (Agricultural Connections)	37,317
Total	9,90,246	Primary Schools	377
		Upper Primary Schools	132
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1. Old Age	29,347	High Schools	170
2. Disabled	9,872	Colleges	68
3. Widow	26,022	Primary Health Centres	12
4. Weavers	700	Primary Health Sub-Centres	99
5. Toddy Tappers	438	Post Offices	112
6. Anti-Retrovirul Therapy Patients	0	Telephone Connections	2,124
7. F.A. to Beedi Workers	818	RTC Fleet of Buses	111
<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	325	Gravel Roads (Length in Kms.)	171
Priority Household Cards	1,39,230	Earthern Roads (Length in Kms.)	462
Anthyodaya Food Security Cards	9,783	Bank Branches	59
Annapoorna Cards	122	SC Hostels	22
		ST Hostels	3
<b>IMPORTANT TOWNS:</b>			
	<b>Population</b>	BC Hostels	15
Wanaparthys	60,949	Anganwadi Centres	589
		Self Help Groups	6,501

## District Profile : NAGARKURNOOL

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	1,96,261	Child Population	1,07,459
Persons	8,61,766	Scheduled Castes Population	1,83,769
Males	4,37,986	Percentage of SC population	21.32
Females	4,23,780	Scheduled Tribes Population	1,06,880
Rural	7,73,936	Percentage of ST population	12.40
Urban	87,830	Sex Ratio (Females per 1000 Males)	968
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	4,10,159	Persons	54.38
Males	2,47,538	Males	64.85
Females	1,62,621	Females	43.64
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	4,56,762	Cultivators	1,54,560
Main Workers	4,00,305	Agricultural Labourers	1,90,030
Marginal Workers	56,457	Workers in Household Industries	9,633
Non Workers	4,05,004	Other Workers	1,02,539
<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	2,39,523	<b>Amenities available in villages</b>	
2. Buffaloes	1,06,373	Individual Household Latrines	20,305
3. Sheep	6,62,717	Safe Drinking Water Sources	5,506
4. Goat	1,95,745	Electricity (Domestic Connections)	1,23,314
5. Others	25,090	Electricity (Agricultural Connections)	0,61,106
Total	12,29,448	Primary Schools	646
		Upper Primary Schools	231
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1. Old Age	44,684	High Schools	225
2. Disabled	12,718	Colleges	91
3. Widow	40,737	Primary Health Centres	24
4. Weavers	252	Primary Health Sub-Centres	179
5. Toddy Tappers	684	Post Offices	219
6. Anti-Retrovirul Therapy Patients	0	Telephone Connections	2,437
7. F.A. to Beedi Workers	13	RTC Fleet of Buses	314
<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	572	Gravel Roads (Length in Kms.)	836
Priority Household Cards	2,09,863	Earthern Roads (Length in Kms.)	744
Anthyodaya Food Security Cards	17,020	Bank Branches	73
Annapoorna Cards	42	SC Hostels	31
		ST Hostels	24
<b>IMPORTANT TOWNS:</b>		Population	
1. Kalwakurthy	28,060	BC Hostels	28
2. Nagarkurnool	26,801	Anganwadi Centres	1,131
		Self Help Groups	6,380

## District Profile : NALGONDA

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	4,01,728	Child Population	1,81,996
Persons	16,18,416	Scheduled Castes Population	2,92,951
Males	8,18,306	Percentage of SC population	18.10
Females	8,00,110	Scheduled Tribes Population	2,09,252
Rural	12,50,113	Percentage of ST population	12.93
Urban	3,68,303	Sex Ratio (Females per 1000 Males)	978
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	9,15,742	Persons	63.75
Males	5,34,573	Males	73.90
Females	3,81,169	Females	53.46
<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	8,06,091	Cultivators	158,951
Main Workers	6,91,772	Agricultural Labourers	3,89,621
Marginal Workers	114,319	Workers in Household Industries	19,633
Non Workers	8,12,325	Other Workers	2,37,886
<b>LIVESTOCK POPULATION:</b> <b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>			
1. Cattle	2,18,220	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	2,99,647	Individual Household Latrines	79,309
3. Sheep	8,79,990	Safe Drinking Water Sources	12,486
4. Goat	2,87,852	Electricity (Domestic Connections)	3,63,927
5. Others	28,171	Electricity (Agricultural Connections)	1,65,131
Total	17,13,880	Primary Schools	1,201
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>		Upper Primary Schools	231
1. Old Age	68,952	High Schools	225
2. Disabled	27,829	Colleges	203
3. Widow	71,378	Primary Health Centres	32
4. Weavers	2,552	Primary Health Sub-Centres	257
5. Toddy Tappers	7,094	Post Offices	333
6. Anti-Retrovirul Therapy Patients	1,940	Telephone Connections	9,265
7. F.A. to Beedi Workers	0	RTC Fleet of Buses	422
<b>PUBLIC DISTRIBUTION SYSTEM:</b>		Gravel Roads (Length in Kms.)	1,345
Fair Price Shops	985	Earthern Roads (Length in Kms.)	1,336
Priority Household Cards	4,19,577	Bank Branches	216
Anthyodaya Food Security Cards	28,938	SC Hostels	58
Annapoorna Cards	77	ST Hostels	31
<b>IMPORTANT TOWNS:</b>		BC Hostels	46
	Population	Anganwadi Centres	2,093
Nalgonda	1,35,744	Self Help Groups	28,777

## District Profile : SURYAPET

<b>POPULATION:</b>		<b>Nos</b>	<b>Nos.</b>
Households	2,85,691	Child Population	1,10,136
Persons	10,99,560	Scheduled Castes Population	2,08,326
Males	5,50,974	Percentage of SC population	18.95
Females	5,48,586	Scheduled Tribes Population	1,41,271
Rural	9,28,521	Percentage of ST population	12.85
Urban	1,71,039	Sex Ratio (Females per 1000 Males)	996
<b>LITERACY:</b>			
<b>Literates</b>		<b>Literacy rate</b>	
Persons	6,34,313	Persons	64.11
Males	3,62,596	Males	73.39
Females	2,71,717	Females	54.85
<b>WORKERS:</b>			
		<b>Type of workers</b>	
Total Workers	5,61,528	Cultivators	98,773
Main Workers	4,95,764	Agricultural Labourers	3,15,838
Marginal Workers	65,764	Workers in Household Industries	8,453
Non Workers	5,38,032	Other Workers	1,38,464
<b>LIVESTOCK POPULATION:</b>			
<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>			
<b>1. Cattle</b>		<b>Amenities available in villages</b>	<b>Nos.</b>
1. Cattle	1,73,985	Individual Household Latrines	50,837
2. Buffaloes	3,19,192	Safe Drinking Water Sources	8,140
3. Sheep	5,61,048	Electricity (Domestic Connections)	2,49,471
4. Goat	1,18,093	Electricity (Agricultural Connections)	1,09,801
5. Others	9,734	Primary Schools	720
Total	11,82,052	Upper Primary Schools	183
<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1. Old Age	50,550	High Schools	370
2. Disabled	19,780	Colleges	135
3. Widow	51,647	Primary Health Centres	23
4. Weavers	830	Primary Health Sub-Centres	172
5. Toddy Tappers	6,532	Post Offices	249
6. Anti-Retrovirul Therapy Patients	690	Telephone Connections	4,235
7. F.A. to Beedi Workers	0	RTC Fleet of Buses	212
<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	609	Gravel Roads (Length in Kms.)	675
Priority Household Cards	2,87,956	Earthern Roads (Length in Kms.)	331
Anthyodaya Food Security Cards	18,819	Bank Branches	142
Annapoorna Cards	50	SC Hostels	41
		ST Hostels	13
<b>IMPORTANT TOWNS:</b>			
	<b>Population</b>	Anganwadi Centres	1,209
Suryapet	1,06,805	Self Help Groups	18,201

## District Profile : KHAMMAM

<b>POPULATION:</b>	<b>Nos</b>		<b>Nos.</b>
Households	3,82,929	Child Population	1,39,614
Persons	14,01,639	Scheduled Castes Population	2,79,319
Males	6,99,124	Percentage of SC population	19.93
Females	7,02,515	Scheduled Tribes Population	1,99,342
Rural	10,84,811	Percentage of ST population	14.22
Urban	3,16,828	Sex Ratio (Females per 1000 Males)	1,005

<b>LITERACY:</b>			
	<b>Literacy rate</b>		
Persons	8,32,320	Persons	65.95
Males	4,62,275	Males	73.69
Females	3,70,045	Females	58.31

<b>WORKERS:</b>		<b>Type of workers</b>	
Total Workers	7,04,729	Cultivators	95,769
Main Workers	6,33,945	Agricultural Labourers	4,14,250
Marginal Workers	70,784	Workers in Household Industries	9,198
Non Workers	6,96,910	Other Workers	1,85,512

<b>LIVESTOCK POPULATION:</b>		<b>AMENITIES AND INFRASTRUCTURAL FACILITIES:</b>	
1. Cattle	1,54,981	<b>Amenities available in villages</b>	<b>Nos.</b>
2. Buffaloes	3,56,151	Individual Household Latrines	1,23,319
3. Sheep	3,09,695	Safe Drinking Water Sources	12,182
4. Goat	1,63,233	Electricity (Domestic Connections)	3,97,024
5. Others	12,967	Electricity (Agricultural Connections)	81,374
Total	9,97,027	Primary Schools	869

<b>SOCIAL SECURITY (AASARA) PENSIONS:</b>			
1. Old Age	63,123	High Schools	409
2. Disabled	23,158	Colleges	181
3. Widow	59,330	Primary Health Centres	22
4. Weavers	416	Primary Health Sub-Centres	224
5. Toddy Tappers	2,867	Post Offices	324
6. Anti-Retrovirul Therapy Patients	2,992	Telephone Connections	10,281
7. F.A. to Beedi Workers	0	RTC Fleet of Buses	340

<b>PUBLIC DISTRIBUTION SYSTEM:</b>			
Fair Price Shops	647	Earthern Roads (Length in Kms.)	892
Priority Household Cards	3,67,994	Bank Branches	201
Anthyodaya Food Security Cards	26,574	SC Hostels	53
Annapoorna Cards	2	ST Hostels	18

<b>IMPORTANT TOWNS:</b>	<b>Population</b>		
1. Khammam	1,96,283	Anganwadi Centres	1,896
2. Sathupalli	31,857	Self Help Groups	25,077





**Government of Telangana  
Planning Department**

[www.telangana.gov.in](http://www.telangana.gov.in)