

Human Resources in North Coastal Andhra Pradesh- Prospects of Development in the Region

Dr. K.Padma,

Associate Professor in Economics

SHORT ABSTRACT: *The development of human resources in North Coastal Andhra Pradesh lags behind the state average.*

LONG ABSTRACT: *The process of development in Andhra Pradesh as in any other region created imbalances. The North Coastal Andhra Pradesh consisting of Srikakulam, Vizianagaram and Visakhapatnam districts developed at a slow pace. The development of human resources within the region and among different areas within the region is poor. The present paper looks at the status of human resources in the North Coastal Andhra Pradesh by considering literacy, health and employment as they determine the quality of human resources and identifies some possible causes for slow pace of human resource development in the region. It also suggests the solutions for the development of the human resources in the region.*

KEY WORDS: *Region, development, human resources, literacy, education, employment*

I. INTRODUCTION

The development process often results in regional disparities. The regional disparities may be because of differences in natural resources or because of historical factors. The differences in race, religion, language or culture together with income inequalities complicate the regional issues. The development theories indicate that regional disparities are inherent in the process of development. Myrdal (1957), in his theory of cumulative causation states that market forces create regional inequalities and this tendency is conspicuous in developing countries. Myrdal explained it in terms of spread and backwash effects. Regional inequalities increase if backwash effects become stronger than the spread effects. He suggests controlling backwash effects through policy interventions. Regional disparities prevail not only across different states in India but also across different areas within the state. Andhra Pradesh state was formed on 1st November 1956 by merging the nine districts of Telangana belonging to erstwhile Hyderabad state with Andhra State formed in 1953 by combining coastal Andhra comprising seven districts and Rayalaseema comprising of four districts. Later three new districts were formed with formation of Vizianagaram district out of Srikakulam and Visakhapatnam districts, Prakasam was formed by combining parts of Guntur, Nellore, and Kurnool districts and Ranga Reddy district was carved out of Hyderabad district by taking out rural parts of Hyderabad district (S. Subrahmanyam, 2004). Regional inequalities exist not only across the regions within the state but also across areas within the region of the state. For instance, the growth in North Telangana lags behind the growth in South Telangana region. Similarly, the growth in South Coastal Andhra Pradesh is higher than the growth in North Coastal Andhra Pradesh. The growth in Hyderabad district occupies top position in the state (S. Subrahmanyam, 2004).

II. OBJECTIVE

The objective of the present paper is to look at the status of human resources in the North Coastal Andhra Pradesh by looking at the population growth rate, sex ratio, literacy, enrolment and drop-out rate, education, health and participation in employment. The paper also makes an attempt to identify some possible reasons for backwardness of human resources in the region. Finally it suggests alternative policies for rapid growth of the human resources within the region and thereby to achieve higher economic growth.

III. METHODOLOGY

The present study primarily depends on secondary sources for the data to study the nature and status of human resources in North Coastal Andhra Pradesh. The information is collected from the 2011 census (P) report published by Directorate of Census Operations, Andhra Pradesh, Hyderabad. Information about vital statistics is collected from Rural Health Mission, Srikakulam, Vizianagaram and Visakhapatnam Districts. Andhra Pradesh is divided into three important regions. They are 1) Andhra region, 2) Rayalaseema region, and 3) Telangana region. The Andhra region is further divided into North Andhra and South Andhra. Here the features of population in North Coastal Andhra Pradesh are analyzed and possible factors for their backwardness are

identified. Besides, few suggestions are made to overcome the hindrances to growth. It consists of Srikakulam, Vizianagaram and Visakhapatnam districts.

IV. DEMOGRAPHIC PROFILE OF NORTH COASTAL ANDHRA PRADESH

Human resources play a pivotal role in economic development of any region. They are not only actors of the development but also end beneficiaries. The quantity and the quality of human beings in a region reflect the quality and quantum of development that takes place in the region. It also determines the available opportunities for future development. The rate of growth of population and sex composition of population throw light on the quantum growth population and its composition.

Population growth rate:
Table1. Growth Rate of Population in Three Districts of North Coastal Andhra Pradesh, 2011 Census (P)

Sl.No	District	Total Population Persons	Percentage Decadal growth Rate
1	Srikakulam	26,99,471	6.38
2	Vizianagaram	23,42,868	4.16
3	Visakhapatnam	42,88,113	11.89
4	Andhra Pradesh	8,46,65,533	11.10

Source: Directorate of Census Operations, Andhra Pradesh, Hyderabad.

In three district of North Coastal Andhra Pradesh, population growth rate for the decade 2001-2011 is respectively 6.3, 4.16 and 11.89. The population grew at a lesser rate than the state average in Srikakulam and Vizianagaram districts. The rate of growth of population in Visakhapatnam is higher than the rate of growth of population in Andhra Pradesh. The decadal Growth rate of population in Visakhapatnam is 11.89% whereas the decadal growth rate of population in the state is 11.10 % (Table.1), this is may be due to migration from other states/districts.

Sex Ratio: Sex ratio indicates the male, female composition of population. In the three district of North Coastal Andhra Pradesh the sex- ratio is favorable to women compared to the sex-ratio at the state level. The trend in sex ratio for Srikakulam, Vizianagaram and Visakhapatnam districts indicate that it is declining over the time period. The sex ratio in Srikakulam in 1901 was 1076. The sex ratio rose to 1093 in 1921 but there after it declined except in 1951, when the sex ratio in the district was 1062. The sex ratio in the district in 2011 was 1011. The sex ratio lost 82 points in a span of 90 years (Table2).

The sex ratio in Vizianagaram district in 1901 was 1061. The sex ratio rose to 1086 in 1921 in Vizianagaram district and thereafter it declined. The sex ratio in Vizianagaram district in 2011 was 1032. The Vizianagaram district lost in its sex ratio 70 points in a span of 90 years (Table2).

The sex ratio in Visakhapatnam district was 1045 in 1901 and it increased to 1079 in 1921 but hence onwards it declined significantly. The sex ratio in Visakhapatnam in 2011 was 1003. Visakhapatnam district lost 76 points in a span 90 years in its sex ratio (Table2). The sex ratio in Andhra Pradesh was 985 in 1901 and it rose to 993 in 1912. The sex ratio in Andhra Pradesh declined from 993 in 1912 to 972 in 1991. The sex ratio increased marginally to 978 in 2001 and further to 992 in 2011 (Table2).

Table2 District Wise Sex Ratio from 1901 Census to 2011 Census

Sl.no	Sex Ratio (Number of Females per 1000 Males)				
	Year	Srikakulam	Vizianagaram	Visakhapatnam	Andhra Pradesh
1	1901	1076	1061	1045	985
2	1911	1098	1082	1064	992
3	1921	1093	1086	1079	993
4	1931	1078	1068	1057	987
5	1941	1059	1048	1037	980
6	1951	1062	1032	1023	986
7	1961	1047	1017	1000	981

8	1971	1033	1009	992	977
9	1981	1023	1006	981	975
10	1991	1012	1000	975	972
11	2001	1014	1009	985	978
12	2011	1011	1016	1003	992

Source: District Census Operations, Andhra Pradesh, Hyderabad

Table3 Sex-Ratio in North Coastal A.P, 2011

Sl.no	District	Sex-Ratio
1	Srikakulam	1,014
2	Vizianagaram	1,016
3	Visakhapatnam	1003
4	Andhra Pradesh	992

Source: Directorate of census operations, Andhra Pradesh, Hyderabad

The sex- ratio at A.P is 992. The sex ratio in Srikakulam, Vizianagaram and Visakhapatnam is respectively 1014, 1016 and 1003. Among the three districts in North Coastal Andhra Pradesh, Visakhapatnam is having lower sex-ratio compared to the other two districts in the region. It makes me ask is development biased against women. Because the developed districts in A.P like Hyderabad, Ranga Reddy, Nellore have lower sex-ratio. (Hyderabad -943, RangaReddy-955, Nellore-986). Is industrialization biased against women? (Table3)

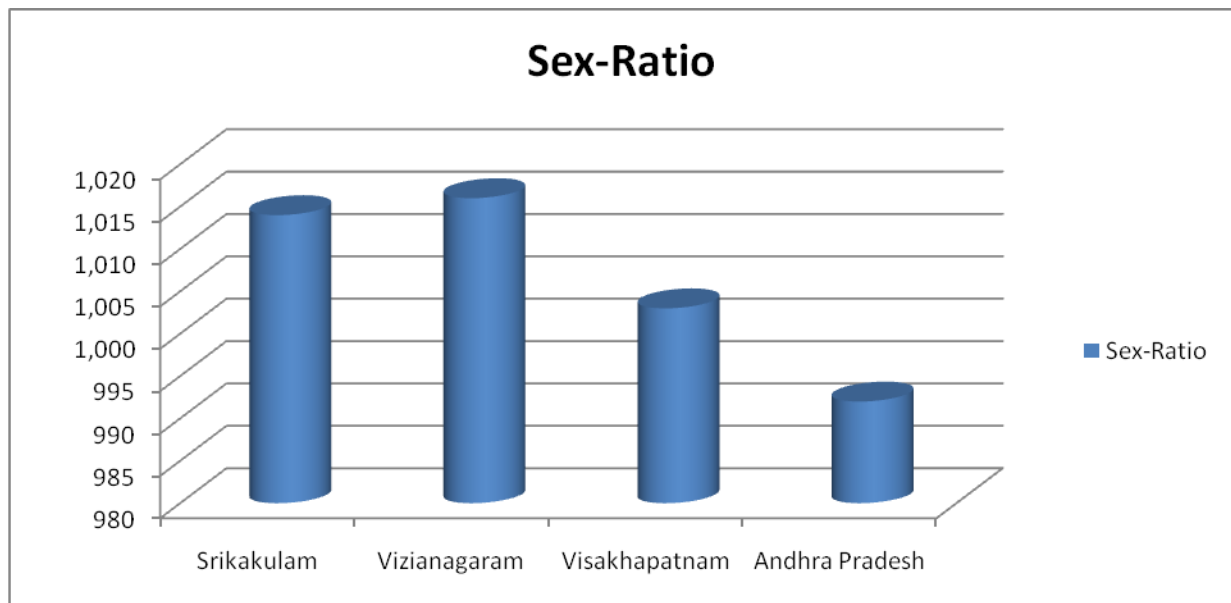


Table4 Percentage of Urban Population and Sex- Ratio

Sl.no	District	Percentage of Urban Population To Total District population	SEX RATIO		
			RURAL(Series-1)	URBAN (Series-2)	TOTAL(Series-3)
1	Srikakulam	16.16	1010	1032	1014
2	Vizianagaram	20.93	1011	1031	1016
3	Visakhapatnam	47.51	1021	983	1003
4	Andhra Pradesh	33.49	995	984	992

Source: Directorate of Census operations, Andhra Pradesh, Hyderabad

The share of urban population is considered as an indicator of development. Srikakulam district in North Coastal Andhra Pradesh is least urbanized district. Visakhapatnam district is highly urbanized district in the region. The

rate of urbanization in Visakhapatnam is higher than the rate of urbanization at Andhra Pradesh. The share of urban population in Andhra Pradesh is 33.49% whereas in Visakhapatnam it is 47.51 % (Table4).

Rural sex-ratio in all the three districts in north coastal Andhra Pradesh is much higher than the rural sex-ratio in Andhra Pradesh. Urban sex-ratio in Srikakulam and Vizianagaram is higher than the urban sex-ratio in the state. However, in Visakhapatnam district, urban sex-ratio is almost on par with the urban sex ratio in the state. The process of urbanization, it appears goes against women (Table.4). (Hyderabad-943, Rangareddy-955).

Graph2. Total, Rural and Urban sex ratio in north coastal Andhra Pradesh

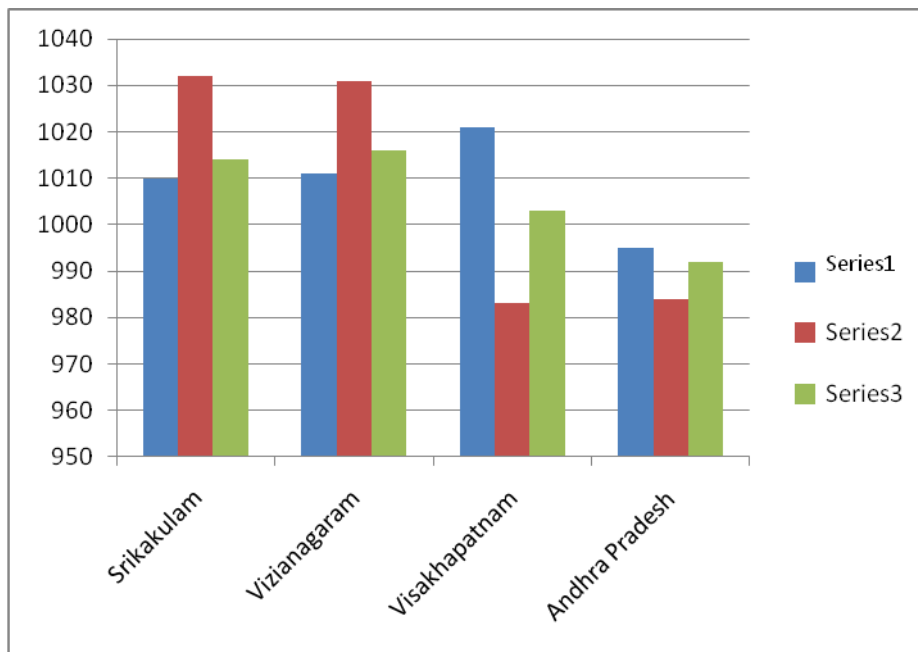


Table5 Child Sex-ratio in north coastal A.P

Sl.no	District	Total	Rural	Urban
1	Srikakulam	953	956	935
2	Vizianagaram	955	957	947
3	Visakhapatnam	961	965	956
4	Andhra Pradesh	943	942	946

Source: Directorate of Census Operations, Andhra Pradesh, Hyderabad

The child sex ratio in the three districts is better compare to the child sex ratio at the state level. Even among these three districts child sex ratio in urban areas is lower than that of the child sex ratio in rural areas. It all indicates persistence of discrimination towards women since the early stages of birth/ prior to the birth. Urban sex- ratio is lower in the three districts probably because of availability of technology to abort female fetus (Table5).

V. LITERACY AND EDUCATION

Literacy, education, health and employment determine the quality of human resources available in a region. Here, I look at the quality of human resources available in North Coastal Andhra Pradesh by looking at the literacy rate and educational status of people in North Coastal Andhra Pradesh, because literacy and education influence productivity of the people.

Table6. Literacy Rate in North Coastal Andhra Pradesh

Sl.no	District	2001			2011		
		Male	Female	Total	Male	Female	Total
1	Srikakulam	67.2	43.7	55	72.05	52.56	62.30
2	Vizianagaram	62.4	39.9	51.1	69.04	50.16	59.49
3	Visakhapatnam	69.7	50.1	60.0	75.47	60.00	67.70
4	Andhra Pradesh	70.32	50.43	60.47	75.56	59.74	67.66

Source: Directorate of census Operations, Andhra Pradesh, Hyderabad

Literacy rate has improved in all the three districts in north coastal Andhra Pradesh in 2011 census compared to 2001 census. In both the census the literacy rate in Srikakulam and Vizianagaram districts is lower than the literacy rate in Andhra Pradesh. The literacy rate in Visakhapatnam is either near equal or little better than the state literacy rate (Table6). Among the three districts, Vizianagaram district has lowest literacy rate. It is only 59.49 per cent. Female literacy is much lower than male literacy rate. In Srikakulam and Vizianagaram districts the female literacy rate is respectively 52.56% and 50.16% in 2011. In Visakhapatnam district the female literacy is 60 per cent which is on par with the state female literacy rate. Though the female literacy rate has improved significantly in these districts during the decade, it still much lower than the male literacy rate in the districts (Table6).

Table7 Gross Enrolment ratio in Classes I-V, VI-VII and VIII-X, 2010-2011

Sl.no	District	Classes (I-V) (6-10) years			Classes (VI-VII) (11-12 Years)			Classes (VIII-X) (13-15 Years)		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Srikakulam	98.20	93.03	95.62	81.29	78.83	79.78	66.12	64.75	65.43
2	Vizianagaram	98.85	94.99	96.93	79.40	75.01	76.94	64.81	61.89	63.36
3	Visakhapatnam	97.79	97.62	97.71	81.64	78.56	79.85	63.16	63.15	63.16
4	Andhra Pradesh	100.58	100.34	100.46	85.06	85.02	84.76	69.42	69.61	69.51

Source: Commissioner and Director of School Education, Andhra Pradesh, Hyderabad

All children of six years and above are not enrolled in class one. Female enrolment rate is marginally lower than male enrolment. All those who enrolled in class one is not continuing up to the class tenth. Hence, enrolment in classes (VIII-X) declined. It is on average 63.32 per cent for the three districts in north coastal Andhra Pradesh, which is lower than A.P state enrolment rate (Table7). If we look at Table7, we can notice that dropout rate begins from class 1 and continues from then onwards. Dropout rate is higher for female children than male children. Dropout rate for both male and female children is higher at secondary & high school stages. It is much higher for female children. Universalisation of primary education draws bleak picture. Free and compulsory education up to the age of 15 years is not yet achieved, though we are very near to 2015.

Table8 Dropout Rates in Classes I-V, I-VII and I-X (All), 2010-2011

Sl.no	District	Classes I-V			Classes I-VII			Classes I-X		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Totals
1	Srikakulam	0	0	0	7.07	7.18	7.12	36.40	36.54	36.47
2	Vizianagaram	10.89	9.85	10.39	23.98	25.08	24.52	45.58	48.62	47.08
3	Visakhapatnam	0	3.37	2.24	5.96	11.60	8.79	40.94	41.94	41.44
4	Andhra Pradesh	18.10	16.73	17.43	22.56	22.11	22.34	45.85	46.59	46.21

Source: Commissioner and director of School education, Andhra Pradesh, Hyderabad.

The students per school and students per teacher are favorable. The need of the hour is quality education. It has to receive priority. Basic mathematics and basic language skills required attention. Any students who have completed primary education are not able to do simple additions and subtractions. They are not able to construct simple sentences (Table8).

Table9 Junior colleges in north coastal Andhra Pradesh

Sl. no	District	No of Colleges			Enrolment			Teachers		
		Boys	Girls	Total	Boys	Girls	Totals	Men	Women	Total
1	Srikakulam	123	11	134	24,114	20,059	44,173	1,197	213	1,410
2	Vizianagaram	123	10	133	18,050	16,611	34,661	1,052	204	1,256
3	Visakhapatnam	227	21	248	42,212	31,154	77,366	1,573	553	1,126

Source: Directorate of Intermediate education, Andhra Pradesh, Hyderabad.

The number of junior colleges for girls is few compared to junior colleges for boys. Fewer women teachers are working in schools & junior colleges compared to men teachers. Except in Visakhapatnam where men and women teachers number is near equal but not equal, in other two districts women teachers number is far less than that of men teachers. More schools and teachers are required to achieve cent percent education (Table9).

The professional colleges established in the region are in private sector. Though the need of professionals and technocrats' is recognized by the government for rapid development of the society, in concurrence to its policy, no effort has been put forth by it in establishing new professional or technical college in the region(Table10).

Table10 Professional Colleges in the North Coastal Andhra Pradesh

Professional Institute	Srikakulam				Vizianagaram				Visakhapatnam			
	Govt	Pvt	Total	No. Students	Govt.	Pvt	Total	No. Students	Govt	Pvt	Total	No. Students
Engineering	-	10	10	3010	1	13	14	3432	2	29	31	10,632
Pharmacy	-	2	2	15	0	7	7	74	1	10	11	44
Polytechnic	3	5	8	1380	2	11	13	3520	6	6	12	2820
MBA	1	11	12	820	1	10	11	820	1	33	34	3050
MCA	1	07	08	520	2	12	14	880	1	28	29	2260

Source: A.P. State Council of Higher Education, Andhra Pradesh, Hyderabad

VI. HEALTH

The second important factor influencing the quality of human resources is health. Infant mortality Rate and Maternal Mortality Rate are some of the indicators measuring health of the people.

Infant Mortality rate:

Table 11. Infant Mortality Rate in North Coastal Andhra Pradesh, 2008

S.no	State/ District	Infant Mortality Rate
1	Srikakulam	49
2	Vizianagaram	46
3	Visakhapatnam	47
4	Andhra Pradesh*	52

Source: Commissioner of Health and Family Welfare, A.P. Hyderabad.

*www.newswala.com/Hyderabad,22.09.2012

Infant Mortality Rate is defined as the number of infants die before the completion of one year for thousand live births. Among three districts in North Coastal Andhra Pradesh Srikakulam has the highest Infant Mortality Rate followed by the Visakhapatnam District. Infant Mortality Rate (IMR) in Vizianagaram District is relatively low. The IMR in Srikakulam, Vizianagaram and Visakhapatnam are respectively 49, 46 and 47. However, the IMR in these districts is lower compared to the Infant Mortality Rate in Andhra Pradesh, which stands at 52 in 2008. High IMR in these districts is may be due existence of tribal areas in these districts. Though IMR in the state declined from 52 in 2008 to 43 in 2012, there is no change in these three districts with regard to IMR. (Table 11). The state and these districts lag far behind to reach the Millennium Development goal by 2015.

Table.12 Maternal Mortality in North Coastal Andhra Pradesh, 2007-09

Sl.No	State/District	Maternal Mortality Rate
1	Srikakulam	143
2	Vizianagaram	156
3	Visakhapatnam	167
4	Andhra Pradesh	134

Source: Commissioner of Health and Family Welfare, A.P. Hyderabad.

Maternal Mortality Rate (MMR) is defined as number of maternal deaths during pregnancy, during delivery or within 42 days of termination of pregnancy per 100,000 live births during the year (District Health Plan, 2012-13). Visakhapatnam registered highest maternal mortality rate in 2007-09 among the districts in North Coastal Andhra Pradesh. The MMR in Visakhapatnam district is 167 in 2007-09. The MMR in Srikakulam and Vizianagaram districts is respectively 143 and 156 during the same period. The MMR in three districts of North Coastal Andhra Pradesh is much higher than that of the state MMR, 134 (Table 12).

VII. EMPLOYMENT

The nature of employment helps to understand utilization of human resources in productive occupation, opportunities to improve their skills. The percentage of main workers in Srikakulam and Visakhapatnam districts is less than the percentage of main workers in the state. Vizianagaram district has the higher proportion of main workers compared to the proportion of main workers in the state and the other two districts in the north coastal Andhra Pradesh. The proportion of non workers is more in Srikakulam and Visakhapatnam districts compared to Vizianagaram district (Table 13).

Table 13: Distribution of Total Population by Main workers, Marginal workers and Non- workers, 2001 census (Percentage)

Sl. No	District	Main workers	Marginal workers	Non-workers
1	Srikakulam	34.3	13.1	52.6
2	Vizianagaram	40.6	11.6	47.8
3	Visakhapatnam	34.1	7.8	58.2
4	Andhra Pradesh	38.1	7.7	54.2

Source: Census of India, 2001, Issued by Directorate of Census Operations, A.P, Hyderabad

In Srikakulam district, the percentage of agricultural laborers is larger compared to the other two districts. The percentage of workers working in the household industries is larger in Srikakulam district than in Vizianagaram and Visakhapatnam districts. Srikakulam has the lowest percentage of cultivators and other workers). Vizianagaram has lower percentage of agricultural laborers compared to Srikakulam. The percentage of workers working in household industries is less in Vizianagaram compared to Srikakulam and Visakhapatnam. Visakhapatnam has the largest number of other workers and least number of agricultural laborers and household industrial workers (Table 14).

We can derive from this that non-farm sector has not developed either in Srikakulam or in Vizianagaram districts. Probably, because of large scale migration of workers to other areas or because of sale of land to non-agricultural purposes number of cultivators has declined. Service sector has grown in Visakhapatnam because of urbanization. Hence more number of workers in other category of workers is to be found in the district.

Table. 14 District wise distribution of total workers in North Coastal A.P

District	Total Workers	Cultivators	Agricultural labourers	Household Industries	others
Srikakulam	12,01,816	22.19	46.35	4.12	27.34
Vizianagaram	11,74,164	28.27	40.15	3.70	27.89
Visakhapatnam	16,02,859	27.06	26.31	3.52	43.11
Andhra Pradesh	3,48,93,859	22.52	39.64	4.71	33.13

Source: Directorate of census Operations, Andhra Pradesh, Hyderabad.

The primary sector provides employment to predominant percentage. 78.16 per cent of people seek employment in primary sector in Srikakulam. 74.72 percent find employment in primary sector in Vizianagaram district. In Visakhapatnam district 62.2 percent secure employment in primary sector. Employment from mining and quarrying is nominal. Household industry is providing employment to higher percentage of main workers in Srikakulam and Vizianagaram districts than Visakhapatnam district. Larger percentage of workers is securing employment in other than household industry in Visakhapatnam (6.48%) compared to Srikakulam and Vizianagaram districts. Main workers employed in construction industry in Visakhapatnam is larger compared to the other two districts in the region (2.49%). It is higher than Andhra Pradesh. This is because of growth in real estate sector. Service sector has expanded in all the three districts in the region. However, the growth rate of service sector is much higher in Visakhapatnam district (Table 15).

Table 15: District wise and Category wise distribution Main workers in North Coastal A.P

Category	Srikakulam	Vizianagaram	Visakhapatnam	Andhra Pradesh
Cultivators	32.69	38.37	36.31	27.74
Agricultural Labourers	41.45	34.19	23.60	40.87
Livestock Forestry, Fishing	4.02	2.16	2.32	1.77
Mining & Quarrying	0.23	0.30	0.47	0.87
Household Industry	3.78	3.36	2.65	3.36
Other than Household Industry	2.32	3.79	6.48	5.47
Construction	0.58	0.75	2.48	1.65
Trade & Commerce	5.81	6.55	7.45	6.69
Transport, Storage & Communications	1.54	2.30	4.96	2.79
Other Services	7.58	8.23	13.27	8.79

Source: Directorate of census Operations, Andhra Pradesh, Hyderabad.

VIII. CONCLUSION

The population growth in three districts in North Coastal Andhra Pradesh is lower than the rate of growth population in Andhra Pradesh. Sex Ratio is favorable in these three districts compared to Andhra Pradesh. Literacy rate in Srikakulam and Vizianagaram districts are low compared to Visakhapatnam District. The literacy Rate in the region is lower than that of the state average. IMR and MMR are also indicate low health standards prevailing in the region. Besides, the sector which is in crisis, the agriculture sector, is providing employment to larger segment of workers. The agriculture sector whose share to GDDP is declining is still providing employment to the larger segment of population. This is nothing but distribution of poverty rather than prosperity (Chandrasekhar and Jayati Ghosh). The growth in non-formal sector is abysmal because of low productivity of agriculture and low income from the agriculture. The growth in real estate activity resulted in growth in construction activity. This is also the cause of fall in agricultural growth rate. The public sector industries established in Visakhapatnam have shrunk in their size or have not developed to the extent desirable because of the neo-liberal policies adopted by the government. Some of them were partially privatized and others are on edge of privatization.

Very little recruitment took place in these public sector industries in the last couple of decades. Much of the employment generated in these industries is contract and casual in nature. It led to growth of informal nature of work. These contract and casual workers settle themselves in slums which have few social infrastructural facilities. Many of the migrants from Srikakulam and Vizianagaram districts besides from other districts within the state and from other states in the country came into the Visakhapatnam city in search of employment, which is the cause for proliferation of the population of the city in the last decade. These migrants very often secure contract and casual employment at very low wage as their level of skill and education does not fetch them high profile employment. They have to work for long hours. Their pre- occupation with their work, which is very much essential for them to keep their body and soul together, their struggle for survival, lack of acquaintance with local people, being alienated from local culture and living near the work site to be available as and when required, nature of work, lack of knowledge of the local language too often put a limitation to unionize themselves. This denies them an opportunity to learn the values of democracy and mutual trust and respect. They are forced to lean on their employers for their survival needs who very often take advantage of the situation. Their ignorance, lack of education and stress of the prevailing livelihood conditions pulls them towards caste and religious identity. It hinders not only their development but also the development of the society (Prabhat Patnaik). Some of the measures needed to overcome the immediate hurdles in the development process are 1) to improve literacy, particularly female literacy, 2) to improve the quality of education, 3) education must be under the purview of the government, 4) completion of major and minor irrigation projects in the region to improve agricultural production and its productivity, 5) Non- farm sector / agro based industries have to be developed, 6) land utilization must be properly planned, 7) there is need to end discrimination by sex, 8) workers rights be protected. Ultimately alternative set of policies are to be implemented for the good of the larger section of the society.

REFERENCES

- [1]. Chandrasekhar, C.P and Ghosh Jayati (2002), "The Market that Failed" (A Decade of Neoliberal Economic Reforms in India), LeftWord Books, ISBN: 81-87496-25-8
- [2] Hanumantha Rao, Ch, Mahindra Dev, S, (2004), Andhra Pradesh Development, Economic Reforms and challenges Ahead, Centre for Economic and Social Studies, Hyderabad
- [3] Myrdal, G, (1975), Economic Theory and Under Developed regions, University of Stockholm, Vora & Co. Publishers,
- [4] Prabhat Patnaik, (2013), "Capitalism, classical versus lumpen", The Telegraph, Calcutta, India, April 11
- [5] Subrahmanyam, S, (2004), Regional Disparities: Causes and Remedies in Hanumantha Rao, Ch, and Mahendra Dev, S, (Ed) "Andhra Pradesh Development", Economic Reforms and Challenges Ahead", Centre for Economic and Social Studies, Hyderabad.
- [6] Statistical Abstract, Andhra Pradesh, 2011, Directorate of Economics and statistics, Government of Andhra Pradesh, Hyderabad.
- [7] Vital Statistics and Public Health, www.ap.gov.in
- [8] National Rural Health Mission, Visakhapatnam, Srikakulam, Vizianagaram Districts.

(I acknowledge sincerely the suggestions given by Prof. M. Sundara Rao garu, Department of Economics, Andhra University, Visakhapatnam, in completing the paper)