# Chapter II Demography, Economy and Land Use

# 2.1 Demography

Vijayawada, thirty fourth largest urban agglomerations in the country, consists of the Vijayawada Municipal Corporation (VMC), Mangalagiri municipality, 4 panchayats and outgrowths. Vijayawada Municipal Corporation constitutes about 3.91 % of the total urban population of the state. Vijayawada is the third largest city in the state with a population of 845217 as per census 2001. The growth of population in Vijayawada municipal area during the last five census decades is given in table 2.1.

S.No.	Year	Population	Decadal growth rate (%)
1	1961	230397	42.93
2	1971	317258	37.70
3	1981	461772	45.55
4	1991	701827	51.99
5	2001	845217	20.43

Table 2.1: Population growth - VMC

The city has witnessed a rapid growth over the past five decades with an average decennial growth rate of 39.72 %. During the period 1981-91 the net growth has been about 51.9% attributed to a large influx of the rural population to the city. However, during the past decade 1991-2001, the growth has stabilised with a decadal population growth of 20.4 %. The growth in the city's population is as detailed in table 2.2.

Year	Population (lakh)	Annual exponential growth rate (%)
1981	4.61	4.5
1991	7.01	5.2
2001	8.45	2.1
2005 (Estimated)	10.01	1.5
2011 (Projected)*	11.77	1.3

Table 2.2 Population Growth - VMC

The contributors to population growth are mainly the natural increase and the in migration from the surrounding villages. The natural increase during 1991-2001 accounts for more than half the growth (table 2.3).

Table 2.3 Composition of Growth - VMC
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Composition	Population increase during				
Year	1981-91	% of total	1991-2001	% of total	
Natural	97300	38%	80,000	53%	
In-migration increase	100000	40%	69455	47%	
Jurisdictional change	50000	20%	-	-	
Total increase	247300		149455		

The population of VUA has increased from 8.45 lakhs (0.84 million) in 1991 to 10.34 lakhs

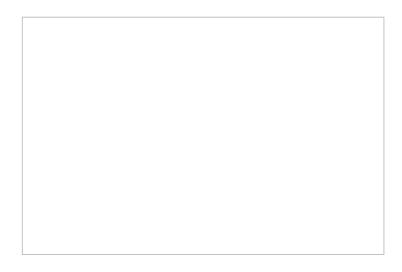
(1.03 million) in 2001. The growth of population was about 37.8% during 1981-91 and 22.2% during 1991-2001. The population details of VUA are given in table 2.4.

City /town status	Area (sq.	Population in lakhs			growth rate
	km)	1981	1991	2001	(1991-2001)
VMC	61.88	461772	701827	845217	20.4
Mangalagiri town	10.49	46172	59152	62048	0.49
Others ( 20Gs+4P)	38.07		84777	121159	47.0
Kanuru (p)	9.00	9690	23597	30696	30.1
Prasadampadu (og)	2.43	5300	6489	10487	61.6
Ramavarappadu (p)	3.37	7646	8418	12808	52.2
Yenamalakuduru (p)	4.17	7217	17331	25463	46.9
Tadepalli (p)	19.18	24542	28942	41705	44.1
VUA	110.44	613756	845756	1033562	22.2

Table 2.4: Population trends - Vijayawada Urban Agglomeration (VUA)

The Vijayawada urban agglomeration consists of the areas under Vijayawada Municipal Corporation, Mangalagiri municipality, gram panchayats and outgrowths of Kanuru, Prasadampadu, Ramavarappadu, Yenamalakuduru and Tadepalli. The area of VUA is shown in figure 2.1

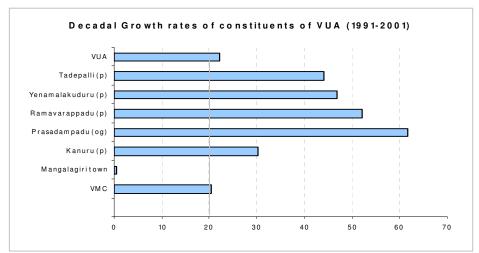
Figure 2.1: Map of Vijayawada Urban Agglomeration



The VUA is growing faster than the two other metropolises of Andhra Pradesh viz., Hyderabad and Visakhapatnam. From figure 2.2 it is clear that while VUA experienced a decadal growth of --- during 1999-2001, Hyderabad and Visakhapatnam Urban Agglomeration experienced growth rates during the same period. An important feature is that the areas around the corporation areas experience faster growth indicating the need for integrated and comprehensive development.

Another important feature is that the areas around VMC have shown a very high growth (see figure 2.3). this is indicative of the growth pattern of VUA. Figure 2.3 – decadal growth rates of constituents of VMC (1991-2001).

Figure 2.3 Decadal growth rates of constituents of VUA (1991-2001)



## 2.1.1 Future Growth Pattern:

The rates of growth of population experienced by Vijayawada Urban Agglomeration during 1991 and 2001 will continue in future though at a lesser rate. The projections indicate that the agglomeration would house a population of 14.5 lakhs in 2011 and 19.9 lakhs in 2021 including the population of the city (table 2.5)

Component	Area (sq. km)	Population in lakhs			Density (pop/sq.km)
		2001	2011	2021	2001
VMC	61.88	845217	1177577	1640630	13658
Mangalagiri town	10.49	62048	84871	110452	3540
Others (2OGs+4P)	38.07	121159	185497	240107	
Kanuru (p)	9.00	30696	53401	73949	3410
Prasadampadu (OG)	2.43	10487	14485	18483	4315
Ramavarappadu (p)	3.37	12808	17198	21588	3800
Yenamalakuduru (p)	4.17	25463	42066	56098	6106
Tadepalli (p)	19.18	41705	58347	69989	2174
VUA	110.44	1033562	1447945*	1991189*	9612

Table 2.5: Population Projections – Vijayawada Urban Agglomeration

\* The population projection of 3.3% is based taking into account the rapid growth in the margins. A recent survey of households for distribution of ration cards indicates that the actual population of the City now would be somewhere in the vicinity of 1.5.

# 2.1.2: Emerging Issues

The Vijayawada urban agglomeration is experiencing population growth rates higher than the state. In the next two decades it is expected to touch 2 million mark. Most of the growth is taking outside the VMC area in the urban agglomeration. This necessitates integrated planning, development and service delivery.

The basic services like traffic, public transport, fire etc are with parastatals. But unlike Hyderabad, since Vijayawada is a small City, there is adequate co-ordination between the VMC and the para-statals. But as the City expands and the roles of para-statals become more intensive, the problems of co-ordination are bound to become an issue. The State Government is already attempting to formulate an Agency for Hyderbad, which would encompass all the basic services. The same model can be extended to the other cities in due course.

# 2.2 Economic Base

# 2.2.1 Occupational Pattern

As per the 2001 census over 30% of the total population comprises of the city work force and the occupational pattern of Vijayawada indicates that it is a major centre for tertiary activities. While 69.37% of the total workers in 1991 belonged to the tertiary sector, the proportion has increased to 71.81% of the total work force in 2001. On the other hand there has been a decline in the proportion of workers in the secondary sector from 27.57% to 21.64% during 1991 and 2001 respectively. A detailed composition of the work force has been enumerated in Table 2.6.

### 2.2.2 Trade and Commerce

The city of Vijayawada is traditionally the main agricultural market centre for Krishna basin. It acts as a major commercial centre to a host of wholesale and retail activities dealing in consumer goods, textiles, automobiles, industrial products etc. It is also a major trading, place for processed Virginia Tobacco, Cotton and Turmeric. The agricultural commodities produced in this part of Andhra finds its market in Vijayawada both for local consumption and export. Vijayawada is also known for its Mango exports, generating crores worth to turnover, annually.

			Marginal		
	Population	Main workers	workers	Non workers	Work force
VUA	1033562	320159	22093	691310	33
VMC	845217	255880	16187	573150	32
Mangalagiri	62048	24026	2038	35984	42
Others	95601	30739	3668	61194	36

Table 2.6 Work Force Participation in Vijayawada Urban Agglomeration

	Table 2.7 Economic Base,	Registered	Manufacturing	and Services
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	Years	
Economic base	2001	2005
		(Estimated)
Manufacturing (Units)	3111	3828
Employment (Nos.)	21301	24738
Production (Rs. crore)	95	118
Value added (Rs. crore)	04	06
Services (IT. Etc.)	5838	6288
Employment	107616	112765

Production or quantum of business (Rs. crore)	260	293
Value added (Rs. crore)	12	15

### 2.2.3 Industries

Agro based industrial activity is predominant around the city. The industrial base consists of solvent extraction plants, rice mills, oil and dal mills etc. There are two Industrial Estates in and around the city. Auto Nagar Industrial Estate, located in the Eastern part of the city, near Patamata, covering 340 acres, houses industrial units which are mostly small and medium in nature. The other estate is located at about 16 Kms from the city at Kondapalli. The total extent of the estate is 439 acres and comprises of 620 plots. The proposed developments in this estate are storage facilities for major oil companies and the land acquisition for the same is in progress. Other areas where industrial activities are concentrated, is on the periphery of the city, near Kanuru, with large units like solvent plants and other agro industries establishing base in the area. The presence of a Super Thermal Power Station near Vijayawada has a bearing on the industrial development of the region. The diverse economic activities has increased rapidly over the past few decades in various fields manifested in the influx of work force and a consequent growth in population. Table enumerates the employment and number of industries in Vijayawada.

Type of Industry	Number
Small Scale Industries	2500
Large and Medium	9
Persons Employed	18000

#### Table 2.8 Industrial Statistics of Vijayawada

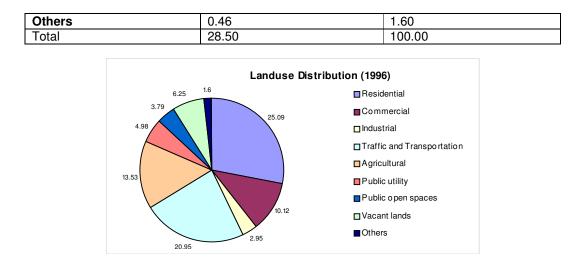
# 2.3 Land Use, Spatial Growth and Planning

## 2.3.1 Land Use Pattern:

The area of the Municipal Corporation has increased from 30 Sq.Kms. to about 58 Sq.Kms. The Corporation's administrative area comprises of 50 administrative divisions inclusive of the extension areas. With regards the existing land use (excluding the extension areas of the city) about 25.09% of the area is categorised as residential and a significant 20.95% is assigned towards transport. On the other hand the proportion of commercial and public use land constitues 10.12% and 10.71% respectively. The landuse details of the added areas are unavailable. A detailed land use structure of the Corporation area has been enumerated in Table 2.9.

Table 2.9 Land use in Vijayawada Municipal Corporation.				
Land Use	Area in Sq. Kms.	% Distribution in 1996		
Residential	7.15	25.09		
Commercial	2.89	10.12		
Industrial	0.84	2.95		
Traffic and Transportation	5.97	20.95		
Agricultural	3.86	13.53		
Public utility	1.42	4.98		
Public open spaces	1.08	3.79		
Vacant lands	1.78	6.25		

Table 2.9 Land use in Vijayawada Municipal Corporation.



The extension areas of Payakapuram, Bhavanipuram, Ajithsingh Nagar are in the initial stages of development. The peripheral areas on the Gunadala are all agricultural lands with low key development activities.

#### 2.3.2 Planning Efforts

The implementation of the Master Plan, for the non-municipal area is the responsibility of the VGTUDA (Vijayawada – Guntur – Tenali – Urban Development Authority). In organising the development programme the authority would take into consideration the various schemes to be implemented by the State and Local bodies. While the Master Plan of the VGT Urban area for 2001 A.D. was initially drafted in 1987 there have been subsequent revisions and taking into consideration the future growth patterns the authority is currently working on a revised Master Plan, which is in its penultimate stages of completion.

#### Land Use

The ultimate land use structure of the Vijayawada urban area by 2021 coursing 137.71 sq.km. will be as presented in Table 2.10. The residential se is proposed to cover about 48% followed by transport and recreation uses. The land use pattern obtaining for 2021 urban scenario definitely far more balanced compared to the prevailing situation.

S.No	Land Use	Within City		Vijayawada Urban Area	
		Area in ha	%	Area	%
1	Residential including mixed Residential	3330.50	53.82	6651.16	48.30
2	Commercial	273.71	4.42	552.99	4.02
3	Industrial	151.02	2.44	666.64	4.84
4	Public & Semipublic including institutional	405.29	6.55	1197.70	8.70
5	Recreational including parks and play grounds	176.67	2.86	1623.11	11.79
6	Transport & Communication including railways	799.97	12.93	1924.74	13.98
7	Water bodies	717.15	11.59	821.15	5.96
8	Hills	333.69	5.39	333.69	2.42
	Total	6188.00	100.00	13771.18	100.00

Table 2.10: Proposed land use pattern-Vijayawada urban area 2021

### 2.4 Development Challenges:

#### 2.4.1 Perspective Plan

With the objective of achieving good governance, the corporation prepared a perspective plan to be implemented during the period of JNNURM. The plan gives directions and approach of the local bodies and envisages further reforms in revenue improvement, institutional development and better service delivery mechanisms to improve municipal performance. It also aims at the provision of infrastructure in all notified poor settlements, critical infrastructure improvement and improved operation and maintenance. It also aims at social development and strengthening of SHGs and CSOs. The other focus of perspective plan is to mainstream gender issues, participatory planning and implementation and capacity building.

#### 2.4.2 Proposals for JNNURM

The proposals in JNNURM aim at municipal performance improvement of environmental infrastructure and aims at socio-economic development. The proposals for municipal reforms are aimed at enhancing the efficiency, effectiveness and service delivery with accountability. The JNNURM reform proposals include privatization of advertisement tax collection, revenue improvement, town development, operation and maintenance of critical infrastructure investment.

The environmental infrastructure proposals aim at improvement of infrastructure in the prioritized poor settlements as per poverty and infrastructure deficiency matrices and linked infrastructure for poor settlements. These include rehabilitation of existing infrastructure provision of water supply, roads, drains, sanitation and street lighting based on community prioritization and construction of drains to improve the living environment.

The social development proposals aim at addressing the socio-economic needs identified and prioritized through participatory micro planning process. These proposals cover areas of health, education, livelihood, vulnerability and strengthening of SHGs, with focus on gender issues. This leads to the reduction of poverty and improvement in living conditions of the people in the poor settlements.