



Estimating Urban and Rural Incomes in Gujarat
1993-94 to 2004-05

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ESTIMATING URBAN AND RURAL INCOMES IN GUJARAT, 1993-94 TO 2004-05

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Abstract

Income originating within geographical boundaries of urban and rural areas of Gujarat is estimated for three benchmark years – 1993-94, 1999-00 and 2004-05 - at current prices following the broad methodology and data sources prescribed by the CSO. This is the first such effort made at the state level. It considers all sub-sectors and sources used for the state income to point out data gaps and suggest minor modifications in the methodology to improve such estimation for replication in other states.

The study finds that urban – rural income inequality in Gujarat (2.3) was almost the same as at the national level (2.4) in 1993-94, but declined substantially to 2.0 by 2004-05, while it increased to 2.7 for the nation. Thus, rural areas grew faster than urban areas in Gujarat, but grew slower than urban areas in the nation. In private consumption, the urban – rural inequality, though lower than in income, increased both in Gujarat and the country over the same period. While at the national level rural population seriously lagged behind its urban counterpart in income, consumption and savings; in Gujarat rural population is fast catching up with urban population in income and savings.

There are considerable structural changes in the urban and rural economies over time in Gujarat. Urban areas are becoming more service oriented, whereas rural areas are becoming more industrialized. Contrary to the general perception, large-scale industries are predominantly rural activities and small-scale industries are largely urban activities. Implications of these findings on the local resource generation through different saving behaviour and natural trends in economic integration and linkages of the two areas for planning are important. Undue concerns about rural employment generation at artificially high wages and about allocating land for industries in rural areas need to be viewed in the context of the findings here. After all, urban areas account for only 2.8% of geographical area, 43% of the population, and 56% of the income of the state. Rural areas account for 97.2% geographical area, 57% of population, and 44% of the income of the state.

The views expressed in the paper are of authors in their individual capacity and not of the organizations to which they belong.

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I. INTRODUCTION

An interesting aspect of the study of regional inequalities between different sections of the population in any country or region is the urban – rural income differences. The distribution of domestic product between urban and rural sectors is an important extension of the regional accounts providing a critical input and crucial link to the planning exercise at different levels. Concerns of balanced regional development and inclusive growth necessitate following decentralized economic and physical planning in the country. It gives rise to multi-level planning approach. The efficiency and effectiveness of such planning needs compilation and estimation of various macroeconomic aggregates including production and income, and their break up for areas within regions, like districts, blocks, cities, etc. Urban – rural area demarcation in this context is extremely significant since current planning concerns at both the state and central levels are specific to these areas. Moreover, urban – rural income differential within a given state forms an integral part of the study of regional disparity. Since Gujarat has so far not released official estimates of the district domestic products (DDP), estimates of urban and rural incomes in Gujarat assume importance because they would be the only sub-state estimates of incomes in the state.

Committee of Regional Accounts (1976) had recommended preparation of the urban – rural income estimates for each state, and had also suggested that efforts should be made to estimate incomes even for big cities. After 25 years, National Statistical Commission (2001) also re-emphasised the same recommendation. Although Central Statistical Organization (CSO) followed the recommendation at the central level by periodically preparing estimates of urban and rural incomes for all-India whenever the base year for national accounts changed, similar efforts at the state level have been conspicuously absent not only by official agencies but also by individual researchers with the only exceptions of Dholakia (1975) and Dholakia & Dholakia (1978).

At the central level, Chakravarti et al. (1960) and Rao (1965) represent noteworthy initial efforts for preparing the estimates of rural – urban incomes respectively for the years 1952-53, and 1950-51 and 1960-61. Subsequently, the CSO started preparing these estimates officially at the country level and has so far prepared urban and rural income estimates for the benchmark years 1970-71, 1980-81, 1993-94, 1999-00, and 2004-05 (CSO, 1979, 1988, 1999, 2006, and 2010). The CSO offers extensive help and has laid down a detailed methodology with broad sources to prepare such estimates at the state level (CSO, 2008). In the liberalized and globalized environment, such estimates are of considerable value not only for urban and rural planners for providing basic infrastructural

facilities like roads, transport, housing, sanitation, drinking water, fuels, etc., but also for the private businesses to market their products, assess market potential, understand cost and standard of living, etc. Moreover, the state government can also evaluate their efforts by comparing the economic growth in the two areas.

In the present paper, we make an attempt to estimate urban and rural incomes in Gujarat for the three benchmark years 1993-94, 1999-00 and 2004-05 following the methodology prescribed by the CSO as far as possible. In the process, we have identified some data problems, made some modifications in the prescribed method, and identified some crucial data gaps existing at the state level for the CSO to rectify.

The paper is organized as follows. The next section discusses briefly the concept and limitations of such estimates. The third section describes the methodology for preparing the estimates and sources of data used by sectors. The fourth section presents our estimates of urban and rural incomes in Gujarat for the three benchmark years. The fifth section presents the urban – rural private consumption differential over the same period obtained from the National Sample Surveys. The sixth and final section provides summary of findings and conclusion.

II. CONCEPT AND LIMITATIONS

Within the existing statistical data collection system in India and its states, the concept of income at the sub-national level that is possible to estimate is the income originating and not income accruing. Thus, urban and rural incomes estimated here would be the income originating within the geographic boundary of the respective areas. At the national level, it is possible to sharply distinguish between the two concepts of income originating within geographic boundary and accruing to residents of the country, because the factor income flows across the border are easily captured and recorded for various purposes. However, at the sub-national levels, factor mobility across the border is far greater in extent and intensity, and hence factor income flows across border are extremely difficult if not impossible to capture satisfactorily. With the concept of income originating, it is hoped that we can avoid all such problems at least conceptually, but implementing the concept in practice makes it difficult and gives rise to some inevitable errors.

The concept of originating income requires recording the production and use of inputs as well as payments made to factors of production where the activity is taking place. However, in practice, all these transactions in monetary terms take place at or from the head-quarters of the company or business. The location of the actual productive activity and the head-quarter often differs. Urban – rural area locations are physically so near that such practical classification problems are bound to pose a major challenge with their resolution being left to the interpretation and understanding of enumerators or respondents.

Further, factors of production employed in units located in one area may be residing in the other area. In service sectors like trade, personal services, etc. very often than not, income of the same enterprise originates in both the areas and its proportion may be genuinely unknown. Implementation of the concept of income originating in such cases would be practically impossible, unless very bold assumptions and compromises are made. In several cases, the aggregate measure would combine the two concepts of income – originating and accruing. Such limitations of the data are not special features of developing countries like India only. They also exist in developed countries like Canada (see, Dholakia, 1994).

Implications of such limitations are very serious for selecting indicators or instruments to allocate the state income between the two areas – urban and rural. The nature of statistical system existing in India necessitates use of such allocating methods in several specific cases as we would see in the following section. If the indicator is an asset (say, tractor), one should be extremely careful to be sure that the asset is used only for the activity (say, agriculture) that we are interested to allocate. If such an asset is known to be used for other activities in one of the two areas, its use would not only distort the allocation of the activity, but would also create confusion in the concept of income used.

Another difficulty is in the use of employment data to allocate the activity between areas. If the employment data are collected from the source that collects the information directly from the unit, it is more accurate for the concept of income used. However, if the source of data on employment is household or residence as is the case with NSS surveys or Census enumeration, the indicator can provide totally wrong signals and would again be subjected to the confusion between the two concepts of income – originating and accruing. This is not a hypothetical problem, but the actual one faced while estimating the urban – rural incomes in the registered manufacturing sector in Gujarat for the year 1993-94 as we would see in the following section. The importance of this problem is not confined only to the manufacturing sector. It can potentially arise in several service sectors where employment is used as an indicator or basis for allocating income.

Having recognized these limitations clearly, we have tried to modify the CSO methodology in a couple of sectors where we could replace convincingly some indicators. However, in most cases, we have followed the methodology and sources prescribed by CSO to generate broadly comparable and consistent estimates of urban and rural incomes in Gujarat for the three benchmark years. The details are in the following section. Finally, we need to recognize that both the concepts of income – originating or accruing – correspond to income produced during a year and exclude transfers. Therefore, both represent use of productive capacity and potential of the economy. They do not strictly represent standard of life of people in the area, which is measured by the disposable or total personal income of people including transfers. States in India have so far not attempted any such estimates of personal incomes. However, what are readily available from the household surveys are the estimates of private consumption expenditures by rural – urban residence. In the fifth

section below, we compare these estimates with our estimates of income originating in the two areas of Gujarat.

III. METHODOLOGY AND DATA SOURCES

The methodology for generating urban and rural break up of Gross State Domestic Product (GSDP) in Gujarat and the sources of required data are broadly as per the guidelines of CSO (2008). The guideline suggests dividing the state economy into almost the same number of sectors and sub-sectors as required for estimating the GSDP. Then, for each sub-sector, check whether the urban – rural break up of value added is directly available from the same source that is used for estimating the GSDP. If the break up is directly available, we obtain the actual estimate of the GSDP originating in the two areas. However, for several sub-sectors, the urban – rural break up of value added is not available from the same source used for estimating GSDP. For such sub-sectors, allocation of the value added has to be attempted with the help of using appropriate indicators. Such indicators are in terms of the most relevant activity, most relevant assets, or employment within the sub-sector across the two areas. It is not possible to classify the traditionally identified broad sectors for reporting the GSDP estimates into these three distinct methodologies, because different sub-sectors within each of the broad sectors require different methods for estimating the urban – rural break up. Therefore, we describe the method and sources for our estimation by various sub-sectors within the traditional sectors.

3.1.1 Agriculture Sector

Workforce engaged in rural and urban areas is used to arrive at estimates of rural and urban income from agriculture sector for the years 1993-94, 1999-2000 and 2004-05. At all India level, numbers of agricultural implements used in the two areas available from the livestock census are considered to derive the rural-urban estimates. However, as argued earlier, this is not an appropriate indicator for allocating output in the sub-sector. A major portion of the implements consists of tractors, which are used for non-agricultural purposes also particularly in the urban areas in (at least) Gujarat. Use of such an indicator may unduly inflate urban incomes at the cost of rural incomes. On the other hand, workforce estimates obtained from the NSS enterprise surveys of 1993-94, 1999-2000 and 2004-05 do not suffer from such limitations.

3.1.2 Livestock

The value of output of livestock in rural and urban areas is worked out based on livestock censuses: 1992, 1997 and 2003 for the years 1993-94, 1999-2000 and 2004-05 respectively. The proportion of rural livestock is about 95 % to total livestock population. After aggregating (gross) output of agriculture and livestock in the two areas, the corresponding value addition is obtained by applying the same proportion as in the GSDP estimates from the sector.

3.2 Forestry & Logging

The estimates of income in the forestry and logging sector have been prepared in the following five major components: (1) Industrial Wood; (2) Fuel Wood; (3) Trees Outside Forest (TOF); (4) Fodder; and (5) Minor forest Product (Now termed as non timber forest products). The value added from Industrial wood is treated as rural. Fuel wood GVA is allocated based on monthly per capita consumption of fuel wood as available from NSS 50th Round (1993-94), NSS 55th Round (1999-2000) and NSS 61st Round (2004-05) Surveys, separately for rural and urban areas. Similar treatment of MPCE Rural/Urban has been provided to work out rural – urban differential from TOF. It may be mentioned that TOF activity has been introduced from the recent base year 2004-05 only and constitutes substantial part of GVA from forestry and logging sector. Value of fodder is distributed on the basis of cattle population in rural and urban areas as available from the livestock censuses: 1992, 1997 and 2003. Sub-sector of Minor Forest Products is treated as entirely rural.

3.3 Fishing

The Fishing Sector comprises of inland fish and marine fish. The GVA estimates for the years 1993-94 and 1999-2000 are allocated on the basis of rural - urban break up of workforce available from the Economic Censuses 1992 and 1998 respectively. For the year 2004-05, the Livestock Census 2003 provides estimates of mechanized boats in rural and urban areas, which is used for the allocation.

3.4 Mining and Quarrying Sector

For Mining and Quarrying sector, the activities above the ground are assumed to be from urban areas whereas, the open cast and below the ground activities are assumed to be from rural areas. In this sector, the value added from petroleum (crude) and natural gas constitutes a major part, and the entire activity is treated as urban activity, whereas value added from minor minerals is assumed to be 50% in rural areas and 50% in urban areas. For major minerals, the workforces as available from Economic Censuses 1992, 1998 and 2005 have been used.

3.5 Registered Manufacturing

For the registered manufacturing sector, the GSDP is allocated using the estimates of gross value added (GVA) in rural and urban areas of Gujarat state as directly available from the Annual Survey of Industries (ASI) for the years 1999-2000 and 2004-05. However, for the year 1993-94 similar estimates were not available from ASI even after repeated requests. The workforce estimates from NSS Employment and Unemployment Survey for the years 1999-00 and 2004-05 provided substantially different estimates compared to employment obtained directly from ASI. This could be because: (1) the NSS surveys were at household level, whereas the ASI was at the unit level as discussed in the previous section; and (2) the NSS surveys were sample survey covering negligible

proportion of households, whereas ASI provides complete enumeration of the census sector and a large (20%) sample of the sample sector of ASI. However, the trends in the employment and the value added between 1999-00 and 2004-05 obtained from the ASI data in urban and rural Gujarat were not in the same direction. It was, therefore, not desirable to make any adjustment in the value added proportion for the year 1993-94 based on the employment proportions available from NSS surveys. On the other hand, the employment proportion from NSS in Gujarat for the year 1993-94 gave allocation proportion reasonably consistent with the trend in the allocation proportion obtained at the national level. As a result, we decided to use the NSS employment proportion for allocating the income from the registered manufacturing between urban and rural areas for the year 1993-94.

3.6 Un-Registered Manufacturing

For unregistered manufacturing sector, the differential in rural and urban GVA estimates obtained from the 51st, 56th and 62nd NSS Round Survey of unorganized manufacturing sector conducted in 1994-95, 2000-01 and 2005-06 respectively are used to compute rural-urban estimates of GVA from unregistered manufacturing sector.

3.7 Electricity, Gas and Water Supply

The rural/urban proportions of the NSS workforce for the years 1993-94, 1999-2000 and 2004-05, are applied in the sub-sectors – Gas and Electricity. For the sub-sector of Water Supply, actual value added proportions are available for the years 1993-94 and 1999-2000, and the same are used. For the year 2004-05, NSS workforce proportions for rural and urban areas have been applied.

3.8 Construction

There are five major components through which the GVA in the construction sector is estimated. These are (1) Public sector construction, (2) Rural residential building, (3) Urban residential building, (4) Other construction works and (5) Residual construction works.

For the years 1999-00 and 2004-05, the public part of construction work is distributed in urban - rural breakup of average cost incurred per completed construction during the last 365 days available from NSS 58th Round (2002) State Sample Report on Housing Conditions. Accordingly, average cost in Rs. per sq. mt. construction in rural areas is Rs.965/- and that of urban areas is Rs.1403/-. This average cost comprises of material cost (pucca), material cost (others), labour cost and other cost. Similarly, residual construction work for the years 1999-2000 and 2004-05 and other household construction activity during 2004-05 are also allocated on the basis of average cost incurred per completed construction in the rural-urban areas as available from 58th Round NSS Report on Housing Conditions.

For 1999-2000, other construction work is allocated on the basis of rural - urban differentials as observed in the registered manufacturing sector.

For the year 1993-94, for Public, residual and rural-urban non residential buildings, the workforce estimates as available from NSS Employment and Unemployment Survey – 1993-94 is used.

The value added from rural residential buildings and urban residential buildings are already available separately for the GSDP estimation and are, therefore, allocated directly to the two areas.

3.9 Trade, Hotels and Restaurants

The GVA for this sector is prepared in two parts namely, organized and unorganized. The organized component comprises of public sector and the organized private sector.

For the year 1993-94, the value added proportions for rural and urban areas are separately available for public, private organized and private un-organised parts of trade, hotels and restaurants.

For the years 1999-2000 and 2004-05, the value added for rural and urban areas are separately available for private un-organised part. For the same years, GVA from public and private organized activities of trade, hotels and restaurants sector have been allocated on the basis of NSS rural urban workforce as available from 50th and 55th Rounds respectively.

3.10 Railways

For Railways, the rural and urban workforce as available separately for 1999-2000 from the NSS 55th Round of Employment-Unemployment Survey (EUS) has been used to derive the rural-urban income differentials for all the three benchmark years : 1993-94, 1999-2000 and 2004-05. This differential has been used to allocate total income at the state level from railways into rural and urban areas.

3.11 Transport other than Railways, Storage and Communication

Transport other than Railways

Transport other than railways covers road, water and air transport activities. Road transport includes mechanized road transport, and non-mechanized road transport activities. Mechanized road transport is sub-divided in public and private mechanized road transport activities. Value added from Public mechanized road transport activities except Ahmedabad Municipal Transport Services (AMTS), for all the benchmark years 1993-94, 1999-2000 and 2004-05 have been allocated on the basis of rural – urban workforce from respective rounds : 50th, 55th and 61st of NSS. Entire activity of AMTS has been treated as urban.

Value added from Private mechanized road transport has been available separately for the rural and urban areas for all the benchmark years. Similarly, separate value added for private non-mechanized activities are also available in rural – urban break-ups.

The value added from water transport and supporting services has been allocated on the basis of rural - urban workforce proportions as available from respective NSS rounds.

The entire air transport activities have been treated as urban.

Storage

For storage, the rural and urban workforce as available separately for 1999-2000 from the NSS 55th Round of Employment-Unemployment Survey (EUS) has been used to derive the rural-urban income differentials for all the two benchmark years 1999-2000 and 2004-05. However, for the year 1993-94, the workforce data as available from Economic Census 1992 have been used for allocation.

Communication

Communication comprises of public and private communication activities. Of which, private communication consists of courier services, cable operators and other communication activities.

For the benchmark years 1999-2000 and 2004-05, value added from private communication is available separately for rural and urban areas. Public communication activities have been allocated on the basis rural – urban proportion of workforce from the respective NSS rounds.

For the year 1993-94, the estimates for private communication as well as public communication are not available under rural-urban break up. Hence, rural - urban proportions of workers as obtained from the Economic Census, 1992 have been used.

2.12 Banking & Insurance

In the case of Banking and Insurance sector, the rural and urban break-up of deposits and credits of scheduled commercial banks is used as an indicator for allocation of the GVA to the rural and urban areas. The data on deposits and credits of scheduled commercial banks in respect of Gujarat State have been obtained from the Reserve Bank of India publication –“Basic Statistical Returns” for the years ending March 1994 (Vol. 24), March 2000 (Vol. 29) and March 2005 (Vol. 34) and accordingly, rural-urban estimates for the years 1993-94, 1999-2000 and 2004-05 are obtained.

2.13 Real estate, Ownership of Dwellings & Business Services

For the base years 1999-2000 and 2004-05, the economic activities covered in this sector are (i) ownership of dwellings (occupied residential houses); (ii) real estate services (activities of all types of dealers such as operators, developers and agents connected with real estate); (iii) renting of machinery and equipment without operator and of personal and household goods;(iv) computer and related activities; (v) accounting, book-keeping and related activities; (vi) research and development, market research and public opinion polling, business & management consultancy, architectural, engineering & other technical activities, advertising and business activities not elsewhere classified (n.e.c); and (vii) legal services. Ownership of dwellings also includes the imputed value of owner occupied

dwelling. In all these activities except Computer services (organized part), the GVA estimates are available in rural – urban break up and are, therefore, allocated to rural and urban areas directly on the basis of rural-urban differential in GVA. The computer services – organized part for the year 1999-2000 is allocated on the basis of NSS workforce – rural-urban proportions from the NSS workforce; whereas, the same for the year 2004-05 has been allocated on the basis of rural - urban differentials as observed in the un-organized part.

During the earlier base year 1993-94, the economic activities in this sector were covered under (i) ownership of dwellings (occupied residential houses); (ii) real estate services (activities of all types of dealers such as operators, developers and agents connected with real estate); (iii) legal services; and (iv) business services only. In all these activities except, business services (organized part) the GVA estimates are available in rural – urban break up, and are, therefore, allocated to rural and urban areas directly on the basis of rural-urban differential in GVA. In business services – organized part, value added has been allocated on the basis of rural – urban workforce from NSS 50th Round.

2.14 Public Administration

For estimation of rural – urban differentials in public administration, the workforce estimates as available through NSS 50th Round (1993-94), 55th Round (1999-2000) and Economic Census 2005 have been used for the benchmark years 1993-94, 1999-2000 and 2004-05 respectively.

2.15 Other Services

The economic activities covered under this sector are (i) coaching and tuition; (ii) education excluding coaching and tuition; (iii) human health activities and veterinary activities; (iv) sewage and refuse disposal, sanitation activities; (v) activities of membership organizations; (vi) recreational, cultural and sporting activities; (vii) washing and cleaning of textiles and fur products; (viii) hair dressing and other beauty treatment; (ix) funeral and related activities; (x) private households with employed persons; (xi) custom tailoring; and (xii) extra territorial organizations and bodies.

For the year 1993-94, Education services except scientific and research part, health services except health (private un-organised part), public sanitary activities and activities from extra territorial organizations have been allocated on the basis of rural-urban workforce proportions from NSS 50th Round. Where as for rest of the activities under this sub-group, value added estimates are separately available for rural and urban areas.

For the benchmark years 1999-2000 and 2004-05, value added from public part of education and health services is allocated to rural and urban areas on the basis of rural-urban proportion from NSS workforce. Public part of sewage and television & radio are treated as urban activities. For all other activities of this sector, the estimates of GVA are available separately for rural and urban areas as a product of GVA per worker and work force. The rural-urban GVA thus obtained is used for allocating the income to the two areas.

IV. ESTIMATES AND ANALYSIS

Our detailed estimates for incomes originating in urban and rural areas of Gujarat for the three benchmark years are presented in Table 1 along with methods used for estimation. This table summarizes our detailed methodology and hence broad sources of data used for estimating the rural – urban incomes in Gujarat. It is evident that we have attempted as detailed sectoral break ups as possible in each of the three years. What is worth noting is that the methodological details and sources do vary from one benchmark year to another. Thus, the estimates are technically not strictly comparable over time. However, considering that such technical non-comparability always exists for the estimation of even the more popular and regular aggregates like GSDP, it is not considered serious impediment for broad comparison of trends. This is because the changes in methods and sources are more compelled by the accepted practice to follow the best available options to generate reliable numbers for the year in question.

More details and better data available over time are generally expected and appreciated for any such efforts to estimate aggregates. However, what we find here and have to deal with regrettably are instances of required details and surveys being available in past years but not being available for more recent years. In the previous section, such instances have been pointed out. In order to consider this aspect of changing methods and sources formally, we have reported in Table 2 by the conventional 17 sector classification, three broad methods used in the present study for estimation, viz. actual value added available directly; employing the workforce proportions to allocate the income between urban – rural areas; and other indicators or ratios used for allocating the income. We may call it firmness of estimates or quality of our estimates in the three benchmark years.

It is evident from Table 2 that in the aggregate, the proportion of direct or actual data on value addition available for estimation has been increasing over time from 1993 to 2004. Similarly, the proportion of the employment based allocation has been declining substantially over the same time. The use of other indicators and ratios for allocation of incomes is of similar dimension over time. Thus, the quality and reliability of the urban – rural income estimates in Gujarat are on the whole improving, though at specific sector levels, the trends in this regards are not unequivocal.

Table 1: Estimates of Urban and Rural Incomes for the Three Benchmark Years by Detailed Sub-Sectors

Sr. No.	Sector	1993-94 Rs. Lakhs			
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
1	Agriculture	927821	51522	979343	
	Agriculture	936912	35648	972560	NSS WF 1993-94
	Livestock	308658	19004	327662	L S Pop.
2	Forestry & Logging	41938	1427	43365	
	Industrial Wood	2005	0	2005	100% RURAL
	Fuel wood	43442	1586	45028	MPCE R/U
	Minor forest product	1151	0	1151	100% RURAL
3	Fishing	65121	13670	78791	Eco.C. 1990 WF
4	Mining & Quarrying	4477	146541	151018	
	Petroleum & Natural Gas	0	143721	143721	100 % urban
	Minor Minerals	1470	1470	2940	50-50 % R/U
	Rest excl. above Two	3007	1350	4357	NSS WF 1993-94
5	Registered	417228	526220	943448	NSS WF 1993-94
6	Un-registered	96615	350372	446987	Actual
7	Electricity, Gas & W.S.	58234	86513	144747	
	Electricity	48722	63830	112552	NSS WF 1993-94
	Gas	8844	11587	20431	NSS WF 1993-94

Sr. No.	Sector	1999-2000 Rs. Lakh			
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
1	Agriculture	1554393	43133	1597526	
	Agriculture	1659350	32382	1691732	NSS WF
	Livestock	543636	28875	572511	LS pop.
2	Forestry & Logging	33753	1110	34863	
	Industrial Wood	1912	0	1912	100% RURAL
	Fuel wood	33765	1233	34998	MPCE R/U
	Minor forest product	1828	0	1828	100% RURAL
3	Fishing	113706	23869	137575	Eco.C. 1992 WF
4	Mining & Quarrying	30817	244793	275610	
	Petroleum & Natural Gas	0	232554	232554	100 % urban
	Minor Minerals	5343	5344	10687	50-50 % R/U
	Rest excl. above Two	25474	6895	32369	No of Est. EC 98
5	Registered	1271111	1201867	2472978	Actual
6	Un-registered	202761	702825	905586	Actual
7	Electricity, Gas & W.S.	142519	154640	297159	
	Electricity	102871	111892	214763	R / U WF

Sr. No.	Sector	2004-05 Rs. Lakh			
		GVA		Total GVA Rs. Lakh	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
1	Agriculture	2568886	105744	2674630	
	Agriculture	1913299	67342	1980641	NSS R/ U WF
	Livestock	655587	38402	693989	LS popul.
2	Forestry & Logging	411631	38776	450407	
	Industrial Wood	3825	0	3825	100 % Rural
	Fuel wood	65475	6706	72181	MPCE
	TOF	275193	28186	303379	MPCE
	Fodder	66307	3884	70191	LS popul.
	Minor forest product	831	0	831	100 % Rural
3	Fishing	89878	55671	145549	Mechanised boats
4	Mining & Quarrying	52683	649947	702630	
	Petroleum & Natural Gas	0	619403	619403	100 % urban
	Minor Minerals	11036	11035	22071	50-50 % R/U
	Rest excl. above Two	41647	19509	61156	No of Est. EC 2005
5	Registered	2206119	2111140	4317259	actual
6	Un-registered	336330	890704	1227034	actual
7	Electricity, Gas & Water Supply	270048	315242	585290	

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Sr. No.	Sector	1993-94 Rs. Lakhs			
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Water Supply	667	11097	11764	Actual
8	Construction	112560	111771	224331	
	Public Part	53858	54598	108456	NSS WF 1993-94
	RRB	19265	0	19265	100% RURAL
	URB	0	17194	17194	100 % urban
	R/U non resi. Buildings	4317	4376	8693	NSS WF 1993-94
	Residual	35120	35603	70723	NSS WF 1993-94
9	Trade, Hotels & Restaurants	133535	386481	520016	
	Trade	130882	380636	511519	
	Public Part	3387	7903	11291	Actual
	Private Un-organized	123156	358557	481713	Actual
	Private Organized	4339	14176	18515	Actual
	Hotels & Restaurants	7665	20352	28017	
	Public Part	1129	2634	3763	Actual
	Private Un-organized	5069	12923	17992	Actual
	Private Organized	1468	4794	6262	Actual
10	Railways	12666	56548	69214	NSS R/ U WF 1999 -00

Sr. No.	Sector	1999-2000 Rs. Lakh			
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Gas	27174	29556	56730	R / U WF
	Water Supply	12474	13192	25666	Actual
8	Construction	226256	405838	632094	
	Public Part	149507	224260	373767	NSS 58th RD
	RRB	33654	0	33654	Actual
	URB	0	34792	34792	Actual
	OCW	8377	7916	16293	Regd Mnf diff
	Residual	34718	138870	173588	NSS 58th RD
	Others			0	
9	Trade, Hotels & Restaurants	236582	1107317	1343899	
	Trade	277671	971879	1249550	
	Public Part	7267	15949	23216	R / U WF
	Private Un-organized	229345	788501	1031112	Actual
	Private Organized	41059	167429	208488	R / U WF
	Hotels & Restaurants	21356	105664	127019	
	Public Part	234	503	737	R / U WF
	Private Un-organized	10199	81737	91936	Actual
	Private Organized	10922	23424	34346	R / U WF

Sr. No.	Sector	2004-05 Rs. Lakh			
		GVA		Total GVA Rs. Lakh	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Electricity	188466	220006	408472	NSS R/ U WF
	Gas	56213	65621	121834	NSS R/ U WF
	Water Supply	25369	29615	54984	NSS R/ U WF
8	Construction	532171	770231	1302402	
	Public Part	186588	279882	466470	NSS 58th RD
	RRB	65743	0	65743	Actual
	URB	0	70589	70589	Actual
	Other Household	269886	404830	674716	NSS 58th RD
	Residual	9954	14930	24884	NSS 58th RD
9	Trade, Hotels & Restaurants	1041133	2326954	3368087	
	Trade	893104	2141463	3034567	
	Public Part	9277	20556	29833	NSS R/ U WF
	Private Un-organized	698584	1345362	2043946	Actual
	502+50404	8387	6217	14604	
	50-502-50404	4321	1997	6317	
	51+74991	119603	220720	340323	
	526	9797	13659	23456	
	52-526	185513	388353	573867	

Sr. No.	Sector	1993-94 Rs. Lakhs			
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
11	Transport by other means	58425	136711	195136	
	Mechanized Road Transport	58680	110692	169372	
	Public	0	297	297	
	ST	10932	21551	32483	NSS WF 1993-94
	AMTS	0	2499	2499	100 % urban
	Private	24495	76379	100874	
	6021	627	1245	1872	Actual
	60221	10000	42810	52810	Actual
	60231	13868	32324	46192	Actual
	Non mechanized	23253	9966	33219	
	60222+60232	23253	9966	33219	Actual
	Water Transport	6780	13367	20147	NSS WF 1993-94
	Air Transport	0	3923	3923	100 % urban
	Supporting services	2393	18233	20626	R / U WF
12	Storage	243	1029	1272	Eco.C. 1990 WF
13	Communication	17977	46005	63982	Eco.C. 1990 WF

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Sr. No.	Sector	1999-2000 Rs. Lakh			
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
10	Railways	14414	64352	78766	NSS R/ U WF 1999 -00
11	Transport by other means	156041	308746	464788	
	Mechanized Road Transport	120921	212427	333349	
	Public	893	1301	2195	
	ST	17191	25089	42280	R / U WF
	AMTS	0	3752	3752	100 % urban
	Private	102837	182285	285122	
	6021	11527	12792	24319	Actual
	60221	33805	61968	95773	Actual
	60231	57505	107525	165030	Actual
	Non mechanized	19706	32579	52285	
	60222	6306	13473	19779	Actual
	60232	13400	19106	32506	Actual
	Water Transport	11725	31455	43180	R / U WF
	Air Transport	274	6260	6534	R / U WF
	Supporting services	3415	26025	29440	R / U WF
12	Storage	1146	5402	6548	R / U WF 1999-00
13	Communication	44783	111874	156657	

Sr. No.	Sector	2004-05 Rs. Lakh			
		GVA		Total GVA Rs. Lakh	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Private Organized	185243	775545	960788	NSS R/ U WF
	Hotels & Restaurants	148029	185491	333520	
	Public Part	156	347	503	NSS R/ U WF
	Private Un-organized	103223	86215	189438	Actual
	551	12065	3773	15839	Actual
	552	6870	12041	18911	Actual
	Private Organized	44649	98930	143579	NSS R/ U WF
10	Railways	27377	122223	149600	NSS R/ U WF 1999 -00
11	Transport by other means	351074	608144	959218	
	Mech. Road Transport	292672	508001	800673	
	Public incl. AMTS	28152	35456	63608	
	Public	28152	33303	61455	NSS R/ U WF
	AMTS	0	2153	2153	100 % urban
	Private	228595	424366	652961	
	6021	29750	41914	71664	Actual
	60221	69624	144919	214543	Actual
	60231	129221	237533	366754	Actual
	Non mechanised	35925	48179	84104	

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Sr. No.	Sector	1993-94		Rs. Lakhs	
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
14	Banking & Insurance	66065	266190	332255	Deposit ratio of sch.com. bank, RBI, March-1994,P-44
15	Real estate, Owner of Dw. Total	109587	202003	311590	
	Real estate	72	941	1013	Actual
	Business services - org. part	2770	10675	13445	NSS WF 1993-94
	Business services - un org. part	1357	2132	3489	Actual
	Legal services	1034	6544	7578	Actual
	Ownership of Dwellings	104354	181711	286065	Actual
16	Public Administration	38729	118706	157435	NSS WF 1993-94
17	Other Services	57154	208975	266129	
	Education	31963	97968	129931	NSS WF 1993-94
	Education (Sci & Research)	0	4344	4344	Actual

Sr. No.	Sector	1999-2000		Rs. Lakh	
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Public	35429	81887	117316	R / U WF
	Private	9354	29987	39341	Actual
	Courier	1492	3900	5392	Actual
	Cable operators	702	2713	3415	Actual
	Other communications	7160	23374	30534	Actual
14	Banking & Insurance	143801	579398	723199	Deposit ratio of sch.com.bank,RBI, March-2000,P-55
15	Real estate, Owner of Dw.	218217	461240	679457	
	Real estate	500	3159	3659	Actual
	Renting of Machinery & Equip.	1014	5686	6700	Actual
	Computer and related activities	491	10412	10903	
	Organized part	461	9775	10236	R / U WF
	Un- Organized	30	637	667	Actual

Sr. No.	Sector	2004-05		Rs. Lakh	
		GVA		Total GVA Rs. Lakh	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	60222	18720	30204	48924	Actual
	60232	17205	17975	35180	Actual
	Water, Air and supporting services	83166	98379	181545	NSS R/ U WF
12	Storage	849	3991	4840	R/ U WF 1999-00
13	Communication	47526	272356	319882	
	Public	32008	184332	216340	NSS R/ U WF
	Private	15518	88024	103542	Actual
	Courier	1877	9467	11344	Actual
	Cable operators	650	3742	4392	Actual
	Other communications	12991	74815	87806	Actual
14	Banking & Insurance	181645	953638	1135283	Deposit ratio of scheduled com. Bank
15	Real estate, Ownership of Dwelling				

Sr. No.	Sector	1993-94 Rs. Lakhs			
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Medical & Health (Pub+Pvt. organized)	8102	17631	25733	NSS WF 1993-95
	Medical & Health (Pvt. Un-organized)	3542	19077	22619	Actual
	Recreational & Entertainment	995	3051	4046	NSS WF 1993-94
	Sanitary services (Public)	908	8354	9262	R / U WF
	Sanitary services (Pvt)	491	5432	5923	Actual
	Rest of services	3657	33654	37311	Actual
	Tailoring	5573	15277	20851	Actual
	Extra Territorial Organization	1924	4186	6110	NSS WF 1993-94

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Sr. No.	Sector	1999-2000 Rs. Lakh			
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Legal services	1533	13440	14973	Actual
	Accounting & Book Keeping	781	10164	10945	Actual
	Research and Development	6222	35823	42045	Actual
	Ownership of Dwellings	207676	382556	590232	Actual
16	Public Administration	169143	326964	496107	R / U WF
17	Other Services	229686	453447	683133	
	Education	140206	220452	360658	
	Coaching centre	5060	28740	33800	Actual
	Except coaching centre	79280	115389	194669	Actual
	education public	51910	69443	121353	R / U WF
	Health	30534	115107	145641	
	Health (Pvt. Org. & un org. ser.)	9161	52700	61861	Actual
	Health Public	20511	59159	79670	R / U WF
	Sanitary	5957	20025	25982	
	Pvt. Sanitary Services	5789	16843	22632	Actual
	Sanitation public	0	2617	2617	Actual
	Activity of	11707	16425	28132	Actual

Sr. No.	Sector	2004-05 Rs. Lakh			
		GVA		Total GVA Rs. Lakh	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	and Business Services	435468	900901	1336369	
	Real estate	579	5484	6063	Actual
	Renting of Machinery & Equipment	2410	20708	23118	Actual
	Computer and related activities	1917	199853	201770	
	Organized part	1727	180044	181771	un org. ratio
	Un-Organized	190	19809	19999	Actual
	Legal services	1527	15428	16955	Actual
	Accounting & Book Keeping	1043	26423	27466	Actual
	Research and Development	5782	52915	58697	Actual
	Ownership of Dwellings	422210	580090	1002300	Actual
16	Public Administration	172844	475127	647971	EC 2005
17	Other Services	305612	705241	1010853	Actual
	Education	178678	363741	542419	
	Public part	98439	160321	258760	NSS R/ U WF
	Coaching centre	9995	42201	52196	Actual
	Except coaching centre	70244	161219	231463	Actual
	Health	51417	144861	196278	

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Sr. No.	Sector	1993-94		Rs. Lakhs	
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		

Sr. No.	Sector	1999-2000		Rs. Lakh	
		GVA		Total GVA Rs. Lakhs	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Membership org.				
	Recreational	7138	23046	30184	
	Recreational, Cultural & Sporting pvt.	7138	19954	27092	Actual
	Recreation public	0	3092	3092	Actual
	Washing & Clean. Of Textile	2017	10246	12263	Actual
	Hair dressing	15549	11707	27256	Actual
	Tailoring	8866	12921	21787	Actual
	Funeral & Related Activities	3250	5065	8315	Actual
	Pvt. H.h. with Employed Persons	4456	18146	22602	Actual
	Extra Territorial Organizations	7	306	313	Actual

Sr. No.	Sector	2004-05		Rs. Lakh	
		GVA		Total GVA Rs. Lakh	Indicator used
		Rural Rs. Lakh	Urban Rs. Lakh		
	Health (Pvt. Org. & un org. medical ser.)	6732	72085	78817	Actual
	Health Public part	44685	72776	117461	NSS R/ U WF
	Sanitary	1487	18914	20401	
	Pvt. Sanitary Services	1487	16970	18457	Actual
	Sanitary Public	0	1944	1944	Actual
	Activity of Membership org.	40878	44511	85389	Actual
	Recreational	3790	41663	45453	
	Recreational, Cultural & Sporting Acti.	3790	38787	42577	Actual
	Recreation Public Part	0	2876	2876	Actual

Table 2: Degree of Firmness in Data and Methodologies Used in Estimation of Urban - Rural Incomes in Gujarat

Sr No.	Sector	1993-94				1999-00				2004-05			
		Part A Actual	Part B NSS W/F	Part C Other	Total	Part A Actual	Part B NSS W/F	Part C Other	Total	Part A Actual	Part B NSS W/F	Part C Other	Total
1	Agriculture	0	734507	244836	979343	0	1193594	403932	1597526	0	1980641	693989	2674630
	% to Total	0.0	75.0	25.0	100.0	0.0	74.7	25.3	100.0	0.0	74.1	25.9	100.0
2	Forestry & Logging	3156	0	45028	48184	38738	0	0	38738	4656	0	445751	450407
	% to Total	6.5	0.0	93.5	100.0	100.0	0.0	0.0	100.0	1.0	0.0	99.0	100.0
3	Fishing	0	0	78791	78791	0	0	137575	137575			145549	145549
	% to Total	0.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0
4	Mining & Quarrying	143721	4357	2940	151018	232554	0	43056	275610	619403	0	83227	702630
	% to Total	95.2	2.9	1.9	100.0	84.4	0.0	15.6	100.0	88.2	0.0	11.8	100.0
5	Registered	0	943448	0	943448	2472978	0	0	2472978	4317259			4317259
	% to Total	0.0	100.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0
6	Un-registered	446987	0	0	446987	905586	0	0	905586	1227034			1227034
	% to Total	100.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0
7	Electricity, Gas & W.S.	11764	132983	0	144747	25666	271493	0	297159	0	585290	0	585290
	% to Total	8.1	91.9	0.0	100.0	8.6	91.4	0.0	100.0	0.0	100.0	0.0	100.0

8	Construction	0	224331	0	224331	68446	373767	189881	632094	136332	1166070	0	1302402
	% to Total	0.0	100.0	0.0	100.0	10.8	59.1	30.0	100.0	10.5	89.5	0.0	100.0
9	Trade, Hotels & Restaurants	539536	0	0	539536	1123048	232441	34346	1389835	2233384	1134703	0	3368087
	% to Total	100.0	0.0	0.0	100.0	80.8	16.7	2.5	100.0	66.3	33.7	0.0	100.0
10	Railways	0	69214	0	69214	0	78766	0	78766		149600		149600
	% to Total	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0
11	Transport by other means	61401	73256	33219	167876	341159	121434	2195	464788	676026	222876	60315	959218
	% to Total	36.6	43.6	19.8	100.0	73.4	26.1	0.5	100.0	70.5	23.2	6.3	100.0
12	Storage	0	0	1272	1272	0	6548	0	6548	0	4840	0	4840
	% to Total	0.0	0.0	100.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0
13	Communication	0	0	63982	63982	78682	117316	0	195998	11344	412080	0	423424
	% to Total	0.0	0.0	100.0	100.0	40.1	59.9	0.0	100.0	2.7	97.3	0.0	100.0
14	Banking & Insurance	0	0	332255	332255	0	0	723199	723199	0	0	1135283	1135283
	% to Total	0.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	100.0
15	Real estate, Owner of Dw. Total	293145	13445	0	306590	669221	10236	0	679457	1154598	0	181771	1336369
	% to Total	95.6	4.4	0.0	100.0	98.5	1.5	0.0	100.0	86.4	0.0	13.6	100.0
16	Public Administration	0	157435	0	157435		496107		496107			647971	647971
	% to Total	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0	0.0	0.0	100.0	100.0
17	Other Services	91048	175082	0	266130	417388	201023	0	618411	555815	376221	0	932036

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% to Total	34.2	65.8	0.0	100.0	67.5	32.5	0.0	100.0	59.6	40.4	0.0	100.0
Total	1590758	2528058	802323	4921139	9417411	6620305	2544751	18582467	10935851	6032321	3393856	20362029
% to Total	32.3	51.4	16.3	100.0	50.7	35.6	13.7	100.0	53.7	29.6	16.7	100.0

Table 3 presents our estimates of the rural and urban incomes originating in the 17 main sectors in Gujarat in the three benchmark years. The contribution of urban areas in the population of Gujarat was 34.49% in 1993-94, 37.62% in 1999-00, and 38.41% in 2004-05. In geographic terms, urban areas contributed only 2.6% in 1991, 2.7% in 2001, and 2.8% in 2011 in the state. However, in the state income (GSDP), urban areas contributed about 54.9% in 1993-94, 56.1% in 1999-00, and 55.6% in 2004-05. As a consequence, the per capita income in urban Gujarat is significantly higher than the average per capita income in the state. Table 3 shows that the difference between the state average and urban per capita income is widening in absolute terms from Rs. 6,717 in 1993-94 to Rs. 11,188 in 1999-00 to Rs. 16,905 in 2004-05. However, the same in relative terms is steeply decreasing from 59% in 1993-94 to 50% in 1999-00 to 45% in 2004-05.

It clearly implies that over the three benchmark years, urban income grew at a lower rate than the average income in Gujarat contrary to general perception in this regard. Our estimates indicate that during 1993-94 to 1999-00, per capita state income at current prices increased by 98%, urban income by 86%, and rural income by 101%. During 1999-00 to 2004-05, the per capita state income at current prices grew by 69%, urban income by 63%, and rural income by 74%. Thus, rural per capita incomes in Gujarat grew faster than urban per capita incomes during 1993-94 to 2004-05. This is consistent with the evidence on high growth trajectory of Gujarat agriculture (Dholakia and Datta, 2010), and favourable terms of trade for agriculture in Gujarat during the last two decades (Dholakia, 2010).

Table 3: Estimates of Rural – Urban Income of Gujarat State

S.No	Sector	1993-94			1999-2000			2004-05		
		GVA (Rs. Lakh)			GVA (Rs. Lakh)			GVA (Rs. Lakh)		
		Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1	Agriculture	927821	51522	979343	1554393	43133	1597526	2568886	105744	2674630
2	Forestry & Logging	41938	1427	43365	33753	1110	34863	411631	38776	450407
3	Fishing	65121	13670	78791	113706	23869	137575	89878	55671	145549
4	Mining & Quarrying	4477	146541	151018	30817	244793	275610	52683	649947	702630
5	Registered	417228	526220	943448	1271111	1201867	2472978	2206119	2111140	4317259
6	Un-registered	96615	350372	446987	202761	702825	905586	336330	890704	1227034
7	Electricity, Gas & Water	58234	86513	144747	142519	154640	297159	270048	315242	585290
8	Construction	112560	111771	224331	226256	405838	632094	532171	770231	1302402
9	Trade, Hotels & Rest.	133535	386481	520016	236582	1107317	1343899	1041133	2326954	3368087
10	Other Transport	58425	136711	195136	156041	308746	464787	27377	122223	149600
11	Railways	12666	56548	69214	14414	64352	78766	351074	608144	959218
12	Storage	243	1029	1272	1146	5402	6548	849	3991	4840
13	Communication	17977	46005	63982	44783	111874	156657	47526	272356	319882
14	Banking & Insurance	66065	266190	332255	143801	579398	723199	181645	953638	1135283
15	Real estate, Dwel. & Busi.ser.	109587	202003	311590	218217	461240	679457	435468	900901	1336369
16	Public Administration	38729	118706	157435	169143	326964	496107	172844	475127	647971
17	Other Services	55148	201352	256500	229686	453447	683133	305612	705241	1010853
18	Total GVA	2216369	2703061	4919430	4789129	6196815	10985944	9031274	11306030	20337304
19	Population (In 00)	284642	149834	434476	306040	184530	490570	33132	20666	53798
20	Per Capita GSDP(Rs.)	7787	18040	11323	15649	33582	22394	27258	54708	37803

It is worth examining the structure of the rural and the urban economies in Gujarat and trends therein over time. Table 4 presents the structure of the urban and the rural economies in terms of income for the three benchmark years. As expected, the income structure of the two areas sharply differs in all the three years. Moreover, as per our estimates, there are substantial changes in the income structure over short time of eleven years in both the areas. The table shows that the structure of the economy of urban Gujarat is heavy on the secondary and tertiary activities, while the rural economy in Gujarat is heavy on the primary and secondary activities.

Table 4: Structure of Rural and Urban Economies of Gujarat State

S. No	Sector	1993-94				1999-2000				2004-05			
		Rural		Urban		Rural		Urban		Rural		Urban	
		GVA Rs.Lakh	% Share	GVA Rs.Lakh	% Share	GVA Rs.Lakh	% Share	GVA Rs.Lakh	% Share	GVA Rs.Lakh	% Share	GVA Rs.Lakh	% Share
1	Agriculture	927821	41.9	51522	1.9	1554393	32.5	43133	0.7	2568886	28.4	105744	0.9
2	Forestry & Logging	41938	1.9	1427	0.1	33753	0.7	1110	0.0	411631	4.6	38776	0.3
3	Fishing	65121	2.9	13670	0.5	113706	2.4	23869	0.4	89878	1.0	55671	0.5
4	Mining & Quarrying	4477	0.2	146541	5.4	30817	0.6	244793	4.0	52683	0.6	649947	5.7
	PRIMARY	1039357	46.9	213160	7.9	1732669	36.2	312905	5.0	3123078	34.6	850138	7.5
5	Registered	417228	18.8	526220	19.5	1271111	26.5	1201867	19.4	2206119	24.4	2111140	18.7
6	Un-registered	96615	4.4	350372	13.0	202761	4.2	702825	11.3	336330	3.7	890704	7.9
7	Electricity, Gas & Water Supply	58234	2.6	86513	3.2	142519	3.0	154640	2.5	270048	3.0	315242	2.8
8	Construction	112560	5.1	111771	4.1	226256	4.7	405838	6.5	532171	5.9	770231	6.8
	SECONDARY	684637	30.9	1074876	39.8	1842647	38.5	2465170	39.8	3344668	37.0	4087317	36.2
9	Trade, Hotels & Restaurants	133535	6.0	386481	14.3	236582	4.9	1107317	17.9	1041133	11.5	2326954	20.6
10	Transport by other means	58425	2.6	136711	5.1	156041	3.3	308746	5.0	351074	3.9	608144	5.4
11	Railways	12666	0.6	56548	2.1	14414	0.3	64352	1.0	27377	0.3	122223	1.1
12	Storage	243	0.0	1029	0.0	1146	0.0	5402	0.1	849	0.0	3991	0.0
13	Communication	17977	0.8	46005	1.7	44783	0.9	111874	1.8	47526	0.5	272356	2.4
14	Banking & Insurance	66065	3.0	266190	9.8	143801	3.0	579398	9.3	181645	2.0	953638	8.4
15	Real estate, Owner of Dw. & Busi.ser.	109587	4.9	202003	7.5	218217	4.6	461240	7.4	435468	4.8	900901	8.0
16	Public Administration	38729	1.7	118706	4.4	169143	3.5	326964	5.3	172844	1.9	475127	4.2
17	Other Services	55148	2.5	201352	7.4	229686	4.8	453447	7.3	305612	3.4	705241	6.2
	TERTIARY	492375	22.2	1415025	52.3	1213813	25.3	3418740	55.2	2563528	28.4	6368575	56.3
18	Total GVA	2216369	100.0	2703061	100.0	4789129	100.0	6196815	100.0	9031274	100.0	11306030	100.0

Table 4 also shows that the urban areas in Gujarat are shifting marginally towards tertiary activities and away from the secondary activities. The rural areas, on the other hand, are shifting substantially towards the secondary and tertiary activities and away from the primary activities. Thus, rural areas in Gujarat are economically developing from the primary to secondary to tertiary activities as expected in the standard development theory. What is significant is that its growth is faster than the urban areas in the state, reducing the regional inequality in the process. The urban areas in Gujarat also do not conform to the fears of industrial activities overcrowding and congesting cities. These activities appear to be going to the rural areas, where land and water are cheaper.

Table 5 presents share of urban areas in the total income for Gujarat and all-India by 17 major sectors in the three benchmark years. It is interesting to note that mining & quarrying is predominantly an urban activity, and registered manufacturing has become predominantly a rural activity of late in Gujarat, whereas in the country they are predominantly rural and urban activities respectively. However, unregistered manufacturing in the state are pre-dominantly urban activities. As expected, all service sector activities are pre-dominantly urban in the country as well as the state.

Table 5: Share of Urban Areas in Income by Sector- India and Gujarat

Sr.No	Sector	All India			Gujarat		
		1993-94	1999-2000	2004-05	1993-94	1999-2000	2004-05
1	Agriculture	5.2	6.2	4.5	5.3	2.7	4.0
2	Forestry & Logging	3.2	6.0	8.3	3.3	3.2	8.6
3	Fishing	32.5	20.8	26.4	17.3	17.3	38.2
4	Mining & Quarrying	34.1	57.6	33.7	97.0	88.8	92.5
5	Registered	70.0	60.1	58.1	55.8	48.6	48.9
6	Un-registered	70.7	55.7	56.6	78.4	77.6	72.6
7	Electricity, Gas & Water Supply	62.7	54.6	66.8	59.8	52.0	53.9
8	Construction	54.9	56.7	54.5	49.8	64.2	59.1
9	Trade, Hotels & Restaurants	69.0	73.0	59.1	74.3	82.4	69.1
10	Transport by other means	66.7	71.6	61.7	70.1	66.4	81.7
11	Railways	66.2	69.0	69.0	81.7	81.7	81.7
12	Storage	69.0	68.8	86.0	80.9	82.5	82.5
13	Communication	58.5	69.2	83.0	71.9	71.4	85.1
14	Banking & Insurance	83.6	85.5	85.2	80.1	80.1	84.0
15	Real Estate, Owner of Dwelling & Business services	59.8	67.9	64.2	64.8	67.9	67.4
16	Public Administration	59.7	80.1	83.9	75.4	65.9	73.3
17	Other Services	57.8	63.8	63.7	78.5	66.4	69.8
18	NDP/GSDP	46.3	51.7	52.0	54.9	56.1	55.6

What is interesting is that the share of urban areas in the total income originating in the country over the three benchmark years is rising steadily, but the same is stable at marginally higher level in Gujarat. This has to be seen in the context of both the higher proportion and higher relative growth of urban areas in Gujarat than the country as a whole. It implies that rural areas in Gujarat are becoming more productive and efficient to catch up with the urban areas. In the country as a whole, however, this does not seem to be the case. It may be analyzed more specifically by considering the income and consumption inequalities between the two areas directly.

V. URBAN - RURAL INEQUALITY IN INCOME AND CONSUMPTION

Table 6 presents urban – rural differential in per capita income and private consumption for Gujarat and all-India in the three benchmark years. The table reveals that in the year 1993-94, the extent of urban – rural inequalities both in income and private consumption was similar if not the same in Gujarat and all India, though inequality in Gujarat was marginally lower than the nation as a whole. However, over years, income inequality in Gujarat fell sharply while it increased substantially in the country. Since the concept of income used here is of income originating within the geographical boundaries, it measures the productive potential and efficiency of resources used in the respective areas. The findings of our study as summarized in the Table 6 clearly indicate that the growth experience of Gujarat sharply differs from the all India average growth experience during 1993-94 to 2004-05. In Gujarat, the rural areas grew faster than the urban areas, catching up in the growth potential and efficiency of resource use. At the all India level, the growth story was opposite. Urban areas grew faster than the rural areas, widening the gap and increasing the disparity in the productive potential and resource use efficiency further. Since Gujarat has been growing faster by at least two percentage points than the nation during the last two decades, the findings in Table 6 appear to be consistent with the hypothesis that sustained high economic growth is likely to reduce eventually the regional disparities. Even the national level inequality has reduced, though marginally, from 2.83 in 1999-00 to 2.71 in 2004-05.

Table 6: Urban – Rural Inequality in Income and Consumption, Gujarat and India.

Years	Gujarat		All - India	
	INCOME	CONSUMPTION	INCOME	CONSUMPTION
1993-94	2.32	1.50	2.39	1.63
1999-00	2.15	1.62	2.83	1.75
2004-05	2.01	1.87	2.71	1.88

Source: Our estimates in this paper and NSS Reports on Consumption of respective years.

Another interesting observation from the table is that the extent of the private consumption inequality between urban and rural areas in Gujarat and the nation is considerably less than in income originating. If we take income originating to reflect the personal income in the area, it implies that savings including taxes are substantially higher in the urban areas than in the rural areas. The difference in the inequality ratio was 0.82 in Gujarat in 1993-94, whereas it was 0.76 in all India. However, the same in 2004-05 was only 0.14 in Gujarat, but 0.83 in all India. Thus, in Gujarat, the rural areas have started catching up the urban areas in terms of savings including taxes, but at the all India level,

the urban areas have become more dominant in contributing to savings. Although the trend in private consumption inequality in Gujarat and all India is almost the same, its implications are very different. In Gujarat, the urban consumers seem to have improved their average propensity to consume and reduce their saving propensity. The rural consumers, on the other hand, have considerably improved their saving propensity and reduced their average consumption propensity. This is definitely a sign of prosperity and growth orientation. In the country as a whole, on the contrary, the urban consumers have greater concentration of income that results in higher consumption and savings. Rural consumers continue to save and consume less.

VI. SUMMARY AND CONCLUDING REMARKS

In the present paper, we have made an attempt – first of its type – to estimate urban – rural incomes at a state level using the CSO prescribed methodology and detailed data sources as used in the estimation of the state income. The concept of income originating within the geographical boundary is used with all implied limitations when applied to urban and rural areas within a state. Since the exercise is carried out with detailed break up of sectors into numerous sub-sectors, specific data gaps and methodological changes though of minor nature are mentioned for possible future improvements and replication of the effort by other states. Consideration of three benchmark years, viz., 1993-94, 1999-00 and 2004-05 for estimating the urban and rural incomes in Gujarat was very useful from this angle. Although there were some specific data gaps at sub-sector levels in all the benchmark years considered in the study, it was found that the quality and reliability of the overall estimates improved over the three benchmark years in the state.

Specific findings of the study about the urban – rural inequality in Gujarat are:

1. Urban – rural per capita income inequality in 1993-94 was of the order of 2.3 against the corresponding national figure of 2.4.
2. Urban – rural income inequality in Gujarat declined over time to the level of 2.0 by 2004-05, whereas the same increased in the nation to 2.7. Rural areas in Gujarat grew faster than urban areas, but at the national level, it was the other way round.
3. There are substantial structural changes in the urban and the rural economies of Gujarat over time. Urban areas are becoming more service oriented, while rural areas are becoming more industrialized. Contrary to the general perception, registered manufacturing in Gujarat is turning into predominantly a rural activity; and unregistered manufacturing into an urban activity.
4. Urban – rural private per capita consumption inequality was lower than income inequality in Gujarat as well as the nation in all the three benchmark years.
5. While the consumption inequality increased in both Gujarat and the nation over time, its implications for both are different because the trends in income inequality are different. At the national level, the gap between urban and rural consumers are widening in income, consumption and savings with rural consumers lagging further behind. In Gujarat, however, the growth experience is different. Rural consumers are fast catching up with urban consumers in terms of both income and savings.

The implications of our findings for the state plan and lower level planning are important particularly for the domestic resource generation and planning sector-specific activities. It is clear that rural areas in Gujarat are growing faster than the urban areas in terms of income originating and hence in terms of employment

opportunities. This needs to be explicitly recognized while formulating and implementing any programmes and schemes to generate more rural employment artificially. It can effectively hinder this natural tendency rather than strengthen it.

Moreover, rural areas in Gujarat have started saving substantially more than before. Their investment behavior is likely to be significantly different than more educated and environmentally more exposed urban investors. They are likely to consider more favourably the local investment opportunities. Well targeted efforts to provide such opportunities at their door-steps reducing to the extent possible their risks can really yield very useful additional resources for local development and growth. Otherwise, these additional savings are likely to be diverted to unproductive channels of gold, silver and land.

Finally, the observed trend of rural areas growing faster and becoming centres for large-scale (registered) manufacturing activities, while urban areas becoming centres for the small scale (unregistered) manufacturing and service sector activities is worth encouraging. It implies stronger economic linkages and integration between the two areas. It is good for the state and the national economy and also good for the consumers in both the areas. After all, urban areas in Gujarat account for only 2.8% of the total geographical area, but 43% of the population, and 56% of the income of the state. The remaining 97.2% of geographical area is available for 57% of the people of Gujarat in rural areas producing 44% of the income of the state. There is a plenty of potential for rural areas to become engine for economic growth of the state and hence the nation.

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