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Prospects of Rural Industry in Andhra Pradesh*

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I Introduction

The development pattern in India since independence to the recent period witnesses regional disparities across states, as well as across regions within the states. Regionally balanced development has been an integral part of economic planning in India since the inception of the First Five Year Plan in 1951 and hence became an essential component of the development strategy of the nation. The 3rd Five Year Plan has discussed in detail about the balanced regional development and the reduction of regional disparities is one of the objectives of the 6th Five Year Plan. Moreover the 11th Five Year Plan objective of inclusive growth also emphasises on the balanced regional development. Despite the explicit plan objectives the continuity of regional disparities is a matter of concern. More so important is that within the states there are rural-urban disparities. Industry including manufacturing as well as the service sector which engines of growth, are concentrated in the few pockets especially in urban locations. Therefore the main trend in regional disparities one can observe is that growth oriented activities/industry/business processes are concentrated in specific urban growth centres, especially in and around metropolitan cities like Delhi, Mumbai, Chennai, Bangalore and Hyderabad.

This kind of development pattern has led not only to growing rural urban disparities but also to widespread disparities between metropolitans and the rest of the small towns and cities. The concerns associated with this kind of development pattern is the migration of agriculture surplus, private capital and people and concentration of capital and skilled people in developed regions and urban areas especially metropolitan cities. In the process of shift / diversification of occupations from agriculture to non-agricultural activities, all that agricultural surpluses are getting invested in these non-agricultural activities which are concentrated in the urban growth centre. Another problem is that overcrowding of the metropolitan cities with high rate of migration of rural people to these cities in search of livelihoods resulted in increasing burden on the city administration in creating facilities. Again the overcrowding also led to low productivity of labour due to loss of labour value unnecessarily spent in traffic jams and traffic congestion; it is an opportunity cost of labour.

Given the negative effects of regional imbalance or disparities owing to concentration of growth oriented activities / industry / business processes in specific urban growth centres especially in and around metropolitan cities, it is need of the hour to plan for managing a regionally balanced growth by spreading enterprises of the growth oriented activities/ industry

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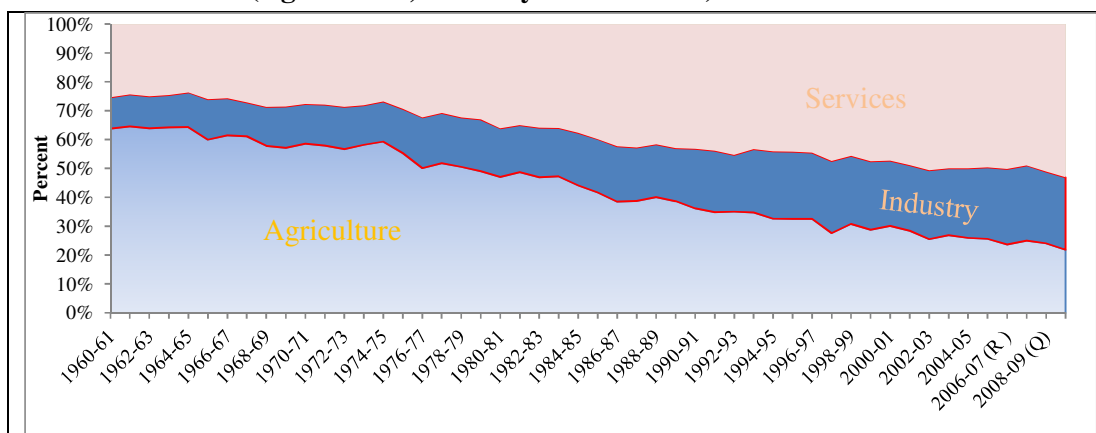
/business processes in to rural districts. There is a need to create rural growth centres. In this context the present paper examines the growth of industry in general and problems and prospects of rural industry in particular in the context of Andhra Pradesh.

II Overview: Andhra Pradesh Economy and Industry

The state of Andhra Pradesh is primarily agriculture based economy as the resource base is favourable to agriculture and for the majority of the people agriculture is the main source of livelihood. However over a period of time non-agriculture sector has also been expanding.

The industrial sector in the state has been contributing around one-fourth (25%) of the total GSDP of the state during the last two decadal period. But the share of manufacturing sector in the GSDP as well as in the total industry is declining during last 10 years period. The share of manufacturing in the GSDP has marginally declined from 12.5% in 1999-2000 to 10.8% in 2009-10. Similarly in the industry the share of manufacturing declined from 52.7% to 42.9% during the same period. The decline in the share of manufacturing in the industry as a whole as well as in GSDP could be due to the high growth of other sectors and resulted increase in their shares. In fact the manufacturing sector in the state has been witnessing the positive growth throughout the last 50 years period. But the rate of growth in manufacturing when compared to other sectors may vary from time to time.

Figure 2.1: Changing Distribution (%) of the State Income (GSDP) across three Sectors (Agriculture, Industry and Services) in Andhra Pradesh



Note: Industry includes manufacturing, construction, gas, electricity and water sub-sectors.

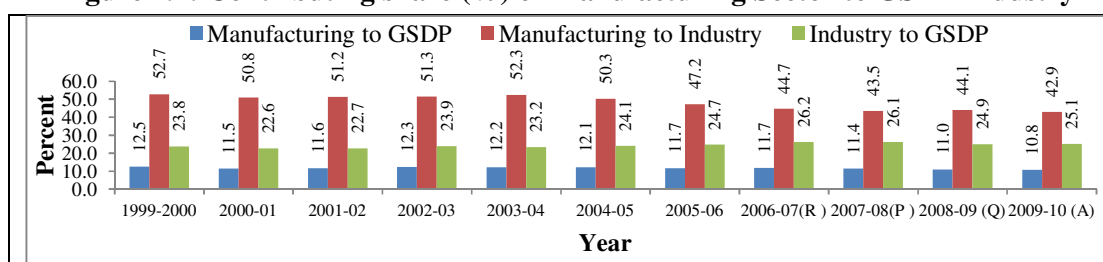
R – Revised estimates Q – Quick estimates.

Source: Directorate of Economics and Statistics.

Andhra Pradesh stands at 4th position in terms of industrial development among Indian states next to Maharashtra, Gujarat, Tamil Nadu and Karnataka. The industrial base especially that of non-household sector began to expand since 1970s. Initially, since its formation, the state of Andhra Pradesh was having relatively lower advantage of already established manufacturing industry especially in the non-household sector when compared to the other states like Maharashtra and Tamil Nadu. The industrial structure of the state has been predominantly agro-based. In the non-agro based sector, the industrial estates initially came up in and around Hyderabad in 1960's and 1970 and the industrial base in the state had begun to expand in the 1970's with the establishment major industries like BHEL and ECIL in Hyderabad and petroleum refineries in Visakhapatnam. Till 1990s the growth of industry other than the agro-based one in the state was propelled by public sector industry.

There is a turnaround in the industrial growth of the state during 1990s with the policy change at the national and state level towards liberalisation and encouragement of private investment and entrepreneurs. The policy has facilitated the emergence of private entrepreneurship and investment. More than the industry manufacturing the service sector has expanded its base particularly unprecedented growth of the software industry has expanded the service sector base of the state.

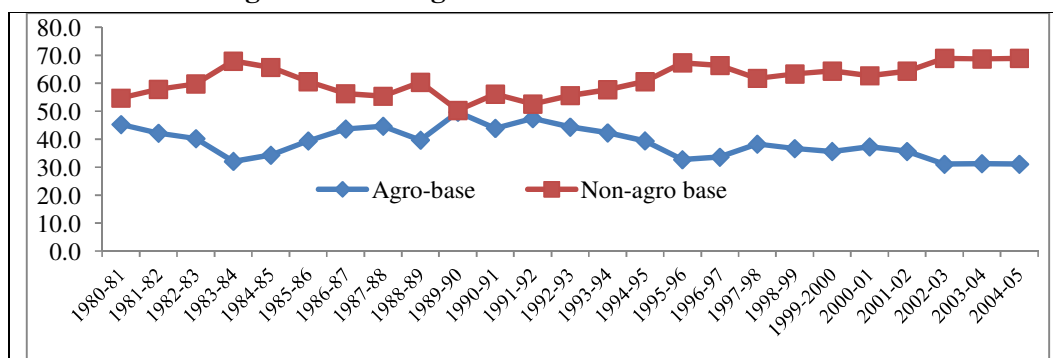
Figure 2.2: Contributing share (%) of Manufacturing Sector to GSDP Industry



Note: 1. **Industry** includes Manufacturing, Construction, Electricity and Gas and Mining and Quarrying sub-sectors; 2. **Manufacturing** includes both Registered and Unregistered manufacturing; 3. R –Revised estimates, P – Provisional, Q – Quick and A – Advanced estimates.

Source: Directorate of Economics and Statistics.

Figure 2.3: Changing Distribution of Net Value Added (NVA) between Agro and Non-agro based Industries in Andhra Pradesh



Note: Based on Annual Survey of Industry (ASI) data.

Source: ASI data from EPW Research Foundation.

Table 2.1: Growth Rates of Industry by sub-sectors in Andhra Pradesh

Industry Sub-sectors	1960s	1970s	1980s	1990s	2000s
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
Mining & Quarrying	6.55	6.6	5.95	7.24	10.45
Manufacturing (Total)	5.45	5.84	7.73	7.55	6.91
<i>Registered Manufacturing</i>	6.27	7.36	9.31	7.54	7.1
<i>Un-Registered Manufacturing</i>	4.68	3.73	4.53	7.58	6.48
Electricity, Gas & Water Supply	13.43	12.26	7.43	7.46	6.2
Construction	2.09	4.55	3.56	5.73	13.72
Industry	4.58	6.07	6.23	7.08	9.29

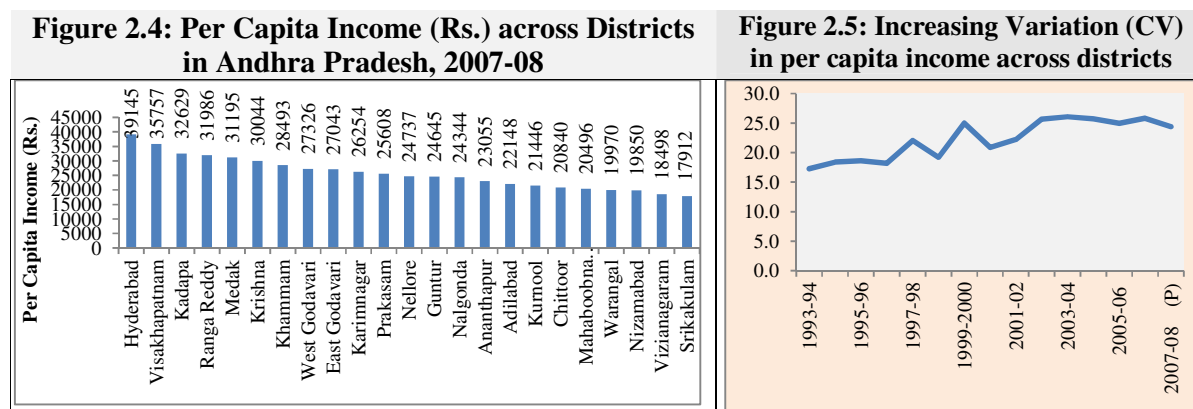
Note: 1. Growth rates are exponential ones and presented in percentage form; 2. 2000s is between 2000-01 and 2008-09.

Source: 1. Manoj Panda and C Ravi (2010) Growth of Andhra Pradesh, CESS, Hyderabad.

As a result there is a remarkable growth in industry and service sector and their contribution to the state economy. But the manufacturing sector could not sustain its remarkably high rate of growth experienced during 1980s and shows a declining trend (See Table 2.1). Therefore the rate of growth in manufacturing sector must be an aspect of the policy concern. In fact the GoAP has recently focussed on developing industrial sector particularly manufacturing in the state. However it needs to be assessed how successful it is in its endeavour.

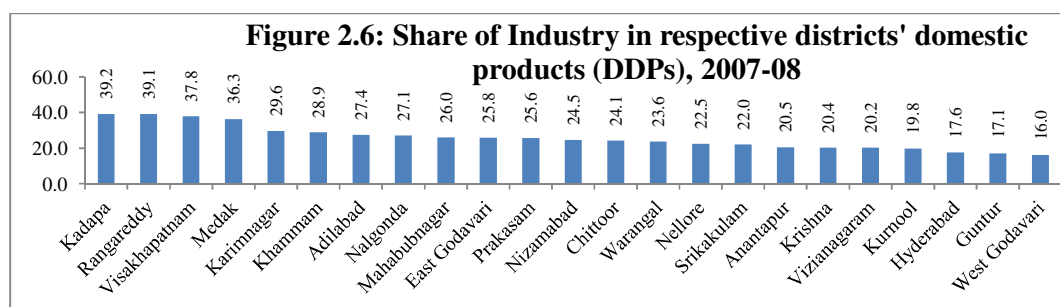
The employment situation in Andhra Pradesh indicates that still more than half the total workforce of the state depends on agriculture for their livelihood. Industry facilitates employment for only one-fifth of the total workforce in the state.

Moreover, the development pattern in Andhra Pradesh indicates that since its formation regional disparities persists in its development path. The recent development initiatives could not manage the balanced regional development rather they are carrying forward. The value of the highest per capita income of a district (Hyderabad) is more than the double of the value of the lowest per capita income of a district (Srikakulam). Moreover the increasing coefficient of variation (CV) indicates the growing inter-district disparities across districts.



Source: Directorate of Economics and Statistics.

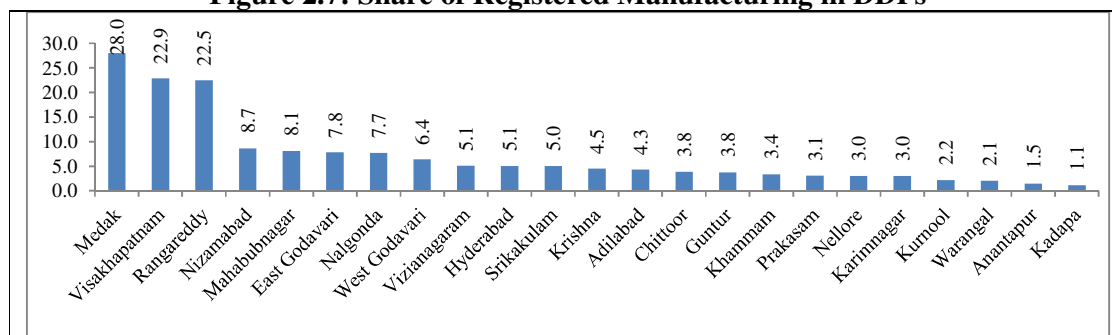
The disparities could also be related to industrial growth across districts. In a few districts like Kadapa, Rangareddy and Visakhapatnam the industry contributes more than one-thirds of their district domestic product (DDP) and the other districts like West Godavari, Guntur the industry contributes less than one-fifth of their DDPs. In Hyderabad district also the industry contribution appears to be low because most of industry in Hyderabad Urban Agglomeration (UA) is spread over in Rangareddy and Medak district areas.



Source: Directorate of Economics and Statistics.

With respect to registered manufacturing the disparities across districts are very high. Most of the registered manufacturing industry in the state appears to be concentrated in three districts namely Medak, Visakhpatam and Rangareddy. The other districts especially Kadapa, Anantapur, Warangal, Kurnool and some others have nominal contributions of registered manufacturing to their DDPs.

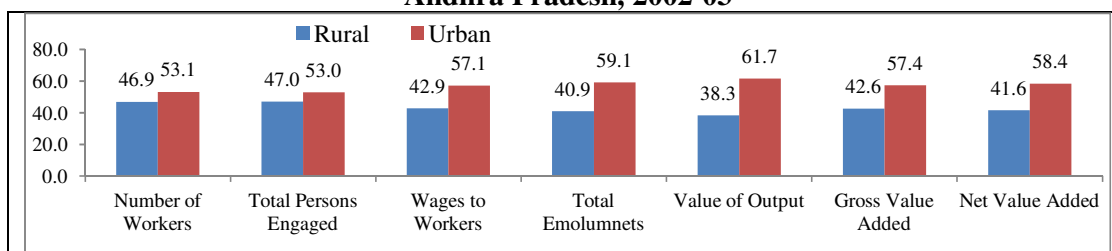
Figure 2.7: Share of Registered Manufacturing in DDPs



Source: Directorate of Economics and Statistics.

Moreover there are rural-urban difference in the industrial sector of the state as a whole and manufacturing within the industry. Although in terms of population urban areas share was only 27% (2001) in the total population of the state, the share of urban industry (factory sector) was more than 50% in any parameter of the industry- Workers, wages, and output.

Figure 2.8: Rural-Urban Break-up (%) in Industry (Factory Sector) Parameters in Andhra Pradesh, 2002-03



Source: ASI data from EPW Research Foundation.

The growth oriented activities/industry/business processes in general are concentrated in urban growth centres, especially in and around metropolitan cities in the state such as Hyderabad, Visakhpatnam and Vijayawada. The disproportionate share of urban areas in manufacturing activity (factory sector) and higher of shares manufacturing in a few district's DDPs indicates that the registered manufacturing is highly concentrated in these districts' urban areas. It confirms that most of the registered manufacturing activity in the state is concentrated in Hyderabad and Visakhpatnam metropolitan cities. Hyderabad city has spread over to four of its adjoining districts: Medak, Rangareddy, Nelgoda and Mahabubngar.

As a result of concentration of industry in the urban growth centres especially the metropolitan cities, the rest of the towns and cities have remained backward when compared with these metropolitans. Moreover the rural areas are the most deprived of the industrial growth and development. Another fact that is coming out of the development of industry is that there rural-urban difference in wages paid for worker in the registered manufacturing sector of the state.

The other well established facts with respect to development of industry and services sectors in the state are as follows. The high growth and concentration of industry in urban areas has its own repercussions in the state. There has been a migration of agriculture surplus, private capital and people from rural areas and concentration of capital and skilled people in the urban growth centres. As a result the rural districts continue to remain backward and hence increasing regional disparities across locations (rural-urban) as well as districts. The existing regional disparities are resulting in social unrest in the state. Moreover, the concentration of industry in the urban growth centre like Hyderabad and Viskhapatnam is increasing the burden on its civic bodies. It is also creating environmental problems like pollution, contamination, increasing industrial waste.

Table 2.2: Rural-Urban Difference in Factory Sector of Andhra Pradesh, 2002-03

Sno	Parameter	Rural	Urban	Total	Ratio	Diff
1	Workers (Nos)	405171	459651	864822	0.881	54480
2	Total persons engaged (Nos)	473902	533561	1007463	0.888	59659
3	Wages (in Rs. Lakhs)	114373	152347	266720	0.751	37974
4	Total emoluments (Rs. Lakhs)	172876	249983	422859	0.692	77107
5	Wage per worker (Rs.)	28228	33144	30841	0.852	4916
6	Total emolument per person engaged (Rs.)	36479	46852	41973	0.779	10373

Note: 1. As per ASI data - factory sector; 2. *Ratio* is rural to urban; 3. *Diff* – Difference between rural and urban areas.

Source: ASI data from EPW Research Foundation.

It is definitely the need of the hour to address the regional disparities in general and disparities related to industrial growth in particular and growing urban challenges more specifically. To overcome the problems associated with the development patterns in the state and to manage the balanced regional development there is a need to diversify relocate/shift/divert the concentrated industry from urban growth centres to rural districts.

In this regard the plan of action may have to control and minimise the migration of rural surpluses, local capital, rural talent and skills to urban growth centres. The potentiality of local resources and talent is to be properly harnessed and utilised at the local level. Also encourage employment potential enterprises to set up their units in rural districts of the state while utilising local resources, capital, investment and talent of the people and ultimately to arrest the migration of capital and people to urban growth centres. Before getting into the constraints in developing rural industry and thereby creating non-migratory jobs in rural areas and the policy issues related to the problem, it is important to touch upon the cases of negative and positive externalities of urban and rural industries.

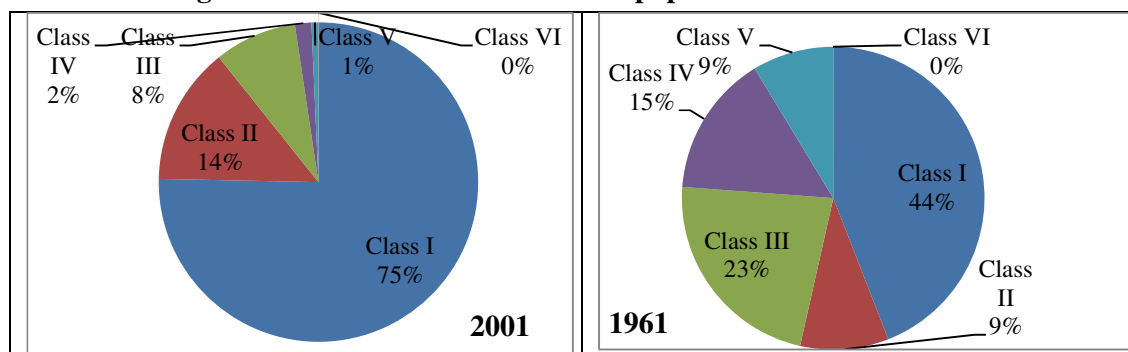
III Urbanisation and Urban Industrial Growth

Urbanization is seen as an indication of transformation of economy from traditional rural one to modern industrial one and therefore an indication of growth and development. But the pattern of urbanisation in countries across the world and region within the countries may not follow this linear trend. Larger cities growing much larger may not be a sustainable pattern rather smaller cities growing bigger is good. Moreover, instead of urbanisation by way of migration of rural people to urban centres and increasing concentration of people in existing urban entities, the pattern of urbanisation is remarkable when it is taking the path of turning the villages into urban entities by transforming the structure of village economy from predominantly agriculture based one to that of non-agriculture based one.

In India, although there is a rapid urbanisation, an anomaly of rapid urbanisation in the country is metropolitanisation, where a lion's share of total urban population is getting concentrated in larger and metropolitan cities. With the unprecedented growth of the larger cities, there is almost nil growth or decline in number of towns. In 1980, there were 12 cities in India with a population of over one million. By 2000, the number of cities had increased to 35 and by 2020 it is expected to reach 70. In 2009, 350 million Indians lived in cities of which over 20% were housed in slums. This is set to increase by another 485 million city inhabitants in another three decades.

In Andhra Pradesh there were 11 Class I Cities in 1961 contributing 44% of the urban population in the state and they were increased to 39 in 2001 and contributing 75% of the urban population. Except Hyderabad there was no big city in the state in 1961 but two more metropolitan cities (Visakhapatnam and Vijayawada) have come up. These three metropolitan cities in the state are placed in the list of 35 cities in India with a million plus population. These three larger cities (Hyderabad, Visakhapatnam, and Vijayawada) account more than 40% of the total urban population in the state. This kind of top-heavy bottom-slim urban pattern in the state is a matter of concern.

Figure 3.1: Concentration of Urban population in Class I Cities



Note: 1. The size class of cities defined as **Class I Cities** – Population more than one lakh; **Class II Towns** – population between 50000 and one lakh; **Class III Towns** – population between 20000 and 50000; **Class IV Towns** – population between 10000 and 20000; **Class V Towns** – population between 5000 and 10000; and **Class VI Towns** – population below 5000.

Source: Census of India.

Some of the small Census Towns (for instance Madhira and Sattupalli in Khammam district; Kodad in Nalgonda district) were declassified as they failed to meet the urban norms. In 1961 there were about 223 towns and they were increased to 263 towns 1991 whereas in 2001 they were declined to 210 towns without any decline in the size of the urban population. This could have been because most of the non-agricultural occupational population living in the small cities might have migrated to bigger cities. It indicates the disappearance/dying of smaller towns in the urban topography of Andhra Pradesh owing mainly to urban to urban migration given the pull factor/attraction of larger cities and concentration of population in these larger cities.

Table 3.1: % of Three Metropolitans (MCs) in the Total Urban Population and the Growth (%) of Population, Andhra Pradesh

Parameter	1951	1961	1971	1981	1991	2001	2011
% of Three MC in Total Urban	25.0	26.6	28.9	28.8	33.7	37.8	38.7
Growth of Total Population	-	1.5	1.9	2.1	2.2	1.3	1.07
Growth of Urban Population	-	1.5	3	4	3.7	1.4	-
Growth of Three MCs Population	-	2.1	3.8	4	5.3	2.5	-

Note: TP – Total Population; MC – Metropolitan Cities (more than a million populations).

Source: Census of India.

It is against the normal urban development pattern which applauds the growing number of towns along with increasing degree of urbanisation. Herein the policy must lay its concerns. The natural growth of urban population is relatively lower than that of rural areas but overall growth of urban population is found to be higher than that of overall population and rural one because of the migration of people from rural to urban. Moreover the growth of population in three metropolitan cities is higher than the growth of overall urban population in the state. This high growth in these three metropolitan cities could be due to higher rate of migration not only from rural to urban stream but also urban (small towns) to urban stream of migration.

Figure 3.2: Percentage of Migrants in the Total Population in AP, 2001

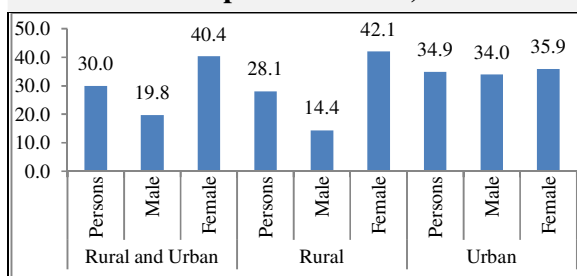
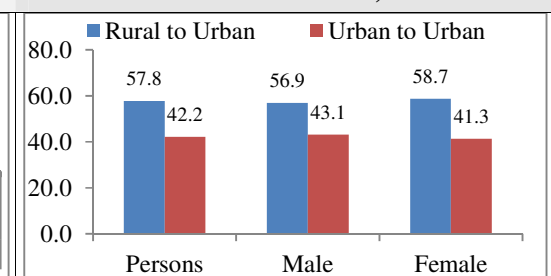


Figure 3.3: Stream of Urban Migration in Andhra Pradesh, 2001



Note: Stream of Urban Migration is percentage within the Urban migrants.

Source: Census of India 2001.

For instance, as per the 2001 Census, the growth of population in Rangareddy district was the highest in A P during 1991-01. This growth is not because of the high birth rate or natural growth of population in the district but due to migration. It is an interesting fact to note that about 27% of total population in the Rangareddy district were migrant population. More interesting is that migrants were forming around 41% of urban population in this district (Rangareddy). The total population of Rangareddy district in 2001 was 34.4 lakhs and its urban population was 18.4 lakhs forming 53% of the districts' total population. The total in-migrants in the district were 9.3 lakhs forming 27% of the total population and the total in-migrants of urban area of the district were 7.5 lakhs forming 41% of its urban population. Of the total in-migrants in the districts, more than 80% were concentrated in the district's urban areas, mostly in and around Hyderabad city.

There is a large scale migration of people and capital to the particular cities is due to concentration of highly growing business/industry in these cities. As a result the rural areas are deprived of skilled labour and local capital for developing rural industry. Even small cities/towns are losing their relative advantage over the villages to the larger cities. Therefore the growth of larger cities is becoming a double-edge knife cutting growth of both the rural villages and small towns. The large scale migration to larger cities is increasing the pressure

on scarce urban resources such as land, housing, water, energy, drainage etc and thereby creating burden on the civic administration.

In the last budget (2010-11), the GoAP has allotted 3261 crores budget expenditure for the Municipal Administration and Urban Development (MA&UD), whereas for the Panchayat Raj and Rural Development (PR&RD) the budget expenditure was 4221 crores. The ratio of urban to rural in terms of population is 100:37 (for every 100 rural persons there are 37 urban persons) in the state, whereas the ratio of urban budget expenditure to that rural is 100:77 (for every Rs.100 of budget expenditure for PR&RD there is Rs. 77 budget expenditure for MA&UD). The per capita PR&RD expenditure per rural person was Rs. 69 whereas the per capita MA&UD expenditure was Rs. 142. It indicates more than the double per capita expenditure on urban development when compared to rural development. The budget is meant for Municipalities and most of it may go to the larger cities. The budget expenditure allotment is the budget support in addition to the expenditure from its own revenue resources. Among the local bodies, the revenue resources for urban local bodies are higher when compared to rural local bodies (i.e. Panchayat Raj).

A serious problem encountered in daily life of metropolitans is congestion - traffic jams, reducing average traffic speed. The average speed of the Hyderabad traffic is now reduced 13 Kms/ph. To increase the traffic speed by reducing the traffic jam, widening roads needs large scale public investment and resulted in large scale demolitions of roadside structures. Due to traffic congestion, the person hours lost during the travel and physical and mental fatigue one undergoes owing traffic jams affects the productivity of the labour.

Another problem of the rapid urbanisation and the urban industry is environmental problems. In the absence of proper waste management arrangement the industrial and residential area are polluted with garbage (open dumping of waste) and drainage leakages. The high concentration industries at place and thereby chemical and other emissions of the industry results in contamination of land, soil, water and air. Moreover the high traffic pollution contaminates the city air with carbon particles. All these are health hazards for people living in the city environment.

Large scale migration to cities swells the ranks of slums and squatters in urban topography. The living conditions of people living in the slums and squatters are very poor. The migrant labourers in the city environment have to face discrimination and they have to work for lower wages. Heavy concentration of business/industry in urban base/growth centre deprives the development of rural economy. Also disproportionately high level government expenditure on creating and maintaining city infrastructure and other civic amenities deprives of the funds available for the rural development.

A strong urban growth centre always siphons-off the business investment in other regions and leaves no opportunity for the development of nearest towns and regions. As a result the other regions remain backward. For example Hyderabad and its surrounding districts, Nalgonda, Medak, Rangareddy and Mahabubnagar except the parts of Hyderabad urban agglomeration, the other parts remain backward. The substitute nature of urban growth impairs the growth of rural economy unless there is an appropriate policy measure that ensures the growth of both the rural and urban economies uniformly and ensures that they are complementary for each other. Therefore it must be the policy concern to change or alter the urban development pattern and diffuse/spread the urban development across districts in an equitable manner in the state.

IV Rural Industry and Rural Development

For overall development of any economy the proportionate contribution of both the dual sectors (rural and urban economies) is a necessary condition and hence uniformity in growth of these two sectors is a desirable one. But the development of rural economy cannot rely on development of agriculture alone. The world-wide development experience indicate that in the life history of every developing economy the relative share of agriculture is bound to decline over a period. The rate of decline in the share of agriculture in the total income is higher than that of its share in employment/workforce. In an agrarian economy with a small or no base for industry (manufacturing/services) in rural areas an overwhelming share of the total workforce is engaged in agriculture. But the near zero employment elasticity in the agriculture sector cannot accommodate additional labourforce.

Urban migration is one of the consequences of stagnant or slow growth with near zero employment elasticity in agriculture sector in rural areas. One section of additions to the rural labour force (surplus) who could not accommodate themselves in agriculture and could not find an alternative opportunity in rural economy are pushed themselves out of agriculture and rural economy to urban area/economy/industry in search of the employment opportunity. The other section consists of those who could not find any alternative, again fall back on agriculture and thereby results in swelling the ranks of disguised unemployed and the underemployed. Consequently the productivity of labour and thereby the real per capita income of those engaged in agriculture declines.

There is no real possibility for enhancing on-farm labour absorption, without a decline in productivity of labour in the agriculture sector, through any type suitable technological, institutional and organisational improvement. Rather these improvements are in need to increase productivity of labour in agriculture while shedding off the surplus and underemployed labour in the agricultural activities. Therefore the rural economy needs the creation and expansion of alternate base of non-agricultural/non-farm sector for the absorption of surplus labour. The two-sector growth model, rural agriculture sector and urban modern industry, failed to transform the rural economies of developing countries like India by transforming rural surplus labour to urban industry automatically.

The expansion of rural industry is essential not only for the absorption of surplus labour but also important as the modern agriculture is bound to be based on strong forward and backward linkages with industry and other non-agricultural activities. The advocates of agriculture-led growth visualised the role of rural industry in stimulating growth of agriculture through inter-sectoral linkages. Conversely the prospects of rural industry would depend upon the performance of agriculture.

The inevitable and continuing process of demand restructuring even in rural areas raises the demand for consumer goods. It is well established fact in the development process that the income elasticity of demand for agricultural goods is lower and the elasticity values for non-agricultural goods and services are fairly wide in range. Once the basic minimum consumption goods to be derived from agriculture, then there arises the demand for non-agriculture goods and services. However, it all depends on the income levels and affordability of rural consumers.

The increase in farm income definitely stimulates the demand for a wide variety of consumer goods which can be produced by the rural industry. Moreover a growing agriculture demands the production inputs which can be produced by the rural industry. Conversely the agriculture

supplies the raw-material/ inputs for the agro-based/agro-processing industries. The most important advantage in the development of rural industry is that it creates non-migratory jobs within the rural area. The unprecedented urban growth is due to creation of business and employment opportunities in the urban locations and thereby large scale migration of rural people to urban location. If these business and employment opportunities alternate to agriculture are created in the rural locations, rural industry can flourish and as a result it minimises/prevents large-scale urban migration of rural job seekers. Indirectly it contributes in easing urban congestion and reducing the pressure on urban infrastructure and other scarce resources. Moreover its role in mitigating the socio-economic problems associated with urban expansion is considerable.

Rural industry facilitates the balanced regional development through spatial spread of industry rather than its concentration in particular urban centres. The opportunity cost of public investment in urban areas for creating environment for the industry is higher than that of rural areas. Rural industry utilises the local people/talent and local slack resources which may not be easily transferred and utilised in urban industry. Rural industry can facilitate people working simultaneously in agriculture and industry, especially small and marginal farmers. The potentials of rural industry are agro-based/agro-processing, resource based (mineral), consumer goods, and ancillary.

The developed countries experience in terms of the development of rural industry (European, US, Japan, and Korea) and reverse migration to rural areas (France) are the examples for the case of rural industrialisation. The Government of Andhra Pradesh can make an attempt to study experience of these countries in terms of spread of industry into non-urban/rural areas and then appropriate strategies can be built up suiting the local conditions of the state.

IV Constraints in Rural Industrialisation

Rural industry is the only alternate base for creating non-migratory jobs in rural areas and for the development of rural sector. In spite of having the relative advantage for the rural industry over the urban industry, the rural industry is still in the infant stage in the state.

Policy constraint: The previous industrial policies (prior to 1990s) restricted the role of private entrepreneurs/enterprises in industrial growth and more importance was given to public sector industries. Most of the public sector industries were large in scale and mostly set up in urban settings; they were not having much scope for spreading to rural areas. Although the policies emphasised on small-scale sector and given scope for private entrepreneurship in this sector. Till 1990s there was only national industrial policy that had decided the pattern of industrial development but there was no scope for state level industrial policies to decide the industrial development the respective states. But scenario after the 1990s has changed and the state level industrial policy are being made. The policy change at the national as well as state level gave space for the private investment/entrepreneurs, but there are many other problems in developing rural industry.

Infrastructure: For the development of rural industry the major constraint is inadequate infrastructure – land, road, water and energy. Connectivity – The inadequate connectivity of rural areas with the rest of the economy through road and transportation and communication networks has been a constraint for the development rural economy in general and rural industry in particular. Energy - Power supply is the major problem for the rural industry. Due to power shortage in the state especially in the peak summer season, the power supply to rural

area is rationalised for limited number of hours. Whereas in urban sector the presence of power-cuts are comparatively less. This is one of the relative disadvantages that rural industry has been experiencing. Many of the rural enterprises are stand alone units unlike the urban industrial estates. In the absence of any dedicated lines of power supply, the usual power-cuts to rural sector are applicable to the industries located in these areas. Most of the units in rural locations are medium, small scale and tiny industries they could not even thought of captive power for which the government is now encouraging by giving provisions.

Technology: Availability of and access to innovative low-cost technologies for agriculture and non-agriculture sectors and suitable for the local conditions is a major constraint. Many of the technological innovations are demand based backed by the purchasing power of the respective communities. These technological innovations and developments served the larger-scale industry and urban industrial classes/communities. The thrust of S&T efforts in India was not at all in favour of the needs of rural areas and thus rural industry has not been figured in these technological developments. Although there have been initiatives in developing technologies especially suitable for rural areas, some of them could not see the light of the day, some of them could not stand the real time situations, some of them could not reach people due to lack of proper strategies for marketing the successfully developed rural technologies. The other barriers observed in a Planning Commission of India study on SSI sector are lack of awareness or lack of knowledge and information about the availability of requisite technology, desire to avoid risk in adoption of improved technology, low level of indigenous R&D, inadequate management skills and non-availability of technically qualified persons to operate the new technology.

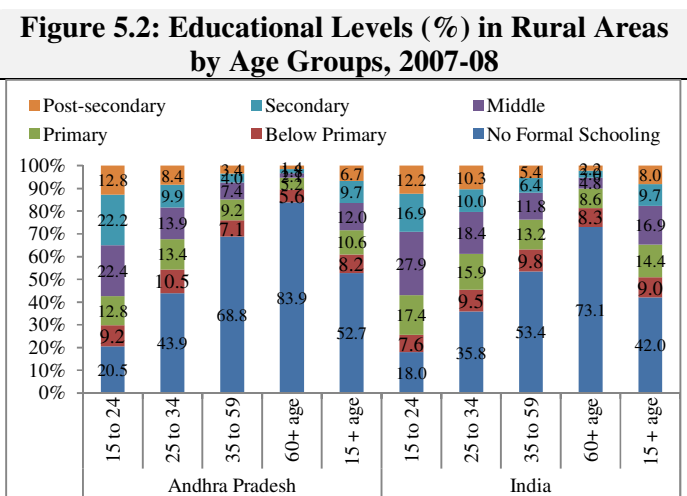
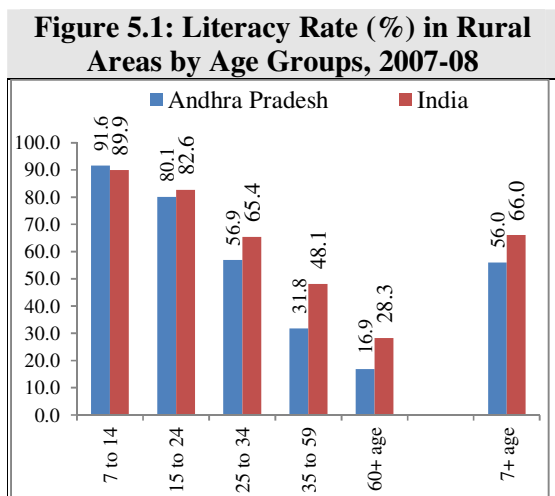
Financial Resources: Mobilising the financial resources is a major problem for the rural entrepreneurs. For availing the institutional finances there are conditions wherein many of the rural entrepreneurs may not be able meet the conditions of the financial institutions. From the non-institutional sources, the burden of heavy interest rate is a constraint. The emergence of Micro Finance Institutions was seen as the ray of hope. But their financial practices especially the private ones as exposed recently in the state created apprehension about the role of these institutions.

Entrepreneurship and Marketing: *Entrepreneurship* - the role of public sector in developing rural industry is limited, private entrepreneurship is a necessary factor. The limiting factor of rural people otherwise prospective entrepreneurs is the literacy and education and then managerial and financial skills. The decisive prospective entrepreneurs are always attracted by the prospects of urban industry. *Marketing* - one of the factors that discourages rural industry is problems involved with marketing of its products due lack of supply chain management, inadequate/poor marketing network and connectivity with the outer world. *Quality of the product* - apprehension of quality of products manufactured / produced in the rural industry discourages entrepreneurs in industry location.

Availability of Skilled Labour: Literacy levels in the state especially in rural areas are very low. About 56% the population aged seven years and above are literates and 44% remained illiterates in the state. Moreover, the state of Andhra Pradesh stands next to Bihar which is having the least literacy levels among major Indian states. Educational levels in the state are improving over a period of time but not able to meet the industry demand. Same source of data indicates that almost 99% of the rural population of the working age group (15-59) in the state have not had any kind of technical education. Therefore availability of skilled and trained personnel in the rural setting is also a constraint for the development rural industry.

Even among the educated availability of persons with employable skills that industry demands is very low in general in India and in particular in Andhra Pradesh. Retention is another major problem if at all the skilled labour available and for those who are trained in-house and equipped with required skills.

Quality of Life - The difference in the quality of life between rural and urban areas discourages the skilled labour moving from urban areas to work in rural settings. Moreover the quality of life in urban settings attracts the emerging skilled labour from the rural areas. The major difference in quality of life between rural and urban areas is the access to health and educational facilities.



Note:

Source: NSS 64th Round (2007-08) Employment and Unemployment Survey.

Policy Indifference: The governments while showcasing the larger cities like Hyderabad as the major investment destination, the policy undermines not only the industrial development of the other districts and cities but also the development of the rural industry. In Andhra Pradesh, as on date there is no specific policy document for the development of rural industry except the provision of certain incentive/subsidies to those industries which are established beyond the Municipal areas of the three metropolitan cities (Hyderabad, Visakhapatnam and Vijayawada).

Missing linkages between industry and agriculture. In principle there is an agriculture growth-led development argument that indicates growth in agriculture demands more and more modern inputs which has to be supplied by the industry. Also growth agriculture led to agro-based industry especially related to processing nature. The surpluses out of the agriculture growth can be invested in this rural industry. Moreover, the growth of agriculture increases the earnings and income levels in rural areas and there by increases the demand for consumer goods which are the products of the industry. The experience of the state indicates that most of surpluses raised with the growth of agriculture especially in the coastal region were invested in urban industry, which is no way connected with rural development.

Considering the issues and challenges raised above a case for rural industrialisation is proposed. It is seen as an opportunity to reducing/managing the regional disparities and urban congestions.

V Policy Issues

The development challenge is to offer the rural population sufficient income for their livelihoods and to improve their quality of life. As a majority of the rural population depend on agriculture which could not ensure the sufficient income, diversification of occupations is need of hour. Diversification facilitates additional income to that of agricultural income by providing employment opportunities in the non-agricultural activities especially in the industry. It is possible through a policy encouraging the industry to set up the production units in the rural areas and eventually build new urban centers in a planned manner. Assisting the poor in income generation activities, improving the quality of their physical environment and enhancing their access to basic services like safe drinking water and sanitation, primary health care and education are absolutely essential for any state/region/country in the development process.

The increasing youth (15-30 years age group) and working age population has been an unprecedented opportunity to accelerate growth in general and growth of industry in particular and thereby to reduce poverty. However, to harness this opportunity of demographic dividend, the challenge is to build human capital with higher levels of education and development of skills and thereby connecting the educated youth with gainful employment or creating suitable environment for the entrepreneurship.

In order to ensure equitable income growth, there is a need to integrate the economies of rural and urban India and ensure a greater flow of goods, services and investments between the two. Establishing the industry in rural area needs to become more attractive and should offer competitive advantage through policy intervention. It must be the policy of the State to facilitate and encourage the development of industries in the private sector by ensuring the development of transport, power and other services, and by appropriate fiscal and other measures. The State has to continue to foster institutions to provide financial aid to these industries, and special assistance must be given to enterprises organised on cooperative lines for industrial and agricultural purposes. In suitable cases, the State may also have to provide financial assistance to the private sector.

The state/government has to play important role for the development rural industry. Broadly, functions of the government in the industrial development are: regulatory and promotional. Beyond the regulatory function, the promotional function of the state/government includes the institutional support, provision of infrastructural facilities, technology up gradation, investment in human capital formation is crucial for the development of industry.

For the industry to grow the entrepreneur is regarded as an integral player in the business culture, and as an engine for job creation and economic growth. Given entrepreneurship's potential role in economic growth, it is the policy goal of any government to develop a culture of entrepreneurial thinking. It can be done in a number of ways: by integrating entrepreneurship into education systems, legislating to encourage risk-taking, and national campaigns. The factors that are crucial for rural industry to flourish are infrastructure, trained manpower, connectivity to the entire supply chain, statutory support and creation of industrial culture in rural locations. Also rural industry needs institutional support in terms facilitating the availability and access to technology, financial resources, and extension services is important for the development rural industry. More than subsidies and incentives, the industry expects provision of infrastructure facilities from the government. Development of innovative ideas and low-cost technologies suitable to local conditions and ensuring availability of efficient and cost-effective technology suitable to rural industry. Dissemination of appropriate and affordable technologies to the prospective rural entrepreneurs is important for the prosperity of rural industry.

Most of the rural entrepreneurs run either sole proprietor units, tiny or small-scale units and they can't make their own transport arrangement and dependency on private transportation arrangement may be costly for the transportation their goods – input/raw materials or output from/to the market. Therefore the government may consider public transportation system facilitating the rural entrepreneurs for the transportation goods/products. The available information and communications technology (ICT) can be best utilised for the development of rural industry. The role of ICT is very important while development market intelligence services for the rural industry. In this regard the government initiatives will be appreciated.

The technological development must be driven by societal demands. While developing technologies, technology-people interaction model must be the better one. Technological development and social demands/needs are dialectically related and transform each other. In this model the first step is the identification of social demands or needs. Subsequently transforming these social needs into technical challenges and then find solutions to these challenges. Then the demonstration of technology models with a variety of static, simulated and live models in stalls and thematic pavilions is an important process. Finally taking the successful and proven technologies to the villages and practically using these technologies with the active involvement of primary stake holders. Participative approach involving stakeholders of particular industry/enterprises in particular locations would give better result in developing rural industry.

Energy is the prime mover of the industry. Meeting energy demand is one of the factors in industrial development in general and rural industry in particular. In this regard the state has to harness all its potential energy resources and enhance supply that meets the increasing demand. The state of Andhra Pradesh has emerged as a key player in the country's power sector. The state is one of the state those states in India which are having the highest installed capacity and gross power generation, the supply is not meeting the increasing demand for the energy. In terms of performance, the state's power sector emerged as the one of the best performing ones in India. For the industry in general and rural industry in particular to grow it expects/demands perpetual supply of the power with dedicated lines for most of the industrial estates/development areas. Most of the power generation in the state is dependent on the either Thermal or Hydel energy systems. The other systems especially the renewable energy systems are not yet fully utilised. In this regard the advantage of the state being gas-hub especially with respect to K-G basin can be utilised for the generation of power. Also the state is having second longest coastline in India, this advantage is not yet harnessed for power generation with tidal energy systems. Renewable energy systems must be harnessed with local initiatives in the rural locations. The plan of action may be that building dedicated line of power supply to industrial centres/clusters. The perpetual supply of power through all lines is necessary for the stand alone units.

There is a need for institutional and financial support. Formal institutions help the prospective entrepreneurs in setting and the sustaining rural enterprises through imparting of training, providing initial investment funds (through banks and other financial institutions), imparting market intelligence, assisting in technology up-gradation and helping in input procurement and product sales. Access credit from the formal financial institutions (especially scheduled commercial banks). Complicated banking procedures, insistence on collaterals, higher transaction cost per rupee of load advanced are the some of the obstacles stand in between the banks and the prospective rural entrepreneurs. The government may consider to simplifying the procedures and insistence on collaterals. More importantly it needs to develop innovative credit delivery systems especially for rural entrepreneurs. The dormant co-operative sector may have to renewed and energised. The state has to take constructive measures in this regard. Micro finance institutions may be promoted under proper regulatory mechanism to help in developing the rural industry especially for sole proprietor, tiny and small-scale industrial entrepreneurs particularly women.

To align with the industry's need for skilled manpower, skill development initiatives and thereby improving the employability of the working population. The skill development initiatives are not only for illiterate/uneducated, school drop-outs, semi-skilled and un-skilled workers but also educated and college graduates. Also due efforts are needed to create a new wave of entrepreneurship in the state that will result in employment generation.

Although the state is having number of engineering (around 700), pharmacy (270), and management (310) colleges for professional education but quality of education/training varies with colleges. In fact as on date the state of Andhra Pradesh is having highest number of professional educational institution in India. As a result though the number of graduates coming out from these colleges in the state is very high. But their employable skills required for industry is not meeting the demand. To clear this mismatch between demand and supply it needs skill development and training programmes. The first and foremost initiatives the government has to consider is the improving the quality of education in the already existing educational institutions. The government may consider in developing the Skill Development Centre/Institutions and Training Institutions for developing employable skills. Vocational education in the state is missing the policy attention it actual required. The state has to take measures not only to expanding the vocation education but also to improve the quality of education.

District Development Plan with a Vision, Goals and Objectives for the industrial development of the district has to be developed. A district and state level Forum to generate ideas and identify potential of resource base for the rural industry. Ultimately the conscious state policy with transparency and good governance that makes the difference in the industrial development especially in the rural industry, of the state.

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