

THE RESTRUCTURING OF THE UNORGANISED SECTOR IN INDIA

Report on a Project

Funded Under the Planning Commission
Scheme of Socio-Economic Research

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2003

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CONTENTS

	<i>Page Nos</i>
Chapter I	Overview _____ 1-49
Chapter II	Unorganised Manufacturing _____ 50-224
Chapter III	Unorganised Trade _____ 225-371
Chapter IV	Restaurants, Hotels and Other Lodging Places _____ 372-425
Chapter V	Unorganised Services _____ 426-475
Chapter VI	Unorganised Transport, Storage and Warehousing, and Communication Services _____ 476-546

Table of Contents

Chapter- I Overview

Introduction		1
1.1 The Organised and the Unorganised Segments of the Indian Economy		2
(i) The Employment and Income Contributions of the Organised and the Unorganised Segments		2
(ii) Employment Growth in the Organised and Unorganised Segments : The Policy Context and the Concerns		3
1.2 The Main Magnitudes and Trends in Them		5
(i) About the Data		5
(ii) The Basic Magnitudes		6
(iii) Growth Rates in Employment and Gross Value Added, Employment Gains and Losses in Absolute Terms, and Employment Elasticities with Respect to Gross Value Added		8
(iv) Labour Productivity		11
1.3 Changes in the Relative Importance of Different Economic Sectors within the Unorganised Segment : 1979-80 to 1994-95		13
1.4 The Restructuring of the Unorganised Segment in India : 1978-99 to 1996-97		14
(i) Introduction		14
(ii) Structural Change : From Rural to Urban Locations		14
(a) The Present Position		14
(b) Trends at the All India Level		17
(c) Large Changes over Time at the State Level		17
(iii) Structural Shift : From Small Family Operated Own Account Enterprises to Larger Non-directory and Directory Establishments		19
(iv) Two Historically Significant Modernisations		20
(a) Manufacturing : The Rise of Modern Chemicals and Metals Based Activities		20
(b) The Mechanisation of Unorganised Transport		23
(v) The Widening of Interstate Labour Productivity Disparities		24
1.5 The Links between Agriculture and the Unorganised Non-Farm Sector		26
(i) Introduction		26
(ii) The Link to Labour Productivity in the Unorganised Non-Farm Sector		26
(a) On Relative Productivity Levels in Agriculture and the Unorganised		26
(b) The Link between Farm Labour Productivity and Labour Productivity in the Unorganised Non-Farm Sector : Some Cross Section Regression Results		26
(iii) Farm Labour Productivity Levels and Rural Non-Farm Unorganised Segment Employment Growth		28
(iv) Initial Labour Productivity Levels in Unorganised Segment Activities & Subsequent Employment Growth within the Unorganised Segment		29
1.6 Perspective on the Main Findings with a Focus on Issues Relating to the Rural Non-Farm Sector		30

LIST OF TABLES

1.1	Share of Unorganised and Organised Segments in Employment and Net Domestic Product in Recent Years	2
1.2	Growth Rates of Employment in the Organised and Unorganised Segments by Main Economic Subsectors. All India 1983 to 1987-88, 1987-88 to 1993-94 and 1993-94 to 1999-2000	5
1.3	Common Year Estimates of the Number of Unorganised Sector Enterprises by Subsector: Rural, Urban and Total (R+U): 1979-80, 1984-85, 1990-91 and 1994-95	6
1.4	Common Year Estimates of Employment in Unorganised Sector Enterprises by Subsector : Rural, Urban and Total (R+U) : 1979-80, 1984-85, 1990-91 and 1994-95	7
1.5	Common Year Estimates of Gross Value Added by Unorganised Segment Enterprises by Subsector, Rural, Urban and Total (R+U) : 1979-80, 1984-85, 1990-91 and 1994-95	7
1.6	Employment Growth Rates based on Common Year Estimates of Absolute Numbers of Workers in Unorganised Enterprises by Subsector Rural, Urban and Total (R+U) : 1979-80 to 1984-85, 1990-91 and 1994-95	8
1.7	Absolute Number of Jobs Gained or Lost in Unorganised Segment Enterprises, by Subsector : Rural, Urban and Total (R+U) : 1979-80 to 1984-85, 1984-85 to 1990-91 to 1994-95	10
1.8	Gross Value Added Growth Rates based on Common Year Estimates of Gross Value Added by Unorganised Segment Enterprises, by Subsector : Rural, Urban and Total (R+U) : 1979-80 to 1984-85, 1984-85 to 1990-91 and 1990-91 to 1994-95	10
1.9	Common Year Estimates of Employment Elasticities with respect to Gross Value Added by Unorganised Segment Enterprises by Subsector : Rural, Urban and Total (R+U) ; 1979-80 to 1984-85, 1984-85 to 1990-91 and 1990-91 to 1994-95	11
1.10	Common Year Estimates of Labour Productivity (GVA per Worker) in Unorganised Segment Enterprises in Specified Subsectors : Rural, Urban and Total (R+U) : 1979-80, 1984-85, 1990-91 and 1994-95	12
1.11	The Sectoral and Subsectoral Restructuring of the Unorganised Segment : 1979-80 to 1994-95 by Rural or Urban Location	13
1.12	The Share of Rural Employment in All Unorganised Segment employment in Specified Sub sectors in each of Fifteen States	15

1.13	Rural India's Share in Unorganised Segment Employment by Sector: Late 1970s to mid 1990s	17
1.14	States where the Rural Share in Unorganised Segment Employment Went Down by More than Ten percentage Points, by Subsector. Specified Periods	17
1.15	Share of Own Account Enterprises in all Unorganised Segment Enterprises, Workers and Gross Value Added in Five Major Subsectors by Rural or Urban Location : Specified Reference Years.	20
1.16	A Cross Classification into Four Sets of Unorganised Manufacturing Industries Arranged by Employment and Labour Productivity Growth Rates	21
1.17	Enterprise and Employment Numbers in Unorganised Transport by Transport Type and Rural or Urban Location : All India 1979-80, 1983-84, 1988-89 and 1993-94	24
1.18	Regression Results : Independent Variable: Gross State Domestic Product from Agriculture per Agricultural Worker. Dependent Variable : Gross Value Added per Worker in Unorganised Sector Enterprises Engaged in Specified Activities 1984-85, 1990-91 and 1994-95 by Rural or Urban Location	25

List of Appendix Maps

1.1	Share of Urban Employment in All Employment in Unorganised Traditional Manufacturing Industries (1994-95)	36
1.2	Share of Urban Employment in All Employment in Unorganised Modern Manufacturing Industries (1994-95)	37
1.3	Share of Urban Employment in All Employment in Unorganised Wholesale Trade (1996-97)	38
1.4	Share of Urban Employment in All Employment in Unorganised Retail Trade (1996-97)	39
1.5	Share of Urban Employment in All Employment in Unorganised Segment Hotels and Restaurants (1993-94)	40
1.6	Share of Urban Employment in All Employment in Unorganised Services (1991-92)	41
1.7	Share of Urban Employment in All Employment in Unorganised Transport (1993-94)	42
1.8	Share of Urban Employment in Unorganised Storage	43
1.9	Share of Urban Employment in Unorganised Communication	44

List of Appendix Tables

1. All India Farm and Non-Farm Usual Principal and Subsidiary Status
Employment Growth Rates (persons): 1972-73 to 1977-78, 1977-78 to 1983,
1983 to 1987-88, to 1987-88 to 1993-94 and 1993-94 to 1999-2000, Rural and
Rural Plus Urban Combined 45
2. Employment in the Organised and Unorganised Sector: All India 45
3. Growth Rates of Employment in the Organised and Unorganised Segments-
1983 to 1987-88, 1987-88 to 1993-94, and 1993-94 to 1999-2000 by Main
Economic Sectors-All India 46
4. Structure of Unorganised Sector NDP 1997-98 46
5. Statewise Common Year Estimates of Unorganised Segment (all Sectors)
Labour Productivity Levels, Rural, Urban and Total (R+U) 1979-80, 1984-85,
1990-91 and 1994-95 47-48
6. Prevalence of Poverty (Head Count Ratio) among Persons in Rural
Households engaged in Specified Subsectors, by State 1993-94 49

CHAPTER – I

OVERVIEW

Introduction

This chapter has three main objectives. It aims, first, to provide an overview, of the contributions made to income and employment generation by the unorganised non-farm sector as a whole, and of the performance of its main subsectors taken individually. It seeks, secondly, to identify and describe the historically significant changes which have characterised the recent restructuring of the unorganised non-farm sector in India. Thirdly, it provides compelling state level evidence of the strong links between agricultural performance, on the one hand, and the economic condition of workers in the unorganised non-farm sector on the other. The conclusions of this chapter arise directly from the evidence presented on these points.

The chapter is organised in six main parts.

The first one provides some contextual facts. The contributions of the organised and unorganised segments of the Indian economy to employment and income generation are compared, and certain pivotal relationships and concerns are highlighted.

The second section looks at the performance of the seven economic subsectors of the unorganised segment covered in this report:- manufacturing, trade, hotels and restaurants, services, transport, storage and warehousing, and communications – and gives a synoptic account of recent trends in those subsectors for which useable time series data is available. Sections three and four both deal with transitions which have resulted in substantial restructuring of the unorganised non-farm sector in India during the years between 1978-79 and 1996-97. These changes include (i) shifts in the relative importance of different economic activities within the unorganised segment, led by a decline in the share of manufacturing in enterprise numbers, in employment and in gross value added and offset by a rise in the shares of transport and services; (ii) a proportionate shift of enterprises and employment from rural to urban areas, in a number of key sectors; (iii) a decline in the relative importance of tiny, family operated own account enterprises and workers and a corresponding rise in the share of larger units employing at least one regularly hired worker; (iv) an increase in the share of units using chemicals and metals based inputs and motorised equipment as compared to the shares of those using traditional, organic raw materials and non-motorised equipment; and finally, (v) the rise of interstate labour productivity disparities in most unorganised segment activities.

Section five reports the results of analysis of the links between agriculture and the unorganised non-farm sector. Of these, by far the most important is the link between farm labour productivity on the one hand, and labour productivity in the unorganised non-farm sector, in urban, as well as in rural enterprises.

Section six sets out the conclusions and policy implications which flow from the material presented in the previous five sections.

Maps, which bring out the regional dimensions, are in most cases relegated to the appendices along with some of the more detailed tables. A substantial appendix on unorganised enterprise surveys, their coverage and the conceptual categories used, is also given at the end of the chapter.

1.1 The Organised and the Unorganised Segments of the Indian Economy

(i) The Employment and Income Contributions of the Organised and the Unorganised Segments

The vast majority of Indians earn their living through work in the unorganised segment of the economy. However, they produce, on the average, only one eighth of the income generated per worker in the organised segment. By the late 1990s, the more than 90 per cent of Indian workers employed in the unorganised segment produced roughly 60 per cent of national income (NDP), while the remaining 8 to 10 per cent generated nearly 40 per cent of NDP. Table 1.1 provides estimates of the employment and income contributions of agricultural and non-agricultural activities within the organised and unorganised segments, which reveal the inter-sectoral, as well as the inter-segment, disparities.

Table 1.1: Share of Unorganised and Organised Segments in Employment and Net Domestic Product in Recent Years. All India.

Segment and Sector	Shares in Employment		Shares in Net Domestic Product
	1993-94	1999-2000	1997-98
Unorganised Agriculture	63.56	59.95	28.84
Unorganised Non-agriculture	29.17	33.00	31.62
All Unorganised	92.73	92.95	60.45
Organised Agriculture	0.39	0.35	1.08
Organised Non-Agriculture	6.88	6.70	38.47
All organised	7.27	7.05	39.55
Organised and Unorganised Segments Combined (all sectors)	100.00 (374,271,353 persons)	100.00 (398,441,131 persons)	100.00 (Rs. 1,233,920 Crores)

- Notes: 1. The organised sector employment estimates are derived from the *Quarterly Employment Review*, published by the Directorate General of Employment and Training (DGE&T). The figures given all as at the mid points of the NSS Rounds. These figures are known to be underestimates because: (i) establishments employing 10 to 24 persons in the private sector in the metropolitan areas of greater Mumbai and Calcutta are not covered at all; (ii) the data for these smaller establishments in other places are collected "on a voluntary basis" (iii) part time employees are excluded, (iv) new establishments may be left out of the lists of establishments maintained at the Employment Exchanges
2. The unorganised sector employment estimates are derived as a residual by subtracting organised sector estimates from usual principal and subsidiary status (UPSS) employment estimates interpolated for the mid-points of the NSS Rounds.
3. The "all sectors" employment figures are derived as the sum of the separate sectoral estimates. These figures differ from the "all workers" figures by the number of workers counted in the NSS UPSS estimates for all workers, but not classified by sector and subsector.
4. Net domestic product figures are derived from the table on page 9 of "Measurement of Informal Sector - The Indian Experience - Country paper India", Fourth Meeting of the Group on Informal Sector Statistics, Doc. 14 ILO, Geneva 28-30 Aug. 2000.

The employment figures for the '90s show something else as well—something which has been a consistent feature of unorganised and organised sector employment behaviour during the past 30 years or so. While the shares of the organised and unorganised sectors in employment have remained remarkably stable over time, there have been changes in the relative importance of agriculture and non-agriculture within the unorganised segment. In brief, the structural adjustments which have taken place generally have involved compensating movements in the share of unorganised agriculture on the one hand, and unorganised manufacturing and trade, on the other. Thus in the years from the mid-seventies to the late eighties, when the share of agriculture went down, the workforce in either unorganised manufacturing or unorganised trade, or both, expanded. Later, when the unorganised segment's share of employment in manufacturing, (and possibly some other sub sectors as well), contracted, agriculture's share in the total workforce went up.

More importantly, changes in the employment share of the unorganised non-farm sector have had significant repercussions on the productivity of employment in the farm sector. During the late '80s and early '90s, for example, gross state domestic product (GSDP) per worker in agriculture went down in almost all states where the farm sector's share in employment rose. During the later 1990s, this link appears to have weakened. Nevertheless, relatively recent Indian experience suggests a continuing connection between the rise and fall of employment opportunities in the unorganised non-farm sector, especially in rural areas, and farm labour productivity at the state level.¹ The relationship is, of course, inverse.

The stability of the unorganised sector's share in employment stands in clear contrast to the behaviour of the unorganised segment's share in NDP, which has declined more or less continuously, largely because the farm sector's relative contribution to NDP has fallen throughout. In recent years also, it appears that the unorganised segment share in non-farm NDP has started to contract.²

In agriculture and allied activities, practically all the income is generated in the unorganised segment. Further, NDP per worker in agriculture as a whole is roughly one quarter of what it is in the non-farm sectors. Thus, agriculture, despite its large size in terms of employment, (currently close to 60 per cent of all usual principal status workers), accounts for less than half of all income generated by unorganised segment activities. In short, it is the smaller, non-agricultural part of the unorganised sector which generates the most income-about 52 per cent of it.

Almost all of this - nearly 90 per cent of it - is generated in just four major sectors: unorganised manufacturing; unorganised trade, hotels and restaurants; unorganised transport, storage and communications; and unorganised services of all types. The substantive chapters of this report cover these four key subsectors of the non-farm economy in detail.

(ii) Employment Growth in the Organised and Unorganised Segments: The Policy Context and the Concerns

This report comes out shortly after two high powered committees have presented their recommendations about how best to expand employment opportunities in India. The *Report of the Task Force on Employment Opportunities* (2001) and the *Report of the Special Group on Targeting Ten Million Employment Opportunities* (2002), both concluded that the bulk of future growth in employment will have to come from the unorganised sector. The rationale for this position arises from the recent record of employment generation in the Indian economy. The unorganised non-farm sector has, in fact, been the only segment to record respectable rates of employment growth.

Indian agriculture, on the other hand, has virtually ceased to employ more labour, and the average annual employment contribution of the organised non-farm sector has dwindled to similarly low levels.³ These two segments together accounted for close to 70 per cent of all persons employed in India in 1999-2000,⁴ but for only 7 ½ per cent of all new jobs. Thus, in recent years, the burden of

¹ Correlation coefficients for the period 1987-88 to 1993-94 are -0.74178 on a Usual Principal Status (UPS) basis and -0.70371 on a Usual Principal Subsidiary Status (UPSS) basis. The correlation coefficients for the period 1993-94 to 1999-2000 are -0.61224 and -0.44620 on a UPS and UPSS basis, respectively.

² For evidence see table 6, page 68 in Kulshreshtha, A.C. and Gulab Singh (2001), "Informal Sector in India's Its Coverage and Contributions" Ch 3 in (eds) Kundu, A. and Alakh N. Sharma *Informal Sector in India: Perspectives and Policies*. Institute for Human Development and Institute for Applied Manpower Research, Manohar Publishers, New Delhi.

³ Between 1993-94 and 1999-2000, agriculture as a whole generated 915,266 new jobs; the organised non-farm sector 919,475 new jobs and the unorganised non-farm sector 22,334,946 jobs.

⁴ Agriculture accounted for about 60 per cent of all employment and the organised sector for under 10 per cent.

providing additional employment to the growing Indian labour force has fallen upon the unorganised non-farm sector, which accounts for only 30 per cent of employment in rural and urban areas combined. The evidence presented in this, and subsequent, chapters of this report provides grounds for arguing that this should not be allowed to happen again.

One result has been that rural employment growth rates have collapsed to less than 0.7 per cent, pulling down the overall, (rural plus urban), employment growth rates to unacceptably low levels, pushing up recorded rates of unemployment,⁵ and easing some people out of the labour force altogether. In short, the evidence from the 1990s demonstrates that the unorganised non-farm sector alone cannot carry the burden of providing work, let alone *productive* work to India's growing working age population.

Even supposing that sufficient numbers of unorganised segment jobs could be created, there is still a big question mark over the issue of their productivity. The situation is particularly bad in rural areas. In the mid 1990s, only one substantial sector, (trade), and three minor subsectors, (i) transport, (ii) banking, financial and legal services, and (iii) warehousing, generated levels of gross value added per worker as high as Rs. 1,000 per month in 1993-94 prices. Together these accounted for less than thirty per cent of all rural employment in the unorganised sector. In subsectors accounting for the remaining 70 per cent of rural unorganised enterprise employment - manufacturing, restaurants and hotels and the rest of the service sector - average labour productivity is too low to sustain the average worker without resort to other sources of income. Moreover, in unorganised manufacturing enterprises, which employ the largest number of people, (about 45 per cent of all rural unorganised segment workers), average labour productivity has been going down, at least during the first half of the 1990s.⁶ This has happened also in transport, which witnessed such a large increase in the number of workers employed in rural areas in the most recent decade, that labour productivity in this sector was also depressed. The decline in labour productivity in manufacturing it may be noted, took place despite the exit of roughly three million rural enterprises and roughly four million workers from this sector during the late 1980s and early 1990s. Since per worker productivity in the surviving enterprises failed to improve as a result of these adjustments, the recent restructuring of the rural unorganised manufacturing segment seems to have served no constructive purpose.

Although it can be verified, from tables in the next subsection, that the situation in urban unorganised sector enterprises is far better on the whole, it needs to be mentioned that there are huge inter state labour productivity disparities, such that urban unorganised segment workers in some states such as Uttar Pradesh are worse off than rural unorganised segment workers in others, such as Punjab.

The rest of this chapter focusses on these, and other characteristics of the unorganised non-farm sector.

To set the stage for the more detailed sections of this chapter, which follow, table 1.2 below provides an overview of recent employment growth rates in the organised and unorganised segments of the Indian economy, for agriculture and non-agriculture separately. It will be noticed that there is no rural-urban breakdown of organised and unorganised segment employment figures in table 1.2. This is because organised segment data is published only for rural and urban areas combined, and the

⁵ Current daily status unemployment rates, which had declined during the 1980s and early 1990s, rose from 6.03 per cent in 1993-94 to 7.32 per cent in 1999-2000 in rural and urban areas combined. In rural areas, unemployment rates reached their lowest point ever in 1987-1988 at 5.25 per cent, then rose to 5.63 per cent in 1993-94 and to 7.21 per cent in 1999-2000.

⁶ Recently released figures suggest a recovery during the later 1990s, see NSS 56th Round (July 2000-June 2001) Key Results in Report No 477 (56/2, 2/1) Unorganised Manufacturing Sector in India 2000-2001. The employment recovery, in the unorganised manufacturing sector is paralleled by one in organised manufacturing which had stagnated throughout the years of the earlier 1990s.

underlying broad unorganised segment employment estimates are derived as a residual by subtraction from National Sample Survey estimates which cover employment in both organised and unorganised segments without distinction.

Despite this drawback, an intuitive appreciation of developments in both rural and Urban India, may be derived from the growth rate figures of table 1.2. It is clear that almost all the employment growth during the most recent few years took place in the unorganised segment, and further, that this must be almost as true for rural areas as it is for the country as a whole.

For a longer term perspective on farm and non farm employment and on the relative importance of organised and unorganised segment employment appendix tables 1 and 2 may be consulted.

Table 1.2: Growth Rates of Employment in the Organised and Unorganised Segments, by Main Economic Subsectors All India 1983 to 1987-88, 1987-88 to 1993-94 and 1993-94 to 1999-2000

Segment Location	National Sample Survey (UPSS)								Organised Segment			Unorganised Segment			
	Rural Only				Rural + Urban				Rural + Urban			Rural + Urban			
Years	Agriculture	Non-Agriculture	All Sectors	Total Workers	Agriculture	Non-Agriculture	All Sectors	Total Workers	Agriculture	Non-Agriculture	Total Workers	Agriculture	Non-Agriculture	All Sectors	Total Workers
1993-94 to 1990-00	0.20	2.34	0.68	0.66	0.06	2.96	1.05	1.02	-0.82	0.59	0.50	0.07	3.15	1.09	1.06
1987-88 to 1993-94	2.32	1.41	2.12	2.10	2.39	2.40	2.39	2.37	0.77	1.14	1.12	2.40	2.71	2.50	2.47
1983 to 1987-88	0.12	5.79	1.26	1.14	0.05	4.71	1.60	1.47	0.72	1.36	1.33	0.04	5.68	1.62	1.49

Notes: (1) Usual Principal and Subsidiary Status (UPSS) employment estimates are based on NSS ratios and population census figures, interpolated for the mid-points of the NSS Rounds

(2) The organised sector estimates are derived from the Quarterly Employment Review published by the Directorate General of Employment and Training (DGE&T). The figures given above are as at the mid-points of the NSS Rounds.

(3) Unorganised sector employment estimates are derived as a residual

(4) The "all sectors" estimates are derived from absolute figures for all sectors, defined as the sum of subsectors. The discrepancy between employment in "all sectors" and "total workers" arises because there are workers not included in any subsector but included in total workers by the NSS. This small subset includes workers without any affiliation to any particular industry, and workers whose activities are "not adequately defined."

1.2 The Main Magnitudes and Trends in Them

(i) About the data

The estimates presented in this section are based on the data generated by the periodic NSSO-CSO unorganised sector enterprise surveys. In interpreting these estimates, certain limitations of the unorganised enterprise surveys need to be kept in mind.

The most important one is that these are *enterprise* surveys. It is well known that the enterprise survey method does not capture either all the enterprises, or all the workers engaged in the unorganised segment of the non-agricultural economy. What gets left out are mainly the smallest, and possibly, the poorest, family operated 'own account' enterprises and workers, particularly those which are operated from within residential premises and those operating without any fixed premises at all.

There seems to be considerable agreement about how this may be remedied. A linked household-cum-enterprise survey which first identifies the workers, (including independent workers), through a household survey and then, through these workers, the enterprises operated, provides a more complete count. This still leaves out the workers who are not attached to any enterprise, such as domestic servants who work for households, and of course, all the enterprises and workers engaged in

activities which have never been covered by the enterprise surveys. Some of them are important, especially in rural areas, such as construction, and mining and quarrying. A substantial appendix on the unorganised sector enterprise surveys, conceptual categories and coverage, is given at the end of this chapter.

(ii) The Basic Magnitudes

Tables 1.3, 1.4 and 1.5 give ‘common year’⁷ estimates of absolute numbers of unorganised segment enterprises, workers, and gross value added by them, for specified sectors and subsectors of the economy, and for rural and urban areas separately.

It is clear from these figures, that both in terms of the number of enterprises and in terms of employment generated, unorganised manufacturing is the most important sector. But in terms of gross value added it is not. In recent years, trade has become the top performer in terms of gross value added. It will also be noticed that manufacturing has lost ground, even in absolute terms, with respect to both rural and urban enterprise numbers, employment in them, and gross value added by them in rural areas, and overall.

Table 1.3: Common Year Estimates of the Number of Unorganised Sector Enterprises by Sub-sector: Rural, Urban and Total (R+U): 1979-80, 1984-85, 1990-91 and 1994-95

Location and Year	Sub-sector					
	Manuf-acturing	Trade	Hotels & Restaurants	Transport	Services	All Sub-sectors
Rural						
1979-80	6,660,355	3,603,415	614,300	843,239	2,666,026	14,387,335
1984-85	13,446,574	5,165,910	555,691	322,584	2,628,017	22,118,777
1990-91	10,973,733	6,883,706	669,484	743,940	4,517,433	23,788,296
1994-95	9,592,657	6,923,685	816,431	1,502,937	6,482,373	25,318,082
Urban						
1979-80	2,003,992	2,823,747	421,712	590,709	1,131,409	6,971,569
1984-85	4,251,837	3,536,395	491,232	393,500	1,859,366	10,532,330
1990-91	3,230,189	4,420,804	649,591	600,251	2,380,893	11,281,728
1994-95	3,069,091	5,380,996	737,897	790,041	2,807,522	12,785,547
Total (R+U)						
1979-80	8,664,347	6,427,162	1,036,012	1,433,948	3,797,435	21,358,904
1984-85	17,698,411	8,702,305	1,046,923	716,084	4,487,383	32,651,107
1990-91	14,203,922	11,304,510	1,319,075	1,344,191	6,898,326	35,070,024
1994-95	12,661,748	12,304,681	1,554,328	2,292,978	9,289,895	38,103,629

Note: These estimates exclude storage and communications because usable time series data is not available.

⁷ Common year estimates have been derived by interpolation or projection from the original estimates, which are for different years for different sectors. See Appendix I for the original reference years.

Table 1.4: Common Year Estimates of Employment in Unorganised Sector Enterprises by Subsector: Rural, Urban and Total (R+U): 1979-80, 1984-85, 1990-91 and 1994-95

Location and Year	Manufacturing	Trade	Hotels & Restaurants	Transport	Services	All Subsectors
Rural						
1979-80	13,271,584	5,467,402	1,355,521	1,065,551	3,937,103	25,097,161
1984-85	24,963,259	8,109,019	1,287,510	454,435	4,226,378	39,040,602
1990-91	22,793,722	10,063,277	1,511,292	1,022,414	7,458,800	42,849,505
1994-95	20,814,837	10,002,610	1,709,967	2,065,094	10,892,712	45,485,220
Urban						
1979-80	5,544,328	5,974,044	1,384,788	693,024	1,938,514	15,534,698
1984-85	9,317,990	7,405,153	1,643,919	663,342	3,867,519	22,897,923
1990-91	9,485,104	8,714,836	2,279,124	1,042,511	5,028,238	26,549,814
1994-95	9,299,837	9,759,164	2,557,001	1,435,460	5,989,695	29,041,157
Total (R+U)						
1979-80	18,815,912	11,441,446	2,740,309	1,758,575	5,875,617	40,631,859
1984-85	34,281,249	15,514,172	2,931,429	1,117,777	8,093,897	61,938,525
1990-91	32,278,826	18,778,113	3,790,416	2,064,925	12,487,038	69,399,319
1994-95	30,114,674	19,761,774	4,266,968	3,500,554	16,882,407	74,526,377

Notes: (1) Excludes storage and communications, for which usable time series data is not available. In 1992-93 storage in rural areas accounted for only 197,000 workers, of which 99,000 were employed in rural areas and 98,000 in urban locations. Communications, in 1991-92, accounted for 23,000 rural workers and 35,000 urban workers

(2) NSS Report No. 477 (56/2.2/1), *Unorganised manufacturing sector in India 2000-2001 Key Results* (NSS 56th Round July 2000-June 2001) GOI Ministry of Statistics and Programme Implementation (September 2002) indicates that unorganised manufacturing employment grew to 23,986,000 persons in rural enterprises and 13,095,000 persons in urban enterprises.

Table 1.5: Common Year Estimates of Gross Value Added by Unorganised Segment Enterprises, by Subsector, Rural, Urban and Total (R+U) 1979-80, 1984-85, 1990-91 and 1994-95

(thousands in 1993-94 constant prices)

Location and Year	Manufacturing	Trade	Hotels & Restaurants	Transport	Services	All Sectors
Rural						
1979-80	59,904,402	24,344,657	1,073,889	6,733,865	1,310,332	93,367,145
1984-85	117,749,497	64,276,247	3,209,874	6,699,975	4,992,390	196,327,982
1990-91	125,628,465	84,104,924	9,906,144	13,102,821	21,711,722	254,454,076
1994-95	109,734,990	110,085,511	19,464,410	23,987,872	57,847,524	321,120,307
Urban						
1979-80	64,249,279	82,870,350	2,062,200	9,910,009	1,805,033	160,896,871
1984-85	134,645,659	217,017,637	6,447,782	18,632,055	12,354,005	389,097,139
1990-91	136,437,169	194,854,957	24,731,207	29,521,612	45,707,833	431,252,778
1994-95	148,976,964	240,699,839	53,535,864	45,832,286	109,340,031	598,384,984
Total (R+U)						
1979-80	124,153,681	107,215,007	3,136,089	16,643,874	3,115,365	254,264,016
1984-85	252,395,156	281,293,884	9,657,656	25,332,030	17,346,395	586,025,121
1990-91	262,065,634	278,959,881	34,637,351	42,624,433	67,419,555	685,706,854
1994-95	258,711,954	350,785,350	73,000,274	69,820,158	167,187,555	919,505,291

Note: Estimates for storage and communications enterprises are excluded here, because usable time series data is not available.

In view of the great weight given to the rural unorganised non-farm sector in a number of employment strategy documents, the sectoral break-up of job losses and gains needs to be highlighted. Unorganised manufacturing in the aggregate, appears to be a lost cause, at least up until the mid nineties. More than four million rural jobs were lost in the ten years from 1984-85 to 1994-95. Employment in rural unorganised trade stagnated. The only significant employment gains were

made in unorganised services enterprises⁸ and in transport, and to a lesser extent, in restaurants and hotels.

This is not to say that all activities within the unorganised manufacturing sub-sector should be written off from the point of review of rural employment generation. Far from it. As is shown in subsequent sub-sections in this chapter, there has been significant expansion of employment in units using chemicals and metals based inputs, but not in those using traditional organic raw materials. Unfortunately, the latter all the ones which have provided most of the employment in rural manufacturing up to now. Thus what these highly aggregated employment data indicate is that the old, undifferentiated, drive for rural industrialisation *per se* is not the way to go. A shift of emphasis in favour of other kinds of rural economic activity, such as trade, transport and services is now also overdue.

(iii) Growth Rates in Employment and Gross Value Added, Employment Gains and Losses in Absolute Terms, and Employment Elasticities with Respect to Gross Valued Added

During the fifteen-year period covered in this report,⁹ employment growth rates in unorganised segment enterprises fell, most conspicuously in units located in rural areas. This deceleration was led by manufacturing. Unorganised transport was the only sector to record continuously rising employment growth rates throughout the 1980's and into the 1990s.

Table 1.6: Employment Growth Rates based on Common Year Estimates of Absolute Numbers of Workers in Unorganised Enterprises by Subsector: Rural, Urban and Total (R+U): 1979-80 to 1984-85, 1984-85 to 1990-91 and 1990-91 to 1994-95

Location and Period	Manufacturing	Trade	Hotels and Restaurants	Transport	Services	All Sub-sectors
Rural						
1979-80 to 1984-85	13.47	8.20	-1.02	-15.67	1.43	9.24
1984-85 to 1990-91	-1.50	3.66	2.71	14.47	9.93	1.56
1990-91 to 1994-95	-2.24	-0.15	3.14	19.21	9.93	1.50
Urban						
1979-80 to 1984-85	10.94	4.39	3.49	-0.87	14.81	8.07
1984-85 to 1990-91	0.30	2.75	5.60	7.83	4.47	2.50
1990-91 to 1994-95	-0.49	2.87	2.92	8.32	4.47	2.27

⁸ It may be noted that NSS employment survey estimates which cover both organised and unorganised segments, indicate an absolute decline in services employment in both rural and urban areas, while the unorganised enterprise surveys record substantial positive employment growth. The inclusion of organised service sector workers may account for a part of the reason for the qualitative difference in recorded trends but another reason may lie in the fact that many service sector workers do not work for readily identifiable enterprises, and many others work for households.

⁹ 1979-80 to 1994-95. Estimates for the subsequent period from the NSS 56th Round (July 2000 to June 2001), indicate that, at least for manufacturing there was a recovery, from negative to positive employment growth, which was more pronounced in the towns and cities than in units located in rural areas. It may be noted that this unorganised manufacturing trend reversal parallels a similar recovery, at the end of the 1990s, in organised manufacturing employment, which had stagnated throughout the earlier years of the 1990s up to 1997-98.

Location and Period	Manufacturing	Trade	Hotels and Restaurants	Transport	Services	All Sub-sectors
Total (R+U)						
84-85 to 79-80	12.72	6.28	1.36	-8.66	6.62	8.80
90-91 to 84-90	-1.00	3.23	4.38	10.77	7.49	1.91
94-95 to 90-95	-1.72	1.28	3.00	14.11	7.83	1.80

Note: (1) In 1979-80, transport included porters and coolies: in 1983-84 and subsequently they were excluded.

(2) Employment growth rates in unorganised manufacturing recovered in the second half of the 1990s. For the period 1994-95 to 2000-2001, the rural employment growth rate was 2.39; the urban employment growth rate was 5.87 and that for rural and urban areas combined was 3.53.

The sub-sectors which account for relatively small shares in unorganised enterprise employment are the ones which recorded the most rapid employment growth—transport, services and hotels and restaurants. On the other hand, employment generation in manufacturing and trade, the two biggest employers in the unorganised segment¹⁰, suffered setbacks, with low or negative employment growth in both rural and urban areas.

From 1979-80 to 1994-95, the number of additional jobs created in the unorganised segment as a whole has come down from period to period. The decline in the absolute number of new jobs created is steepest in rural areas. The loss of more than 4 million jobs in rural unorganised manufacturing alone, is largely responsible for the overall slowdown in employment generation, although there were some cutbacks in rural employment in trade as well. It is possible, however, that the turn around in unorganised manufacturing employment growth revealed by the recently released estimates for 2000-2001, may have reversed this secular decline in the absolute number of jobs created in successive periods for all sub-sectors combined, but this is not certain.¹¹ We have no similarly recent estimates for employment in enterprises in any of the other unorganised sub-sectors.

On the positive side, what we know about the first half of the 1990s is that, in rural areas, services enterprises provided the largest number of new jobs, followed by transport and, trailing far behind, hotels and restaurants. In urban areas, trade enterprises generated more jobs than any other sector, but in the towns and cities, the contribution of trade is closely followed by that of services, then transport and, finally, hotels and restaurants.

Growth in gross value added by unorganised segment enterprises was most rapid during the early 1980's. This was followed by a distinct slowdown during the 1984-85 to 1990-91 period, most noticeable in urban areas. Subsequently, the early 1990s saw a return to respectable GVA growth rates of the order of 6 per cent per year in rural enterprises and 8 ½ per cent in urban units. This GVA growth was led by services, hotels and restaurants, and transport enterprises. Negative GVA growth in unorganised rural manufacturing units during the early 1990s pulls down the recent overall GVA growth rates considerably.

¹⁰ Together, unorganised manufacturing and trade account for two thirds of employment in unorganised sector enterprises.

¹¹ For the (mainly) subsequent period, 1993-94 to 1999-2000, we know that employment in services, (organised and unorganised segments combined), declined by about one and a half million UPSS workers. We also know that the recent employment gains of unorganised manufacturing were heavily concentrated in urban areas. In rural areas, the gains of the late 1990s do not quite make up for the job losses of the late 1980s and early 1990s. In urban areas, the gains of the late 1990s much more than compensate for earlier job losses.

Table 1.7: Absolute Number of Jobs Gained or Lost in Unorganised Segment Enterprises, by Sub-sector: Rural, Urban and Total (R+U) : 1979-80 to 1984-85, 1984-85 to 1990-91 and 1990-91 to 1994-95

Location and Period	Manufacturing	Trade	Hotels & Restaurants	Transport	Services	All Sub-sectors
Rural						
1979-80 to 1984-85	11,691,675	2,641,617	-68,011	-611,116	289,275	13,943,441
1984-85 to 1990-91	-2,169,537	1,954,258	223,782	567,979	3,232,422	3,808,903
1990-91 to 1994-95	-1,978,885	-60,667	198,675	1,042,680	3,433,912	2,635,715
Urban						
1979-80 to 1984-85	3,773,662	1,431,109	259,131	-29,682	1,929,005	7,363,225
1984-85 to 1990-91	167,114	1,309,683	635,205	379,169	1,160,719	3,651,891
1990-91 to 1994-95	-185,267	1,044,328	277,877	392,949	961,457	2,491,343
Total (R+U)						
1979-80 to 1984-85	15,465,337	4,072,726	191,120	-640,798	2,218,280	21,306,666
1984-85 to 1990-91	-2,002,423	3,263,941	858,987	947,148	4,393,141	7,460,794
1990-91 to 1994-95	-2,164,152	983,661	476,552	1,435,629	4,395,369	5,127,058

Note: These absolute numbers are based on common year estimates.

Table 1.8: Gross Value Added Growth Rates based on Common year Estimates of Gross Valued Added by Unorganised Segment Enterprises, by Sub-sector: Rural, Urban and Total (R+U) : 1979-80 to 1984-85, 1984-85 to 1990-91 and 1990-91 to 1994-95

Location and Period	Sub-sector					
	Manufacturing	Trade	Hotels and Restaurants	Transport	Services	All Sub-sectors
Rural						
1979-80 to 1984-85	14.47	21.43	24.48	-0.10	30.67	16.10
1984-85 to 1990-91	1.09	4.58	20.66	11.83	27.76	4.36
1990-91 to 1994-95	-3.32	6.96	18.40	16.32	27.76	5.99
Urban						
1979-80 to 1984-85	15.95	21.23	25.61	13.46	46.91	19.32
1984-85 to 1990-91	0.22	-1.78	25.11	7.97	24.36	1.73
1990-91 to 1994-95	2.22	5.42	21.30	11.62	24.36	8.53
Total (R+U)						
84-85 to 79-80	15.25	21.28	25.23	8.76	40.97	18.18
90-91 to 84-90	0.63	-0.14	23.72	9.06	25.39	2.65
94-95 to 90-95	-0.32	5.89	20.49	13.13	25.49	7.61

Employment elasticities with respect to gross value added in unorganised segment enterprises are low by the usual standards. In rural areas, they have declined steadily since the start of the 1980s. This indicates that when GVA grows, the result in recent years has been a relatively large increase in labour productivity combined with a rather small increase in employment. The transport sector constitutes a notable exception to the usual pattern. Although GVA growth rates in unorganised transport are substantial, the influx of workers into this sub-sector has been so great that it has pushed down GVA per worker. Something similar happened in urban unorganised manufacturing during the late 1980s. Table 1.9 gives the estimated employment elasticities.

Table 1.9: Common Year Estimates of Employment Elasticities with respect to Gross Value Added by Unorganised Segment Enterprises, by Sub-sector: Rural, Urban and Total (R+U) : 1979-80 to 1984-85, 1984-85 to 1990-91 and 1990-91 to 1994-95

Location and Period	Manufacturing	Trade	Hotel & Restaurants	Transport	Services	All Sub-sectors
Rural						
1979-80 to 1984-85	0.93	0.38	-0.04**	155.37*	0.05	0.57
1984-85 to 1990-91	-1.39**	0.80	0.13	1.22	0.36	0.36
1990-91 to 1994-95	0.67*	-0.02**	0.17	1.18	0.36	0.25
Urban						
1979-80 to 1984-85	0.69	0.21	0.14	-0.06**	0.32	0.42
1984-85 to 1990-91	1.35	-1.55**	0.22	0.98	0.18	1.44
1990-91 to 1994-95	-0.22**	0.53	0.14	0.72	0.18	0.27
Total (R+U)						
1979-80 to 1984-85	0.84	0.30	0.05	-0.99**	0.16	0.48
1984-85 to 1990-91	-1.59**	-23.00***	0.18	1.19	0.30	0.72
1990-91 to 1994-95	-5.35*	0.22	0.15	1.07	0.31	0.24

Notes: 1. These elasticities are calculated as the ratio of the rate of growth of employment to the rate of growth of GVA.

2. These elasticities exclude storage and communications, for which useable time series data are not available.

3. A star, *, indicates that both rates of growth are negative. A double star, ** indicates that the rate of growth of employment is negative. A triple star, ***, indicates that the rate of growth of GVA is negative.

(iv) Labour productivity

Labour productivity, (GVA per worker), particularly in rural unorganised sector enterprises, is abysmally low. Rural enterprises in the service sector and in manufacturing have consistently recorded the lowest labour productivities of all. In urban unorganised sector enterprises, labour productivity typically amounts to more than three times what it is in enterprises in the corresponding sub-sector located in rural places. Labour productivity in urban unorganised manufacturing is the lowest, at Rs. 16,020 per annum (in 1993-94 constant prices), followed by services, at Rs. 18,250. In other sub-sectors, average urban labour productivity approaches a living wage.

Within unorganised services, productivity disparities are particularly great. While productivity levels in banking, financial and legal services in 1991-92 were Rs. 12,872 per worker in rural areas and Rs. 34,806 in urban enterprises (in 1993-94 constant prices), the corresponding figures for education and health services were Rs. 5,485 for rural areas and Rs. 12,383 for urban centres. All other services combined, which account for 88 per cent of rural service sector workers and 83 per cent of urban workers, recorded much lower productivity levels: Rs. 2,928 in rural enterprises and Rs. 8,404 in urban ones.

One thing needs to be emphasised, however. It is that rural households with members engaged in unorganised manufacturing and services commonly have multiple income sources.¹² Not only this. Individual workers, in unorganised manufacturing in particular, may be employed part time, seasonally, or only occasionally in the family enterprise and are engaged otherwise in diverse agricultural and non-agricultural pursuits. In short, these labour productivity figures are not gross underestimates as sometimes feared by both data users and NSS insiders. They are telling us, correctly, that people engaged in many rural unorganised sector activities cannot survive on the

¹² The unorganised sector enterprise surveys do not provide this information. It comes from field surveys, which also indicate that unorganised sector workers in relatively prosperous areas are less likely to be engaged in multiple activities than those in backward, or drought prone areas.

returns to their labour in these activities alone. This is a fact which must be kept in mind while devising strategies for productive labour absorption in rural areas.

Table 1.10 Gives common year estimates of labour productivity in the unorganised segment for enterprises in rural and urban areas separately, by sub-sector. What this all-India table does not show are the huge interstate labour productivity disparities, which have been getting worse as time goes on. These trends are discussed in some detail in the sub-section, headed *'The Restructuring of the Unorganised Sector: 1979-80 to 1994-95'*: What is done here is to map the 'all sectors' labour productivity levels for rural and urban areas separately. At the more disaggregated sub-sectoral level, it may be noted that, for example, in manufacturing, which employs the largest number of people, labour productivity in the top state, Haryana, is now roughly ten times what it is in Orissa. Trade records the smallest regional labour productivity differences. The common year state-wise labour productivity figures which lie behind Map 1.1 for rural areas, and Map 1.2, for urban enterprises, are given in appendix table 1.5 for all four 'common years'. It can be seen that Punjab, Delhi, and Gujarat record the highest rural labour productivity levels in unorganised segment enterprises, while Orissa's rural labour productivity levels are the lowest, with rural Andhra Pradesh and Karnataka near the bottom, but somewhat better off than Orissa. In urban unorganised segment enterprises, labour productivity is the highest in Delhi, Maharashtra and Haryana. The lowest urban labour productivity levels are posted by West Bengal, Andhra Pradesh and Uttar Pradesh. Detailed analyses of trends and causation are presented later, in the chapters devoted to particular sectors and sub-sectors.

Table 1.10: Common Year Estimates of Labour Productivity (GVA per Worker) in Unorganised Segment Enterprises in Specified Sub-sectors; Rural, Urban and Total (R+U) : 1979-80, 1984-85, 1990-91 and 1994-95.

(Rs. in constant 1993-94 prices)

Location and Year	Manufacturing	Trade	Hotel & Restaurants	Transport	Services	All Sub-sectors
Rural						
1979-80	4,510	4,450	790	6,320	0,330	3,720
1984-85	4,720	7,930	2,490	14,740	1,180	5,040
1990-91	5,510	8,360	6,550	12,820	2,910	5,940
1994-95	5,270	11,010	11,380	11,620	5,310	7,060
Urban						
1979-80	11,590	13,870	1,490	14,300	930	10,360
1984-85	14,450	29,310	3,920	28,090	3,190	16,990
1990-91	14,380	22,360	10,850	28,320	9,090	16,240
1994-95	16,020	24,660	20,940	31,930	18,250	20,600
Total (R+U)						
1979-80	6,600	9,370	1,140	9,460	530	6,260
1984-85	7,360	18,130	3,290	22,660	2,140	9,460
1990-91	8,120	14,860	9,140	20,640	5,400	9,880
1994-95	8,590	17,750	17,110	19,950	9,900	12,340

1.3 Changes in the Relative Importance of Different Economic Sectors within the Unorganised Segment: 1979-80 to 1994-95

In India, the sectoral structure of rural unorganised activities has been shifting away from manufacturing and in favour of transport and service sector activities. The share of trade in rural employment in unorganised segment enterprises has been constant. Although rural areas have recorded the largest changes in the relative importance of different sectors, the directions of change have been more or less the same in urban areas.

The big change has been brought about by the decline in the relative importance of unorganised manufacturing. Its shares in enterprises, in employment and in gross value added have all gone down, in urban areas as well as in rural locations. This major sectoral readjustment mainly involves very small scale manufacturing, whose persistence in rural areas may have reflected, in part, isolation and lack of access by consumers to commodities not produced locally, and in part the effects of promotional and protective legislation, whose objective, in the first instance, was to provide food, cloth and agricultural implements through labour intensive local production in units which would be safeguarded from "intensive competition by large scale manufacture."¹³ Yet despite this attrition, manufacturing is still the single most important subsector in terms of rural employment.

The generalised contraction of manufacturing's shares has been compensated for mainly by increases in the relative importance of unorganised services, and partly by the more modest increases in the shares of transport, which occurred after 1984-85. By the mid 1990s, service sector enterprises had become the second largest contributors to rural unorganised segment employment, displacing trade from second position. The most spectacular rise in gross value added shares has been achieved by service sector enterprises also whose contribution in rural areas went up from only 1.4 per cent in 1979-80 to 18 per cent in 1994-95. Urban service sector enterprises recorded similar increases.

These, and other, trends described in the next subsection, have obvious implications for employment planning in relation to the unorganised non farm segment, particularly in rural areas.

Table 1.11: The Sectoral and Subsectoral Restructuring of the Unorganised Segment: 1979-80 to 1994-95 by Rural or Urban Location (Share of Subsector (%) in All Sectors)

Location & Year	Manufacturing	Trade	Hotels & Restaurants	Transport	Services
A. ENTERPRISES					
Rural					
1979-80	46.29	25.05	4.27	5.86	18.53
1984-85	60.79	23.36	2.51	1.46	11.88
1990-91	46.13	28.94	2.81	3.13	18.99
1994-95	37.89	27.35	3.22	5.94	25.60
Urban					
1979-80	28.75	40.50	6.05	8.47	16.23
1984-85	40.37	33.58	4.66	3.74	17.65
1990-91	28.63	39.19	5.76	5.32	21.10
1994-95	24.00	42.09	5.77	6.18	21.96
B. EMPLOYMENT					
Rural					
1979-80	52.99	21.78	5.40	4.25	15.69
1984-85	63.94	20.77	3.30	1.16	10.83

¹³ Government of India (1948) *Industrial Policy Resolution*. April 6, New Delhi.

Location & Year	Manufacturing	Trade	Hotels & Restaurants	Transport	Services
1990-91	53.19	23.49	3.53	2.39	17.41
1994-95	45.76	21.99	3.76	4.54	23.95
Urban					
1979-80	35.69	38.46	8.91	4.46	12.48
1984-85	40.69	32.34	7.18	2.90	16.89
1990-91	35.73	32.82	8.58	3.93	18.94
1994-95	32.02	33.60	8.80	4.94	20.62
C. GROSS VALUE ADDED					
Rural					
1979-80	64.16	26.07	1.15	7.21	1.40
1984-85	59.79	32.64	1.63	3.40	2.54
1990-91	49.37	33.05	3.89	5.15	8.53
1994-95	34.17	34.28	6.06	7.47	18.01
Urban					
1979-80	39.93	51.51	1.28	6.16	1.12
1984-85	34.60	55.77	1.66	4.79	3.18
1990-91	31.64	45.18	5.73	6.85	10.60
1994-95	24.90	40.22	8.95	7.66	18.27

Note: These figures are based on the common year estimates given in tables 1.3, 1.4 and 1.5.

1.4 The Restructuring of the Unorganised Segment in India: 1978-79 to 1996-97

(i) Introduction

In India, the recent restructuring of the unorganised non-farm sector has been characterised by four, historically significant, kinds of changes. The important changes are: (i) a proportionate shift of enterprises and employment from rural to urban areas, in a number of key sectors; (ii) a decline in the relative importance of family operated own account enterprises and workers, and a corresponding rise in the share of larger units employing one or more regularly hired workers; (iii) an expansion in the share of units using chemicals and metals based inputs and motorised equipment as compared to those using traditional, organic raw materials and non-motorised equipment; and (iv) the widening of inter state labour productivity disparities in most unorganised segment activities.

The rest of this part describes each of these developments in turn.

(ii) Structural Change: From Rural to Urban Locations

The rural to urban shift of most, but not all, unorganised sector activities has a strong regional dimension, with some activities tending to shift more rapidly to urban areas than others, and one or two only, moving in the reverse direction.

(a) The Present Position

Table 1.12 gives the present position in fifteen major states for nine sub sectors of the economy, in each case for the most recent year for which unorganised sector data is available.

It can be seen that wholesale trade is predominantly, (or overwhelmingly), rural in only two states, storage and warehousing in four or five, hotels and restaurants in five, retail trade in six, and so on. The sub sectors in which employment is concentrated in rural areas in the largest number of states are : transport as a whole, (because of the great weight of non-mechanised transport), communications, services, and manufacturing based mainly on organic raw materials.

Recent year rural-urban breakdowns are not available for some important sub sectors. But in services, for example, it is clear that from the beginning, legal, business and financial activities were predominantly urban located, while in the largest category of all, "other services", (covering personal services (96), repair services (97), and community, recreational and cultural services (94, 95)¹⁴, employment has been heavily concentrated in rural areas in all states except Delhi. Education and health services were predominantly rural in twelve out of fifteen states in 1978-79 – the only year for which such breakdowns were made available at the state level. (The exceptional states were Delhi, Gujarat and Haryana). Similarly in the restaurants and hotels sub sector, the latest year for which separate estimates are available is 1983-84. This data indicates that in that year although employment in restaurants was predominantly or overwhelmingly rural in several states, employment in hotels was overwhelmingly or predominantly urban in all states.

Table 1. 12: The Share of Rural Employment in All Unorganised Segment Employment in Specified Sub sectors in each of Fifteen States (most recent unorganised enterprise survey years): States where Employment in Specified Sectors is Overwhelmingly Rural, Predominantly Rural, Predominantly Urban and Overwhelmingly Urban (percent share of rural areas in brackets)

Overwhelmingly Rural	Predominantly Rural	Predominantly Urban	Overwhelmingly Urban
I. Manufacturing Based on Organic Raw Materials (1994-95)			
1. Orissa (96.30) 2. Bihar (87.61) 3. West Bengal (83.76) 4. Kerala (81.63) 5. Karnataka (80.44) 6. Andhra Pradesh (77.79)	7. Uttar Pradesh (73.82) 8. Madhya Pradesh (67.96)* 9. Rajasthan (62.95) 10. Haryana (55.29)* 11. Tamil Nadu (53.80)*	12. Punjab (45.11)* 13. Maharashtra (44.83)* 14. Gujarat (42.82)*	15. Delhi (15.12)
II Manufacturing Based on Inorganic Raw Materials (1994-95)			
1. Orissa (97.35) 2. Bihar (86.03)	3. Kerala (73.40) 4. Andhra Pradesh (72.29)* 5. Madhya Pradesh (71.17)* 6. Uttar Pradesh (67.22) 7. Rajasthan (66.00) 8. West Bengal (53.02)	9. Karnataka (49.70)* 10. Haryana (48.25)* 11. Tamil Nadu (46.98)* 12. Maharashtra (32.10)* 13. Punjab (30.35)*	14. Gujarat (22.96)* 15. Delhi (14.90)
III. Wholesale Trade (1996-97)			
1. Bihar (78.44) 2. West Bengal (76.88)	None	3. Uttar Pradesh (46.30) 4. Madhya Pradesh (42.43) 5. Orissa (42.14)* 6. Kerala (26.31)* 7. Gujarat (25.35)*	8. Karnataka (20.55) 9. Andhra Pradesh (18.27) 10. Rajasthan (17.11) 11. Haryana (16.30)* 12. Tamil Nadu (11.38) 13. Punjab (5.43) 14. Maharashtra (2.51) 15. Delhi (0.67)
IV. Retail Trade (1996-97)			
None	1. Bihar (71.70) 2. Orissa (64.00)* 3. Madhya Pradesh (56.58) 4. Uttar Pradesh (55.70) 5. Andhra Pradesh (50.43)* 6. West Bengal (50.07)	7. Rajasthan (49.46) 8. Kerala (49.38)* 9. Karnataka (47.99) 10. Punjab (41.53)* 11. Haryana (41.06)* 12. Gujarat (39.41) 13. Maharashtra (33.12)* 14. Tamil Nadu (31.81)*	15. Delhi (7.51)

¹⁴ The numbers in brackets are National Industrial Classification (NIC), 1987 codes

Overwhelmingly Rural	Predominantly Rural	Predominantly Urban	Overwhelmingly Urban
V. Hotels and Restaurants (1993-94)			
1. Kerala (86.49)	2. Orissa (63.23)* 3. Karnataka (55.93) 4. Andhra Pradesh (51.82)* 5. Bihar (51.31)	6. West Bengal (41.68)* 7. Tamil Nadu (40.29)* 8. Uttar Pradesh (39.66) 9. Madhya Pradesh (34.85) 10. Rajasthan (27.73)* 11. Haryana (25.66)*	12. Gujarat (15.75)* 13. Maharashtra (14.59)* 14. Punjab (Unknown shares about 12 percent) 15. Delhi (Unknown shares about 12 per cent)
VI. Services (1991-920)			
1. Orissa (83.00) 2. Andhra Pradesh (78.69) 3. West Bengal (75.40)* 4. Kerala (75.12)	5. Uttar Pradesh (74.80) 6. Bihar (73.39)* 7. Rajasthan (69.84) 8. Madhya Pradesh (65.32) 9. Karnataka (57.28) 10. Tamil Nadu (54.53)	11. Punjab (44.98)* 12. Haryana (43.85) 13. Gujarat (40.61) 14. Maharashtra (39.07)*	15. Delhi (0.63)*
VII Mechanised Transport (1993-94)			
1. Kerala (90.64)** 2. Rajasthan (81.65)** 3. Haryana (75.98)**	4. Uttar Pradesh (64.15)** 5. Bihar (63.49)** 6. West Bengal (61.26)** 7. Orissa (60.27) 8. Andhra Pradesh (59.97)**	9. Gujarat (48.52) 10. Karnataka (46.06)** 11. Punjab (43.35) 12. Maharashtra (27.79) 13. Madhya Pradesh (27.61)** 14. Tamil Nadu (25.79)	15. Delhi (0.11)
VIII Non Mechanised Transport (1994)			
1. Kerala (96.55)** 2. Haryana (89.34)** 3. Karnataka (82.08)** 4. Rajasthan (82.04)** 5. Tamil Nadu (80.58)** 6. Orissa (77.49)** 7. West Bengal (76.59)**	8. Bihar (73.86)** 9. Punjab (70.42)** 10. Andhra Pradesh (68.43)** 11. Uttar Pradesh (67.01) 12. Maharashtra (51.20)	13. Gujarat (49.28)	14. Madhya Pradesh (12.00) 15. Delhi (2.47)
IX Services Incidental to Transport (1993-94)			
None	None	1. Kerala (41.90)	2. Andhra Pradesh (16.71) 3. Karnataka (5.99) 4. West Bengal (5.00) 5. Maharashtra (4.26) 6. Tamil Nadu (3.25) 7. Madhya Pradesh (2.30) 8. Gujarat (2.12) 9. Rajasthan (1.13) 10. Uttar Pradesh (0.23)
X. Storage and Warehousing (1992-93)			
1. Andhra Pradesh (87.91) 2. Bihar (76.34) 3. Other States (73.17)	None	4. Maharashtra (42.83) 5. Madhya Pradesh (30.12) 6. West Bengal (29.64)	7. Gujarat (7.71) 8. Karnataka (4.34)
XI Communications (1991-92)			
1. Orissa (87.52) 2. Andhra Pradesh (86.76) 3. Uttar Pradesh (83.87) 4. Bihar (81.56) 5. Rajasthan (79.19) 6. West Bengal (79.08) 7. Kerala (8.76)	8. Madhya Pradesh (70.29) 9. Karnataka (65.79) 10. Tamil Nadu (65.11) 11. Maharashtra (63.92) 12. Haryana (59.99) 13. Punjab (55.52) 14. Gujarat (50.52)	None	15. Delhi (8.53)

- Notes:** 1. In the states marked with a single star (*) in Panels I to VI inclusive, the share of rural areas in total employment has declined appreciably over time
2. In the states marked with a double star (**) in Panels VII, VIII and IX, the share of rural areas in total employment has increased by more than ten percentage points between 1988-89 and 1993-94.
3. In storage and warehousing and in communications, (Panels X and XI), state level data are available for the specified year only.
4. In the case of storage and warehousing (Panel X), the estimates for the remaining states and union territories were grouped together under the heading "other states".

(b) Trends at the All India Level

At the all-India level, over time, there appears to have been a negligible increase in the rural share of employment in traditional manufacturing, and a small fall in the rural share of employment in modern manufacturing. The sectors where rural India's share in employment has clearly gone up are wholesale trade, transport, and storage and warehousing. In retail trade, rural area's share has been more or less stable, while in both hotels and restaurants, and in services, the share of rural areas has gone down. (See table 1.13).

Table 1.13: Rural India's Share in Unorganised Segment Employment by Sector : Late 1970s to mid 1990s

Year	Manufacturing		Year	Trade		Year	Hotels and Restaurants	Year	Services
	Traditional	Modern		Wholesale	Retail				
1978-79	71.89	63.49	1779-80	17.70	50.93	1979-80	59.16	1979-80	67.01
1984-85	74.85	63.65	1990-91	28.08	50.15	1983-84	44.97	1983-84	50.93
1989-90	75.19	58.71	1996-97	44.64	49.65	1988-89	39.77	1991-92	60.95
1994-95	73.52	58.37				1993-94	40.02		
Year	Transport			Year	Storage and warehousing				
	Mechanised	Non-Mechanised	Services Incidental to Transport		Warehousing	Cold storage	Other storage	All types	
1988-89	30.51	58.55	9.49	1992-93	40.46	70.60	87.62	50.30	
1993-94	47.43	71.70	4.94						

Notes: 1. In 1985-86, Directory Trade Establishment data was not published at the 2-digit level for states for rural and urban areas separately. Thus this year has to be omitted from this table.

2. Small sample sizes for storage and warehousing in 1979-80 and 1983-84 rule out precise estimates for these years, but it is clear that rural areas share in employment stood much below 50 per cent.

(c) Large Changes over Time at the State Level

The all-India figures, however conceal the important fact that the majority of states listed in the right hand side of table 1.12 got there because of very large reductions over time in the relative importance of rural employment. These states are listed in table 1.14, by sub sector. States where the rural share in employment went down by more than 20 per centage points are underlined.

Table 1.14: States Where the Rural Share in Unorganised Segment Employment Went Down by More than Ten Percentage Points, by Sub Sector, Specified Periods.

Subsector	Period	States
"Traditional" Manufacturing (based on organic raw materials) (6 out of 15)	1978-79 to 1994-95	Gujarat, Haryana, Madhya Pradesh, Maharashtra, Punjab, and Tamil Nadu
"Modern" Manufacturing (based on inorganic raw materials) (8 out of 15)	1978-79 to 1994-95	Andhra Pradesh <u>Gujarat</u> , <u>Haryana</u> , Karnataka, Madhya Pradesh, <u>Maharashtra</u> , <u>Punjab</u> , <u>Tamil Nadu</u>
Wholesale Trade (4 out of 15)	1979-80 to 1996-97	Gujarat, Haryana, <u>Kerala</u> , <u>Orissa</u> (In three states rural areas share in total employment <u>rose</u> by more than 20 percentage points. These are Bihar, Madhya Pradesh and West Bengal)
Retail Trade (7 out of 15)	1979-80 to 1996-97	Andhra Pradesh, Haryana, <u>Kerala</u> , Maharashtra <u>Orissa</u> , <u>Punjab</u> , Tamil Nadu
Hotels and Restaurants (8 out of 13)	1979-80 to 1993-94	Andhra Pradesh, Gujarat, Haryana, Maharashtra, <u>Orissa</u> , Rajasthan, Tamil Nadu, West Bengal.

Subsector	Period	States
Services (5 out of 15)	1979-80 to 1991-92	Bihar, Delhi, Maharashtra, Punjab, West Bengal
Mechanised Transport	1988-89 to 1993-94	<u>None</u> (In seven states the share of rural areas in total employment <u>rose</u> by more than 20 percentage points. They are ; Andhra Pradesh, Bihar, Haryana, Kerala, Rajasthan, Uttar Pradesh, West Bengal)
Non-Mechanised Transport	1988-89 to 1993-94	<u>Delhi, Gujarat</u> (In 7 states share of rural areas in total employment <u>rose</u> by more than 20 percentage points. They are : Andhra Pradesh, haryana, Karnataka, Kerala, Orissa, Rajasthan, West Bengal.)
Services Incidental to Transport	1988-89 to 1993-94	Bihar, <u>Haryana</u> , Kerala, <u>Madhya Pradesh</u> , <u>Rajasthan</u> , Uttar Pradesh

- Notes:* 1. In 2 states, Delhi and Punjab, no data is given for recent year(s) because of small sample size in rural areas; that is, too few cases turned up in the NSS sample.
2. In each of Storage and Ware housing and Communications, state level data is available for a single (recent) year only.

In most states, unorganised sector employment became increasingly urbanised in all economic activities except wholesale trade and transport, where the trend was in the opposite direction. In wholesale trade, rural areas' share in total employment rose by more than ten percentage points in Bihar, Gujarat, Madhya Pradesh, Uttar Pradesh and West Bengal. In transport, substantial increases in rural areas share in employment was the rule in all but two states: Delhi and Gujarat.

There were exceptional states, however, where rural areas' employment shares expanded in other sectors. In Madhya Pradesh, for example, rural areas' share in retail trade employment increased significantly. Similarly, West Bengal stands out as the only state where the rural share in service sector employment rose by as much as ten points. On the other hand, in manufacturing, no state recorded an increase in rural areas' share of as much as ten percentage points, and in hotels and restaurants, there was no state in which rural areas share went up by even as much as five percentage points.

In short, wholesale trade and transport are the only two unorganised sector activities in which recent employment growth has been concentrated in rural areas. In other activities, the states where rural areas' share rose at all, are typically the populous but economically and/or socially relatively backward states: Bihar, Orissa, Rajasthan and Uttar Pradesh, in the case of manufacturing. Of the BIMARU¹⁵ states, Madhya Pradesh is an exception in the case of manufacturing, but in the case of trade, employment has become distinctly more ruralised in recent years.

There is thus, in most subsectors, a distinct regional pattern to the urbanisation of non-farm employment in the unorganised sector. The urbanisation process dominates in the western and north-western states, plus Tamil Nadu, conspicuously so in the two sub sectors providing the largest number of jobs to rural people-manufacturing and retail trade. Appendix Map 1.1 to 1.7, which bring home the sharp regional contrasts in the rural-urban distribution of unorganised sector employment in India, have been relegated to the end of this chapter.

¹⁵ The term 'BIMARU states' was coined by Ashish Bose, "Bimar" in Hindi, means 'sick', and the letters in BIMARU stand for Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh. See: Ashish Bose (1985) *Demography Beyond Decimal Points* Presidential address to the annual conference of the Indian Association for the Study of Population, Bangalore. The term was later used in Bose, A. (1988) *From Population to People* Vol 1 (of 2 volumes) B.R. Publishing Corporation, New De lhi.

(iii) Structural Shift: From Small Family Operated Own Account Enterprises to Larger Non-Directory and Directory Establishments

The character of the unorganised segment is gradually changing. In all subsectors except trade, and possibly rural restaurants, the small family operated businesses have been losing ground to the somewhat larger establishments which employ one or more regularly hired workers. The decline in the share of own account enterprises in all enterprises, in workers and in gross value added in both rural and urban services and transport is substantial. The same holds for urban own account manufacturing units and employment in them and for urban restaurants and hotels. But *rural* own account restaurants and hotels are at least holding their own, and although the share of *rural* own account units in manufacturing workers and gross value added is going down, their share in the number of enterprises has been very nearly stable.

It is significant also that in all subsectors, including trade and restaurants and hotels, own account units are relatively less important in urban areas than in rural locations. In urban areas, in all subsectors except trade, the larger establishments account for the majority of workers and contribute the most to GVA. In rural areas, however, the own account enterprises still constitute the overwhelmingly dominant section in terms of enterprises and workers, and generate the most GVA, except in the transport sector.

What do we make of these patterns of change?

First of all, it is confirmed that local market size matters. This is why tiny own account units have ceased to dominate in the urban setting. The larger urban market permits expansion to more efficient scales of production. On the other hand, most rural units are constrained to operate at scales which are suboptimal. The small local market constraints operate most obviously on the demand side in the case of trade, hotels and restaurants, transport and services, and possibly less obviously, with respect to the sourcing of inputs, including repairs and business services, and stocks, on the supply side.

Secondly, of all sectors, trade, especially retail trade and possibly restaurants, are the ones in which own account enterprises appear destined to survive and possibly to flourish, perhaps side by side with larger scale operations. The entry of super market chains into this business arena could, however, change this outlook drastically, at least in the cities and major market towns.

Finally, productivity levels will, in time, be the deciding factor. In the case of rural own account manufacturing units, average labour productivity is so low that earnings from this source cannot constitute the sole income source of the households engaged in them. It should be anticipated that many more of the very low productivity units will close down. By way of contrast, rural own account units in trade typically earn more than three times as much per worker as their counterparts engaged in manufacturing. Within unorganised services also, there are only two major groups for which average labour productivity levels are more or less adequate. They are banking, financial and legal services and education and health services. Labour productivity in the average rural own account unit engaged in "other services" is abysmally low, even lower than in rural own account manufacturing. In this case, we know from the 1999-2000 NSS employment and unemployment survey, that large numbers of rural workers have exited recently from this activity. More exits should be expected.

The decline in the share of own account enterprises in other activities is brought out by the figures in table 1.15 below.

Table 1.15: Share of Own Account Enterprises in all Unorganised Segment Enterprises, Workers and Gross Value Added in Five Major Subsectors by Rural or Urban Location: Specified Reference Years

Year and sub-sectors	Enterprises		Workers		Gross Value Added	
	Rural	Urban	Rural	Urban	Rural	Urban
1. Manufacturing						
1978-79	(97.6)	(89.2)	(84.0)	(63.2)	(76.5)	(44.5)
1984-85	91.5	71.8	83.1	50.2	72.5	24.6
1989-90	92.2	68.7	79.7	44.1	66.8	24.0
1994-95	90.6	66.0	80.1	41.4	61.8	24.1
2. Trade						
1979-80	93.3	81.6	85.7	62.0	67.9	40.3
1985-86	94.8	79.3	90.2	58.7	81.4	53.3
1990-91	95.1	81.3	91.0	63.6	80.4	34.4
1996-97	94.8	83.9	88.0	69.0	77.2	46.5
3. Restaurants and Hotels						
1979-80	83.8	61.4	73.7	36.1	56.0	21.1
1983-84	79.8	55.3	67.0	30.7	49.5	19.7
1988-89	78.2	55.1	66.1	30.7	49.2	19.7
1993-94	83.6	53.7	72.8	28.1	57.1	16.2
4. Transport						
1979-80	92.7	95.3	85.0	88.8	83.3	84.9
1983-84	87.8	83.7	69.1	55.3	47.0	33.5
1988-89	90.6	83.7	N.A.	N.A.	N.A.	N.A.
1993-94	84.7	81.7	63.2	48.7	49.5	24.6
5. Services						
1979-80	96.7	81.9	94.2	67.4	89.8	56.3
1983-84	80.2	69.2	61.0	43.0	58.1	32.1
1991-92	90.0	72.2	77.3	47.4	68.3	32.5

Note: Figures in brackets for the manufacturing subsector in 1978-99 relate to own account and non directory - establishments combined.

(iv) Two Historically Significant Modernisations

Major structural changes have taken place in both unorganised manufacturing and in transport in directions commonly associated with “modern economic growth”¹⁶. In manufacturing, the share of units using “modern” chemicals and metals based inputs has gone up while the share of units relying on traditional, organic raw materials has declined. In transport, the rapid switch to motorised equipment has been spectacular.

(a) Manufacturing: The Rise of Modern Chemicals and Metals Based Activities

Most of the roughly 30 million people who work in unorganised manufacturing are concentrated in just three industries – food products, textile products and wood products, furniture and fixtures - all of them based mainly on organic raw material inputs. These three traditional industries together account for nearly half of all employment in unorganised manufacturing and close to 40 percent of gross value added by it. Their dominance is even greater in rural areas than in rural and urban areas combined. Unfortunately, the top two – food products and wood products – are in decline in both employment

¹⁶ Kuznets, S (1966), *Modern Economic Growth: Rate, Structure and Spread* Yale University Press, New Haven, Connecticut.

and labour productivity terms. Most other industries based on organic raw materials traditionally produced in rural areas have also suffered either negative employment growth or negative labour productivity growth, or both. In general, even in rural areas, manufacturing industries based on inorganic raw materials – the chemicals and metals based industries – are doing far better than the traditionally rural industries, but there are exceptions.

Table 1.16 cross classifies all unorganised manufacturing industries into four sets, defined in terms of positive or negative employment and labour productivity growth rates.

Table 1.16: A Cross Classification into Four Sets of Unorganised Manufacturing Industries Arranged by Employment and Labour Productivity Growth Rates, 1989-90 to 1994-95

Growth	Industry
I. Positive employment growth and positive productivity growth (ranked from highest to lowest employment growth rates 1989-90 to 1994-95)	1. Other Manufacturing Industries (38)
	2. Manufacture of rubber plastic, petroleum and coal products and processing of nuclear fuels (31)
	3. Manufacture of transport equipment and parts, repair of locomotives and other rail road equipment (37)
	4. Manufacture of metal products and parts except machinery and transport equipment (34)
	*5. Manufacture of Textile products including wearing apparel (26)
II. Positive employment growth and negative productivity growth	1. Manufacture of wool, silk and manmade fibre textiles (240)
	2. Basic metal and alloy industries (33)
	3. Manufacture of machinery, machine tools and parts (35)
III. Positive labour productivity growth and negative employment growth (ranked from highest to lowest productivity growth rates 1989-90 to 1994-95)	1. Manufacture of electrical, electronic machinery (36)
	2. Manufacture of jute and other vegetable fibre textiles (except cotton) (25)
	3. Manufacture of leather and leather products (29)
	4. *Manufacture of cotton textiles (23)
	5. *Manufacture of beverages, tobacco and related products (22)
	6. *Manufacture of non-metallic mineral products (32)
IV. Negative employment growth and negative labour productivity growth (ranked in ascending values of the negative employment growth rates 1989-90 to 1994-95)	1. *Manufacture of food products (20-21)
	2. Manufacture of paper, paper products, printing, publishing and allied industries: (28)
	3. *Manufacture of wood, wood products, furniture and fixtures (27)
	4. Manufacture of basic chemicals and chemical products (except products of petroleum and coal) (3)

Notes: 1. *Starred industries employ 5 per cent or more of all unorganised manufacturing workers.

2. The numbers in brackets are National Industrial Classification (NIC), 1987 codes.

The true sunrise industries can be readily identified as those enjoying both positive employment growth rates and positive productivity growth. Unfortunately, there are not very many of them – only five. Most other industries suffered negative employment growth.

On a combined employment and labour productivity growth criterion, the five industries which score first class marks are: (1) other manufacturing industries (code 38), (2) the rubber, plastic, petroleum and coal products group (code 31), the manufacture of transport equipment and parts (code 37), (4) metal products and parts (code 34), and (5) textile products, including wearing apparel (code 26). Unorganised segment units in these industries have demonstrated that they can survive and prosper even in an environment where unorganised manufacturing units in some other industries are doing badly. Unless policy changes adverse to these particular groups are made they should continue to do well.

There is a second set, of three industries, which record positive employment and negative labour productivity growth. Of these, one deserves special mention. The manufacture of wool, silk and manmade fibre textiles, (code 24), records positive GVA and positive employment growth, but for rural and urban areas combined, labour productivity has been declining. This is not the case in rural areas however. Units in rural locations have enjoyed positive productivity growth. This industry, therefore, may be treated as one which deserves support on both employment and income generation grounds.

There is another set, of six industries, whose long term prospects as members of the unorganised manufacturing segment may be better than it appears at first glance. All of them succeeded in increasing labour productivity, and all of them did it, at least in part, by reducing the number of workers employed in their respective industry groups. Most of these industries also recorded positive overall GVA growth rates. Large negative employment growth rates are found in rural areas in all but one of them. The exception is the manufacture of electrical and electronic machinery, (code 36). In this case, both the number of enterprises and employment has contracted in urban areas (and overall) but expanded in rural locations. In short in the early 1990's this industry is one in which unorganised segment units tended to shift from urban to rural areas.

As long as these industries as a group continue to raise labour productivity, they are probably destined to survive as members of the unorganised of manufacturing sector, but the prospects for increasing employment in them must be rated as poor. The likely scenario appears to be a smaller number of enterprises and workers, but higher per worker and per enterprise productivity, and in most cases positive growth in total gross value added by the surviving set of unorganised sector units in each industry.

Each member of the last set, of four sunset industries, appears to be giving way to producers, which are operating on a larger scale, in the organised sector. In the unorganised segment they are all characterised by negative GVA growth, negative employment growth and negative labour productivity growth. It is a bad combination, particularly because a large proportion of unorganised manufacturing employment is accounted for by these units, especially in rural areas.

Of these the most important is the manufacture of food products (code 20-21). Regardless of rural or urban location, per worker and per enterprise productivity growth rates are both negative, GVA growth is also negative, and the number of unorganised sector enterprises is going down. There is a small positive employment growth rate in urban areas, but in rural areas and overall, the workforce is contracting. The food products industry accounts for 21 per cent of unorganised manufacturing employment in rural areas and nearly 19 percent in rural and urban areas combined. In this industry the organised segment is expanding. To illustrate: organised sector GVA growth rates in the food products industry were 3.92 percent, 8.69 percent and 6.09 per cent in 1978-79 to 1984-85, 1984-85 to 1989-90 and 1989-90 to 1994-95 respectively. The corresponding growth rates in employment and labour productivity in the most recent period were 2.10 percent and 3.91 percent respectively. In short, the evidence is overwhelming that in the food products industry, the unorganised segment of manufacturing is losing out to the organised segment. This would be no cause for concern were it not for the fact that the job losses in the unorganised segment far outweighed the gains in employment in the organised segment.

The manufacture of paper, paper products, printing and publishing (code 28) is an odd case. Although there is negative GVA growth overall and negative labour productivity growth everywhere, on two criteria the industry is not doing too badly in rural areas. It records both positive employment growth and positive GVA growth in rural locations. Nevertheless the evidence is clear that this is

another industry which is being supplanted by the more sophisticated units in the organised sector where it enjoyed high growth rates of GVA, employment and labour productivity in recent years.

Unorganised sector enterprises engaged in the manufacture of wood products, furniture and fixtures (code 27) enjoy positive enterprise and employment growth only in urban areas, but negative GVA growth and negative labour productivity growth everywhere. Both employment and the number of enterprises are contracting in rural areas and overall. The same thing has been happening in the organised segment of this industry. Everything, including labour productivity is in decline from 1989-90 to 1994-95. Since the industry as a whole is in recession, not much can be said about the future place of the unorganised segment within it.

If there is any industry which can be said to be a lost cause as far as production by small, unorganised segment units is concerned, it is the manufacture of basic chemicals and chemical products. In the organised sector it has been doing very well, with GVA growth rates of more than ten percent between 1989-90 and 1994-95, employment growth rates of close to five percent per annum and labour productivity growth of the order of 6.8 percent. In the unorganised sector, the industry records large negative growth rates across the board. It appears that this industry is just not suited to small scale unorganised segment production. Since it accounts for a very small share of unorganised sector employment, no tears need be shed on account of its virtual disappearance from the unorganised sector scene.

(b) The Mechanisation of Unorganised Transport

In India, the switch from human and animal labour intensive, non-mechanised transport to mechanised transport provides one of the most dramatic and significant examples of rapid restructuring recorded by the unorganised segment enterprises surveys conducted by the NSS.

This technological revolution began with a bang at the start of the 1980's. Initially, mechanised transport displaced non-mechanised transport, causing a sudden collapse in the number of enterprises and workers in the non-mechanised branch and overall. However, following a brief period of adjustment, the number of non-mechanised units and workers began to rise again, but at a relatively slow pace.

The explosion in the number of mechanised units was most marked in rural areas. Absolute numbers for enterprises and workers reveal the rapidity of the technological shift and its consequences for employment in both rural and urban areas. The displacement of rural workers from non-mechanised transport was made good within a decade, but in urban locations, even in the mid- 1990's, the number of people engaged in the non-mechanised branch remained below the figures for the end of the 1970's.

Table 1.17: Enterprise and Employment Numbers in Unorganised Transport by Transport Type and Rural or Urban Location: All India: 1979-80, 1983-84, 1988-89 and 1993-94

Location & Year	Absolute of Number Enterprises and Workers			
	Enterprises		Workers	
	Mechanised	Non-mechanised	Mechanised	Non-mechanised
Rural				
1979-80	23,078	813,159	42,251	1,010,209
1983-84	36,999	245,868	115,619	283,445
1988-89	66,958	451,226	176,753	531,114
1993-94	264,106	991,664	597,638	1,123,217
Urban				
1979-80	89,136	489,641	129,922	536,508
1983-84	86,809	257,124	248,446	289,296
1988-89	159,191	333,753	402,531	375,952
1993-94	261,807	415,116	662,291	443,403

Note: There is a third enterprise category within transport, not entered here, namely, "services incidental to transport". These units are overwhelmingly concentrated in urban areas.

Implicit in the figures of table 1.17 is a tremendous increase in the rural share of non-mechanised transport units and workers. Today, more than 70 percent of non-mechanised transport units operate in rural areas. At the same time, the rural share of mechanised transport has also gone up sharply.

What is happening, in short, is that the very small own account human and animal labour intensive transport units are tending to concentrate in rural areas. Simultaneously, the unorganised transport sector in rural areas is becoming increasingly mechanised. Thus in the early 1990's, the share of rural areas in mechanised transport jumped up suddenly, suggesting that a kind of rural catching up process had gotten underway.

There is, however, a down side to these transitions. Because the productivity levels achieved by mechanised transport were so much higher than in any other line of unorganised sector activity in the early 1980's, large numbers of entrepreneurs and workers flooded into unorganised transport, pushing down labour productivity levels in both the mechanised and the non-mechanised branches of unorganised transport. Despite this downward pressure, however, productivity levels in unorganised transport remain well above those in the unorganised segments of the other important sectors.

(v) The Widening of Interstate Labour Productivity Disparities

In India's unorganised sector, interstate inequalities in labour productivity are gigantic, and in all sectors except trade, these disparities have tended to increase in the long run. In manufacturing, which employs the largest number of people, labour productivity in the top state, Haryana, is now roughly ten times what it is in Orissa. In trade, which is the activity with the smallest regional labour productivity differences, gross value added per worker in Delhi is three times what it is in Bihar. The gaps between the top and the bottom states in the case of transport, restaurants and hotels, and services stand between these two extremes – with the top state achieving productivity levels from 4.6 to 6.6 times the levels recorded in the state where labour productivity is lowest.

In three sectors – restaurants and hotels, transport and services – the widening of interstate disparities has been a continuous process. In manufacturing, however, inequalities peaked in the mid-1980's and then fell, but to levels which still remained above the initial position of 1978-79. This sequence – a period characterised by widening disparities, followed by some years of convergence – occurred in

unorganised trade as well, but in this case interstate inequalities declined sufficiently after the mid-1980's, to produce a narrowing of productivity disparities over the long run.

Among all unorganised sectors covered in this report, the most shocking increases in interstate labour productivity disparities have taken place in services – the third largest employer in the unorganised sector. In this, as in most other unorganised sectors, interstate variations in per capita incomes is the factor which best explains interstate differences in labour productivity, suggesting that productivity levels in most unorganised, non-farm, activities are regionally, and possibly locally, demand determined.

The interstate coefficients of variation which measure the size of interstate disparities are given in table 1.18 below.

Table 1.18: Interstate Coefficients of Variation for Labour Productivity in Specified Unorganised Segment Activities, by Rural or Urban Location: Specified Years

Year	Coefficients of Variation for GVA per worker		
	Rural	Urban	All Locations
Manufacturing			
1978-79	41.11	29.78	46.12
1984-85	50.72	73.43	94.16
1989-90	45.34	41.03	58.35
1994-95	44.98	37.66	53.36
Trade			
1979-80	50.86	38.77	47.23
(1985-86)	(96.44)	(119.15)	(144.92)
1990-91	53.22	36.57	52.84
1996-97	43.15	30.90	33.00
Restaurants and Hotels			
1979-80	24.63	33.14	38.65
1983-84	46.14	61.74	43.20
1988-89	62.32	49.58	45.53
1993-94	53.21	65.01	64.86
Transport			
1988-89	47.68	46.33	45.94
1993-97	43.41	152.39	186.32
Services			
1979-80	47.44	26.53	42.16
1983-84	42.66	35.85	46.56
1991-92	67.22	42.79	60.79

Notes: 1. Trade figures for 1985-86 have been bracketed because of unmanageable problems with the underlying GVA data at the state level.

2. In transport, although all-India data is available for four points in time, state level estimates for the main magnitudes are available only for two of them: 1988-89 and 1993-94.

Maps 1.1 and 1.2 showing the resulting interstate differences in rural and urban productivity levels, as of 1994-95, were given in a previous sub section of this chapter - subsection 1.2.4. "Common year" estimates of labour productivity for four points in time are presented for each of 15 states in appendix table 1.5.

1.5 The Links between Agriculture and the Unorganised Non-Farm Sector

(i) Introduction

Some factor, or set of factors, links regional productivity levels in the unorganised non-farm sector to regional productivity levels in agriculture. There may be a causal connection also, between employment growth rates in rural (but not urban) unorganised segment enterprises and the performance of agriculture at the state level.

This subsection presents the statistics which indicate how strong the connections are between agriculture on the one hand, and the unorganised non-farm sector on the other, even in urban areas. These strong links need to be taken into account when devising strategies directed to improving productivity and employment growth rates in the unorganised non-farm sector.

(ii) The Link to Labour Productivity in the Unorganised Non-farm Sector

(a) On Relative Productivity Levels in Agriculture and the Unorganised Non-farm Sector

Although, in cross section, labour productivity in agriculture and labour productivity in the unorganised non-farm sector are directly related to one another, in the rural areas of most states, labour productivity in the unorganised non-farm segment as a whole is lower than what it is in agriculture¹⁷, while in urban enterprises labour productivity is generally higher than in agriculture¹⁸. This result for all sectors combined comes about largely because of the low labour productivity levels which characterise unorganised manufacturing and services, particularly in rural areas.

In 1994-95, for example, in all of the fifteen states covered in this report, labour productivity in rural unorganised manufacturing activities was lower than labour productivity in agriculture. In unorganised services, agricultural labour productivity exceeded labour productivity in rural services in all states except Bihar. Trade, hotels and restaurants, and transport are the only subsectors in which labour productivity in rural units is greater than labour productivity in agriculture in as many as half the states covered here.

Appendix table 1 gives subsectoral details, statewise, for three points in time. It may be worth noting, that the relative productivity levels recorded here are in line with the results of a rather different kind of analysis: - a series of exercises to produce estimates of the prevalence of poverty among persons in households engaged in different kinds of economic activities.¹⁹

(b) The Link between Farm Labour Productivity and Labour Productivity in the Unorganised Non-farm Sector: Some Cross Section Regression Results

¹⁷ In 13 out of 15 states, in 1994-95, labour productivity in rural unorganised sector enterprises was lower than in agriculture. The two exceptional states where rural unorganised segment labour productivity levels were higher than agricultural labour productivity were Bihar and Maharashtra.

¹⁸ The three exceptional states where urban labour productivity in unorganised segment enterprises stood below agricultural labour productivity were Punjab, Haryana and Delhi—the three states recording the highest farm labour productivity in the country.

¹⁹ These results are reported in Bhalla, Sheila (2002) "Behind Poverty: The Qualitative Deterioration of Employment Prospects for Rural Indians." In (eds.) Acharya, S.S., Surjit Singh and Vidya Sagar *Sustainable Agriculture, Poverty and Food Security: Agenda for Asian Economies* Vol. 2 (pp 702-726), Rawat Publications, Jaipur and New Delhi. What these poverty estimates showed was that people belonging to households engaged in manufacturing suffered the third highest poverty ratios in rural areas, next only to agricultural labour households and households involved in construction work, which are the two poorest groups. Considering that these data cover households employed in the organised segment of rural manufacturing as well as its unorganised segment, the results tend to confirm the relatively poor productivity performance of the average unorganised manufacturing enterprise in rural areas. In most states, persons engaged in services other than health and education services, were the next worst off. The 1993-94 head count ratios are given in appendix table 1.4.

In brief, the prosperity of agriculture, or its poverty, is reflected at the state level in the economic condition of the workers in the unorganised non-farm sector. In states where agricultural labour productivity is high, labour productivity in the unorganised non-farm sector is high. Where labour productivity levels are low in agriculture, they are low also in other unorganised sector activities. This relationship holds not only for the productivity levels of workers in rural enterprises, but also for that of persons engaged in urban unorganised sector units.

This relationship, across states, for three points of time, has been and remains highly significant in the case of all unorganised sector activities combined. In the mid 1990s, the relationship was also highly significant for each subsector taken separately. In the past, however, the significance of these relationships was much lower in the transport and service sectors than in manufacturing or trade. Then, during the 1990s, R^2 , beta coefficients and t values all moved up, most noticeably in rural transport, bringing the behaviour of labour productivity in unorganised transport and services more closely into line with that of manufacturing and trade.

The impact of farm labour productivity levels on productivity in non-farm sector enterprises does differ somewhat between rural and urban located units in particular subsectors, such as trade and services, but the differences today are not nearly as large as might be anticipated. In short, the effects of high, or low, labour productivity in agriculture at the state level are not confined to rural areas. They extend to enterprises located in the urban areas of each state as well.

The channels through which these effects operate were not investigated. However, three possibilities, all of which may well be at work simultaneously, may be worth mentioning. First, a wide ranging literature suggests that high, or low, regional productivity levels in both agriculture and non-agriculture may be traceable to a common cause—inter state differences in infrastructure endowments.²⁰ Secondly, the monetary and other advantages and disadvantages of alternative farm and non-farm activities may tend to be brought into equality by people in a position to shift and choose between one activity and another. (The problem with this explanation is that, especially in rural areas, a large proportion of people employed in unorganised segment non-farm enterprises work there only seasonally or part time. They, and their households, are in no position to decide between alternative kinds of full-time work. They continue with whatever kind of work they have, and, at the same time, look out for additional supplementary, seasonal, or part time work to do). Finally, there is the likelihood that a prosperous and technically more sophisticated agriculture may generate stronger and more numerous forward and backward links with other activities in urban as well as rural areas, providing a basis for more, and more productive, non-farm work in a range of unorganised non-farm sector enterprises.²¹

These findings, on the strong links between farm and non-farm unorganised segment labour productivity, it may be noted, do not apply to labour productivity in the organised and unorganised non-farm segments combined, for any subsector, with one important exception—trade, hotels and

²⁰ See, for example: (i) Papola, T.S. (1987), "Rural Industrialisation and Agricultural Growth: A Case Study on India" (pp 39-106) in (ed.) Rizwanul Islam *Rural Industrialisation and Employment in Asia* ILO-ARTEP, New Delhi; (ii) Fan, S, P.B.R. Hazell, and T.Haque (1998) *Role of Infrastructure in Production Growth and Poverty Reduction in Indian Rainfed Agriculture*. Project Report to the Indian Council for Agricultural Research and the World Bank. International Food Policy Research Institute, Washington D.C. and (iii) Fan, S, P.B.R. Hazell, and S. Thorat (1998) "*Government Spending, Growth and Poverty: An Analysis of Inter linkages in Rural India.*" Environment and Production Technology Division, Discussion Paper No. 33, International Food Policy Research Institute, Washington, D.C.

²¹ See, for example: Mellor, John W. (1976) *The New Economics of Growth: A Strategy for India and Developing World*, Cornell University, Press, Ithaca, N.Y.

restaurants²²—where the relationship is highly significant from the mid 1980s to the mid 1990s. For the record, they also do not apply to organised manufacturing at all.²³

Table 1.19: Regression Results: Independent Variable: Gross State Domestic Product from Agriculture per Agricultural Worker. Dependent Variable: Gross Value Added per Worker in Unorganised Sector Enterprises Engaged in Specified Activities: 1984-85, 1990-91 and 1994-95 by Rural or Urban Location.

Dependent Variables	Statistics	1984-85			1990-91			1994-95		
		Rural + Urban	Rural Only	Urban Only	Rural + Urban	Rural Only	Urban Only	Rural + Urban	Rural Only	Urban Only
1. Labour Productivity in Unorganised enterprises engaged in all non-farm activities	R ²	.593	.083	.614	.413	.497	.360	.694	.443	.509
	Beta Coefficient	.770	.289	.784	.643	.705	.600	.833	.666	.713
	T- Value	4.181	1.044	4.372	2.906	3.442	2.599	5.425	3.216	.670
	Significance	99.9	None	99.9	98.7	99.5	97.7	99.9	99.3	99.7
2. Labour Productivity in unorganised manufacturing enterprises	R ²	.457	.071	.607	.500	.370	.462	.531	.429	.336
	Beta Coefficient	.676	.269	.779	.707	.609	.680	.729	.655	.580
	T- Value	3.177	.959	4.306	3.465	2.656	3.209	3.834	3.123	2.565
	Significance	99.2	None	99.9	99.5	97.9	99.2	99.8	99.2	97.7
3. Labour Productivity in unorganised trade enterprises	R ²	.474	.006	.446	.286	.348	.146	.619	.573	.272
	Beta Coefficient	.689	-.077	.668	.535	.590	.382	.784	.757	.522
	T- Value	3.289	-.269	3.108	2.194	2.530	1.433	4.595	4.177	2.204
	Significance	99.4	None	99.1	95.1	97.4	None	99.9	99.9	95.4
4. Labour Productivity in unorganised transport activities	R ²	.009	.428	.019	.001	.595	.199	.343	.752	.367
	Beta Coefficient	-.094	.654	.138	-.032	.772	.446	.586	.867	.606
	T- Value	-.328	2.994	.483	-.110	4.201	1.724	2.606	6.270	2.747
	Significance	None	98.9	None	None	99.9	89.0	97.8	99.9	98.3
5. Labour Productivity in unorganised services	R ²	.100	.052	.013	.404	.089	.012	.709	.378	.219
	Beta Coefficient	.316	.228	-.114	.636	.299	-.108	.842	.615	.468
	T- Value	1.155	.812	-.398	2.852	1.085	-.377	5.625	2.809	1.912
	Significance	None	None	None	98.5	None	None	99.9	98.5	92.2

Note: The regressions were run on the statewise common year estimates of unorganised segment labour productivity presented in Appendix Table 1.3.

²² For the case of trade, hotels and restaurants, the cross sector regression statistics given below. The independent variable is gross state domestic product per worker in agriculture. The dependent variable is gross domestic product per worker in trade, hotels and restaurants, both in 1993-94 constant prices.

Regression Statistics	1984-85	1990-91	1994-95
R ²	.546	.460	.442
Beta coefficient	.739	.678	.665
T- Value	3.799	3.195	3.210
Significance	99.7	99.2	99.3

²³ In the case of labour productivity in organised manufacturing, no R² is above .030.

(iii) Farm Labour Productivity Levels and Rural Non-Farm Unorganised Segment Employment Growth

The evidence for a link from agricultural labour productivity to rural non-farm employment is, however, extremely thin. Although it has been demonstrated²⁴ that in India, during the 1970s, agricultural productivity growth stimulated rural non-farm employment growth, nothing of this sort is happening today. On the contrary. During the 1980s and 1990s, whenever agricultural labour productivity, (or its rate of growth) produced any significant impact at all on unorganised non-farm sector employment growth, the relationship was invariably inverse. Thus relatively high state level agricultural labour productivity growth rates are associated with low employment growth rates in rural unorganised manufacturing²⁵ during the period 1984-85 to 1990-91, and conversely low agricultural labour productivity growth is associated with relatively high employment growth. The same holds for employment in rural unorganised service sector enterprises²⁶ from 1990-91 to 1994-95. Similarly, there is some indication that employment growth in rural unorganised service sector enterprises was inversely related to levels of agricultural labour productivity²⁷ during the first half of the 1990s. It may be noted that significance levels above 90 per cent are found *only* with respect to employment growth in units located in rural areas, and never in the case of employment growth in urban areas.

This evidence tends to confirm suspicions that in some low farm labour productivity states, a great deal of rural unorganised non-farm sector employment growth is distress induced. Further, it suggests that under these circumstances, unorganised manufacturing and service sector enterprises are the ones most likely to absorb rural workers who are in search of alternative, or supplementary, sources of income.

(iv) Initial Labour Productivity Levels in Unorganised Segment Activities and Subsequent Employment Growth within the Unorganised Segment.

It has been suggested also that inter state differences in unorganised segment employment growth rates might be accounted for in part by inter state contrasts in labour productivity within the unorganised segment itself. In the optimistic scenario, relatively high productivity levels in any state in the initial year of any period would result in relatively high employment growth rates in that state during that period, and conversely. However there are also grounds for suspicion that the states with the lowest productivity levels in the unorganised sector may be among those where unorganised enterprise employment growth has been most rapid. The observed proliferation of unorganised non-farm sector activities in some backward regions suggests such an inverse relationship.

This line of causation does seem to operate to some extent in recent years in the unorganised segment as a whole. During the late 1980s and early 1990s, the impact of own productivity levels was significant, but only in urban areas. In rural areas generally other factors prevail over this sort of economic logic. No significant link exists between initial rural productivity levels, on the one hand, and subsequent employment growth on the other, for all unorganised segment activities combined.

However, in particular subsectors, during particular periods, inter state variations in employment growth rates can be accounted for by initial productivity levels within the subsector. For example, in unorganised manufacturing the "productivity pull" factor appears to have operated during the 1984-

²⁴ See, for example: Mellor, John W and Mohinder S. Mudahar (1974), "Modelling Agriculture, employment and economic growth: A Simulation Model," Occasional Paper No. 75. Employment and Income distribution project, Dept. of Agricultural Economics, Cornell University Ithica, N.Y, and Raj Krishna (1976) *Rural Unemployment: A Survey of Concepts and Estimates for India*: Staff Working Paper No. 234, The World Bank, Washington D.C.

²⁵ In rural manufacturing, the beta coefficient was -.568 and the significance level 96.6 per cent.

²⁶ In rural services, the beta coefficient was -.462 and the significance level only 90.4 per cent.

²⁷ The beta coefficient was -.464 and the significance level 90.5.

85 to 1990-91 period in both rural and urban areas. Moreover, in unorganised transport, interstate variations in initial rural productivity levels have accounted, to a significant extent, for interstate differences in rural employment growth rates in all three periods, although the level of significance has tended to come down over time. Finally, during the 1990s only, a significant²⁸ inverse relationship emerged between initial productivity levels in rural services and subsequent employment growth. This tells us, that rural services employment tended to expand the most in states where services productivity was relatively low and the least in states where services productivity was comparatively high. In short, distress diversification into rural services characterised relatively poor states.

1.6 A Perspective on the Main Findings with a Focus on Issues Relating to the Rural Non-Farm Sector

The evidence presented here indicates that the *mantra* of undifferentiated "rural industrialisation" has now got to be dropped. The activities which have demonstrated that they can survive and prosper in rural areas are trade, restaurants, transport and some sections of services. Aside from these, there may be a strong case for promoting certain activities allied to agriculture, but not covered by the unorganised enterprise surveys. Village resurveys²⁹ in 2002 showed that specialised poultry and other animal husbandry activities have expanded, and that each of these new enterprises typically employs more people than any other kind of rural activity. Construction, and mining and quarrying are also activities which have expanded at much more rapid rates than manufacturing.

Within manufacturing, the importance of fine tuning rural industrialisation policy to take into account the strengths and weaknesses of particular industrial groups is underlined by the evidence.

Questions are often raised about the possibly adverse impact of economic liberalisation measures, on unorganised manufacturing enterprises in particular. The evidence presented here indicates that such measures constitute only one part of the story.

During the 1980s and even more so during the 1990s, a number of changes in policy and practice were introduced which were undoubtedly inimical to the expansion of rural employment in the unorganised sector. These can be classified into three broad categories : (i) changes in the regulatory environment which directly affected small scale and very small scale manufacturing activities³⁰ (ii) cut backs in rural infrastructure investment and changes in credit policy which have much wider repercussions³¹, and (iii) changes in the import policy regime which may affect specific industries (such as oil seeds processing³² and not others.

²⁸ Significant at the 97.0 per cent level

²⁹ The original surveys were conducted in 1992. Resurveys in 2002 were funded by the Overseas Development Institute, London, U.K.

³⁰ These range from repeated increases in the investment ceiling limits defining small and very small scale industries to dereservation of items previously reserved for production by small scale units only. On this see, for example; Chadha, G.K. (1996), and policy documents such as GOI Ministry of Industry (1997); GOI, Ministry of Industry (1980) especially page 4 paragraph 12; GOI Ministry of Industry (1991) July 24; GOI (2000) Aug 30/31 and GOI, Ministry of Industry (1997), July.

³¹ See especially Shetty, S.L. (2002) and Mujumdar, N.A. (2001) and the official forerunner of these changes - the *Narasimhan Committee Report on the Financial System* (GOI 1991). The Shetty paper demonstrates that commercial bank credit has been directed away from rural areas, backward regions, agriculture and small scale enterprises and in favour of urban areas, advanced regions, and the organised non-farm sector: Mujumdar, former Principal Advisor to the Reserve Bank of India, describes the 1990's as "a lost decade for rural credit" (page 3) and for investment and working capital flows to agriculture (p4).

³² On oilseeds there is a consolidated report on the Quick Studies conducted by Agricultural Economics Research Centres, by D.S. Bhopal (2002), which finds that, as a result of tariff reductions and increased imports "about half of the rapeseed/mustard processing units in Haryana and many in Rajasthan were closed down". (page 80). The surviving units reduced operations by 20 per cent in Haryana, and by 18 per cent in Rajasthan between 1997-98 and 1999-2000. "the most badly affected were the soya processing units in Madhya Pradesh and oil palm units in Andhra Pradesh....."(page 80-81) Soyabean, it may be noted, is not processed by small units.

Although there is now a large literature on the possible, or observed, impact of these measures on rural areas generally, and on small scale and very small scale economic activities in particular, very few studies have been done to trace out the cause and effect links between the decline in particular 3 or 4 digit level activities in the unorganised sector, on the one hand, and specific changes in policy and practice on the other. Nevertheless, it is generally acknowledged, that such economic liberalisation measures have damaged the prospects for productive employment in the rural, unorganised non-farm sector.

But too much blame should not be laid at the door of liberalisation measures. The situation is much more complex than that. Much of the restructuring of the unorganised sector which has taken place very likely would have taken place anyway. There are at least four reasons for saying this.

The first one involves the issue of access to transport facilities. Most studies have concluded that transport acts as a double-edged sword. It cuts both ways. On the one hand, increased ease of access and falling transport costs make it economically profitable both to exploit rural resources and to sell in rural markets. This, it has been argued, facilitates the development of a "more specialised, more productive, rural economy"³³. Input supplies can be sourced from more distant locations, and output can be sold to buyers in urban centres, inside and outside the region. On the other hand, as the local village economy becomes increasingly integrated with the regional and national economies, local rural non-farm enterprises have to face growing competition from outside, possibly from units in nearby towns, or in more distant urban centres, and from imported goods. It is commonly found that manufacturing units face the stiffest competition, while rural services are relatively insulated. However, where passenger transport is well developed, even some local services are exposed to competition, as the consumers of certain services tend to rely increasingly on service providers located in rural market towns and district headquarters. It is common, for example, in Haryana for people to travel to town for medical, legal or repair services. They say they prefer the urban services to locally available ones because of better quality. Thus, even in the absence of liberalisation measures, the improvement of rural transport facilities would have exposed rural manufacturing, trade and some services, more and more, to 'outside' competition. The rapid rise of motorised (and other) unorganised transport enterprises in rural areas, has undoubtedly speeded up these processes in India.

The second factor relates to the scale of operations, technology and the decline of tiny family operated, own account enterprises in most, but not all economic activities. As development proceeds, one expects a shift involving the slow phasing out of self employment, and a simultaneous rise in the share of hired workers and open unemployment in the total labour force. The National Sample Survey's periodic employment surveys provide abundant evidence that these labour force transitions are underway in rural areas³⁴. The key factors driving this transition are improving technologies and more sophisticated organisation of production processes, which reduce costs. The entire process raises labour productivity but tends to reduce labour absorption per unit of output. Enterprises which, for any reason, are not able to participate in these transitions, get left behind, and in the longer run, are driven out of business by more efficient competitors, which may be in urban centres within the region, or outside the region altogether. The unorganised enterprise surveys provide ample evidence that this has been taking place, in particular within the manufacturing sub sector. Again, much of this would have taken place, even without the introduction of economic liberalisation measures.

³³ See Haggblade, Steve, Peter Hazell, and James Brown (1989) "*Farm, Non-farm Linkages in rural Sub-Saharan Africa*" in *World Development* Vol 17, No.8.

³⁴ The speed of this transition is remarkable. The share of hired regular and hired casual workers rose from 45 per cent to 47 per cent in the short period between 1993-94 and 1999-2000. Open unemployment rose from 6.0 to 7.3 per cent during the same period.

The evidence also suggests the operation of a third factor. It may be significant that low productivity, unorganised sector activities have persisted in rural areas in the relatively backward regions of India— the BIMARU states plus Orissa, while the more modern, and more productive units have sprung up in the states where rural infrastructure is best developed, with many of them locating in market towns and large villages rather than in rural areas. To understand these developments, it needs to be remembered that there are many villages without access to electric power and many more which get, for example, three hours of two phase power and two hours of three-phase power, (not counting unscheduled power cuts). Many more villages have no reliable source of water, no link roads, and no telephone connections to the outside would. Unless these basic facilities are provided, there is no way that modern unorganised sector activities can establish themselves in these regions. Even the traditional industries cannot compete under such conditions.

What are the other key issues?

In India, the question of how to accelerate employment growth in the rural non-farm sector has often been identified as the single most important issue. But the evidence presented here suggests that the *quality of* rural employment growth may be at least as important as its quantity. The abysmally low average labour productivity levels in India's rural non-farm sector are directly related to India's relatively poor performance in poverty reduction, as compared, for example, to China's.

Aside from labour productivity *levels*, there are other indicators of the poor quality of rural unorganised non-farm sector employment growth, including the rise in the number of part-time workers and the fall in the number of full time workers especially in unorganised agro-based industries during the later 1990s.³⁵

There are also several important issues directly or indirectly related to productivity.

The first is the issue of interstate labour productivity disparities in unorganised sector enterprises. They are gigantic, especially in manufacturing. Moreover, these disparities have tended to widen over time in most economic activities. The only significant exception is unorganised trade.

There is a second issue which also could be the source of socio-economic tensions. The rural-urban disparities in levels of labour productivity in unorganised sector enterprises, described in this study, are remarkably large, considering the fact that in India workers are, in principle, free to migrate to urban centres.

This study has shown, that there has been in fact a substantial and systematic shift of a number of major economic activities, including manufacturing and retail trade from rural to urban locations. This has involved an absolute decline in the number of rural workers engaged in these activities during some periods. The extent of these shifts has a significant geographical dimension. It is most pronounced in the highly developed states of north west India, coastal western India and the state of Tamil Nadu in the south. It is weak or absent in the relatively backward states of Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and Orissa. If it is indeed true, as this evidence suggests, that such shifts characterise healthy development processes, these observations raise a serious question about

³⁵ Evidence on this, most recent period (1993-94 to 1999-2000) is discussed in Chadha, G.K. and P.P. Sahu (2003) "Employment in Unorganised Manufacturing in India: Post Reform Trends and Future Direction). Paper presented at the National Seminar on results of the NSS-56th Round, March 21, Ministry of Statistics and Programme Implementation, NSSO, GOI. Chadha interprets these changes as a sign of *distress*.

policy. Does India *want* this rural to urban shift? Should we take steps to facilitate it, or is rural non-farm development to be viewed, among other things, as a means to prevent or contain such shifts?

Finally, on the productivity issue: it was shown that there exists a highly significant link between levels of agricultural productivity and productivity in non-agricultural activities, which has persisted over the last 20 years. The relationship holds for productivity levels in *urban* unorganised sector enterprises as well as in rural ones. Further it was argued that variations in *infrastructure endowments* are likely to be the common cause of the observed interstate variations in both productivities. The implications of these findings are obvious. The best way to improve labour productivity levels in the unorganised sector is to make the kinds of rural infrastructure investments which are known to raise productivity levels in agriculture.

Finally, given the very low productivity and part-time character of many unorganised sector activities, especially in less well endowed regions, it may need to be noted that, for many households, such activities provide a stepping stone to the world outside agriculture. They are not merely part of a survival strategy: these non-farm activities are seen as a constructive move into other activities promising a more productive and more secure future. This route out of agriculture will continue to be chosen by many, regardless of whether or not further liberalisation measures are put in place, and despite the gradual shift of some important activities to urban locations, where they can better take advantage of economies of scale, and of agglomeration.

At the end, it may be appropriate to underline one key finding of this study: the deceleration over time of unorganised non-farm sector employment growth rates.

This observation, along with other evidence presented here, leads to another serious question: can the rural non-farm sector in India carry the burden of providing employment to an expanding rural population? The evidence presented in this Report, suggests that the answer is : No. The *organised* non-farm sector, which is mainly located in urban areas, has to kick in with jobs, and so also does the massive agricultural sector where employment growth rates have collapsed to close to zero. In India, the unorganised non-farm sector is not now in a position to provide the jobs the rural labour force needs. It is not likely to be able to provide them in future either.

Appendix I : The Unorganised Sector : Conceptual Categories and Coverage

In India's National Accounts Statistics the "unorganised sector" includes units whose activity is not regulated by statute or legal provision, and/or those which do not maintain regular accounts. In the case of manufacturing, this covers all manufacturing units (I) using power and employing less than 10 workers or not using power and employing less than 20 workers. There is thus an unambiguous ceiling on size. Bigger manufacturing units belong to the organised sector, which includes those registered under the Factories Act of 1948, for which data is regularly collected under the *Annual Survey of Industries*.

In the case of trade, Government and public sector trading enterprises are excluded but there is no boundary specified in terms of size. Thus even the sometimes large trading units of manufacturing concerns are covered provided that the sales units have a separate and distinct identify. The sale shops of Delhi Cloth Mills, Bombay Dyeing and Bata Shoes are mentioned specifically as coming under the purview of the unorganised trade segment.

In the case of unorganised service sector units, all public sector enterprises owned by central or state governments, local bodies, public corporations and public undertakings are excluded, along with all enterprises registered under the *Banking Companies Act*. In the field of education, only unrecognised

institutions are covered. The primary purpose in defining the scope of the unorganised service sector survey coverage was, in the words of the 1991-92 report, “to catch all institutions for which no regular accounts were available”³⁶

The same exclusion principles apply to the transport sector. Rail and air transport and other enterprises owned or run by government or quasi-government institutions are treated as public sector enterprises which belong to the organised segment. Co-operatives, however, come within the purview of the unorganised segment. Aside from both mechanised and non-mechanised goods and passenger transport by land, inland waterway or sea, the survey covered a wide range of activities under the head “services incidental to transport”.

There is however, a change in the coverage of unorganised transport after the first, 1978-79 survey. This first survey included porters and coolies under non-mechanised transport. Later transport surveys excluded them, causing a tremendous drop in the numbers of workers recorded as employed in this sector of the industry, in rural areas especially.

The unorganised storage and warehousing survey departs somewhat from the usual coverage formula. In addition to storage and warehousing activities under private and co-operative ownership, without any restriction on the size of employment, they have also covered, as a special case, the community grain *golas/dharma golas* maintained by village panchayats. Also included are storage and warehousing facilities available on hire to farmers, dealers, traders processors and manufacturing enterprises. Storage and warehousing activities undertaken by an enterprise whose main or auxiliary activity was trade, manufacturing or transport were “considered”. However, a farmer storing farm produce in his own godown, or a manufacturer doing the same thing were excluded.

The one report available on unorganised communications follows the usual rubric. Public sector enterprises owned by governments and local bodies, and public undertakings are excluded. In principle the activities covered are those identified by the 1987 National Industrial Classification Code 750, 751 and 759. These four codes identify enterprises providing the following kinds of communications services: postal, telegraphic, wireless and signal communication services. It is difficult to visualise the areas where provision by the unorganised sector is significant. No details are given in the report.

Within each unorganised sector, three categories of enterprises are distinguished. Own account enterprises (OAE) are those owned and operated without the help of any regularly employed, hired workers. These enterprises, run by family workers, constitute the vast majority of all unorganised sector units. (In 1994-85 for example, about 85 percent of unorganised sector manufacturing enterprises were own account units).

The Non-Directory Establishments (NDEs) which constitute the second largest group, are defined as enterprises which employ 5 worker or fewer (including family workers), of which at least one is a regularly employed hired worker. Directory Establishments (DES) are those employing 6 or more workers of which at least one is hired.

Only five broad categories of activity have been covered by the NSS-CSO unorganised segment surveys with sufficient regularity to make analysis worthwhile. Communications services were covered only in 1991-92. Panel I below sets out the sectoral and time period coverage of the main unorganised sector surveys.

³⁶ See page 4 of Report Number 3462 NSSO 34th round

Panel 1 : Sectoral and time period coverage of the NSS-CSO Unorganised Sector

Reference Years	Manufacturing	Trade	Transport, Hotels & Restaurants	Storage & Warehousing	Communications	Services
Late 1970s	1978-79	1979-80	1979-80	1979-80 (NDE only)		1979-80
Mid 1980s	1984-85	1985-86	1983-84	1983-84		1983-84
Late 1980s or early 1990s	1989-90	1990-91			1991-92	1991-92
Mid 1990s	1994-95	1995-96	1993-94	1992-93		

Appendix Table 1: All India Farm and Non-Farm Usual Principal and Subsidiary Status Employment Growth Rates (persons): 1972-73 to 1977-78, 1977-78 to 1983, 1983 to 1987-88, to 1987-88 to 1993-94 and 1993-94 to 1999-2000, Rural and Rural Plus Urban Combined

Sector	1972-73 to 1977-78	1977-78 to 1983	1983 to 1987-88	1987-88 to 1993-94	1993-94 to 1999-00	1972-73 to 1977-78	1977-78 to 1983	1983 to 1987-88	1987-88 to 1993-94	1993-94 to 1999-00
Agriculture	1.76	1.43	0.12	2.32	0.20	1.88	1.49	0.05	2.39	0.06
Non-Agriculture	5.33	3.83	5.79	1.41	2.34	5.02	3.68	4.71	2.40	2.69
All Sectors	2.29	1.97	1.14	2.10	0.66	2.70	2.28	1.47	2.37	1.02

Notes: 1. Based on NSS ratios and Population Census figures (Male, Female, rural and urban areas separately) interpolated for the mid points of the NSS Rounds.

2. The all-sectors figures are derived directly from NSS ratios and interpolated populations estimates and not by addition of the absolute figures derived for each subsector separately.
3. 1993-94 NSS and 1999-00 figures are taken from the CDs available from the NSSO.
4. These estimates over workers in organised and unorganised segments combined.

Appendix Table 2: Employment in the Organised and Unorganised Sector: All India

Year	Employment (Million)			Unorganised as per cent of Total
	Organised	Unorganised	Total	
1973	18.82	216.65	235.47	92.01
1978	21.24	247.84	269.08	92.11
1983	24.01	280.53	304.54	92.12
1988	25.71	299.55	325.26	92.10
1991	26.73	315.17	341.90	92.18
1994	27.23	347.04	374.27	92.72
2000	28.15	369.73	397.88	92.93

Source: 1. National Sample Survey reports on Employment and Unemployment for usual principal and subsidiary status employment estimates

2. Directorate General of Employment and Training (DGE&T) for organised sector estimates. The figures for 1973 to 1991 inclusive are for the entire year. Those for 1994 and 2000 are as at 1 January (that is, the mid joint of the NSS Round). Unorganised

Note: 1. The true figures for the organised sector are probably a little higher, in recent years especially and therefore, the true figures for the unorganised sector lower. See Kulshrestha. A.C. and Gulab Singh (2001) page 64, in Kundu.A and Alakh N. Sharma

Appendix Table 3: Growth Rates of Employment in the Organised and Unorganised Segments-1983 to 1987-88, 1987-88 to 1993-94, and 1993-94 to 1999-2000 by Main Economic Sectors-All India

Sector	National Sample Survey						Organised Segment			Unorganised Segment		
	Rural			Rural + Urban			Rural + Urban			Rural + Urban		
	1983 to	1987-88 to	1993-94 to	1983 to	1987-88 to	1993-94 to	1983 to	1987-88 to	1993-94 to	1983 to	1987-88 to	1993-94 to
Agriculture	0.12	2.32	0.20	0.05	2.39	0.06	1.39	0.77	-0.82	0.04	2.40	0.07
Non-Agriculture	5.79	1.41	2.34	4.71	2.40	2.96	0.95	1.14	0.59	5.68	2.71	3.15
All Sectors	1.26	2.12	0.68	1.60	2.39	1.05	0.98	1.12	0.51	1.62	2.50	1.09
Total Workers	1.14	2.10	0.66	1.47	2.37	1.02	-	-	-	1.49	2.47	1.06
Mining & Quarrying	7.56	1.74	-2.88	7.19	2.09	-3.27	-0.28	0.97	-1.37	1.57	2.89	-4.63
Manufacturing	3.43	1.11	1.57	2.86	1.45	1.56	0.16	0.35	0.80	3.50	1.67	1.70
Electricity, Gas &	8.17	2.94	-6.35	6.84	3.39	-5.25	1.63	2.37	0.46	47.97	5.82	-34.11
Construction	19.40	-4.84	6.95	14.88	-1.10	6.61	0.81	-0.27	-0.75	17.32	-1.20	7.30
Trade, Hotels &	5.25	2.75	3.74	4.52	3.20	6.20	0.48	1.49	1.26	4.61	3.23	6.27
Transport	5.68	3.71	7.35	3.49	3.58	5.28	0.65	0.46	0.18	0.80	5.07	7.07
Services	3.13	3.50	-0.80	4.00	3.76	-0.67	1.61	1.81	0.85	6.11	4.76	-1.41

Appendix Table 4: Structure of Unorganised Sector NDP 1997-98

Sl. No.	Unorganised Segment Activity	Share of Specified Unorganised Sector Activities in	
		NDP from All Unorganised Sector Activities	NDP from Unorganised non-agricultural Activities
1	Agriculture, Forestry & Fishing	47.7	NA
2	All Non-Agriculture	52.3	100.0
3	Mining & Quarrying	0.2	0.4
4	Manufacturing	8.9	17.1
5	Electricity, Gas & Water supply	0.1	0.3
6	Construction	5.4	10.3
7	Trade, Hotels & Restaurants	20.7	39.5
8	Transport, Storage & Communication	4.8	9.3
9	Finance, Insurance & Retail Estate	8.2	15.5
10	Community Social & Personal Services	4.0	7.7
11	All Unorganised Segment Activities	100.0	NA

Source: 1. Based on estimates of net domestic product in the organised and unorganised segments 1997-98, given on pg 9 of *Measurement of Informal Sector. The India Experience* Country Paper India (Doc-14) ILO Geneva August 2000.

Appendix Table 5: Statewise Common Year Estimats of Unorganised Segment (all Sectors) Labour Productivity Levels, Rural, Urban and Total (R+U) 1979-80, 1984-85, 1990-91 and 1994-95

(Rs. in constant 1993-94 prices)

Year and State	Rural	Urban	Total (R+U)
1979-80			
1. Andhra Pradesh	2171	5997	3058
2. Bihar	3711	10073	5149
3. Delhi	4431	18727	6534
4. Gujarat	6131	14815	11214
5. Haryana	5834	17082	11424
6. Karnataka	2548	12621	7075
7. Kerala	4164	25003	8933
8. Madhya Pradesh	4284	12392	7099
9. Maharashtra	4569	12909	8931
10. Orissa	2067	8110	2913
11. Punjab	6287	14827	9100
12. Rajasthan	3307	7701	5415
13. Tamil Nadu	2665	7790	4902
14. Uttar Pradesh	2916	10181	5270
15. West Bengal	3992	10509	5984
1984-85			
1. Andhra Pradesh	5103	7089	5841
2. Bihar	6255	13810	7812
3. Delhi	9590	89517	73836
4. Gujarat	8469	26635	19009
5. Haryana	4216	19138	11893
6. Karnataka	3761	17069	9877
7. Kerala	5436	24655	11383
8. Madhya Pradesh	5680	11627	8414
9. Maharashtra	5659	20535	13336
10. Orissa	3254	7448	3916
11. Punjab	6899	53890	25835
12. Rajasthan	6543	10438	8135
13. Tamil Nadu	3412	7432	5482
14. Uttar Pradesh	3688	10616	5117
15. West Bengal	4059	13425	7067
1990-91			
1. Andhra Pradesh	4138	13424	7080
2. Bihar	8263	17269	10086
3. Delhi	16870	32618	31890
4. Gujarat	9266	20921	16485
5. Haryana	8590	19059	13334
6. Karnataka	4691	13919	8502
7. Kerala	7869	18279	10478
8. Madhya Pradesh	5297	16675	9866
9. Maharashtra	8588	23328	17205
10. Orissa	2763	13028	4115

Year and State	Rural	Urban	Total (R+U)
11. Punjab	11238	23715	18894
12. Rajasthan	7675	15486	10871
13. Tamil Nadu	5642	11857	8858
14. Uttar Pradesh	4981	12757	7649
15. West Bengal	5618	14052	7657
1994-95			
1. Andhra Pradesh	5157	15161	8326
2. Bihar	7419	17532	9480
3. Delhi	12784	35860	33950
4. Gujarat	12347	22093	18864
5. Haryana	11643	25258	18223
6. Karnataka	6023	21048	11760
7. Kerala	11785	22861	14631
8. Madhya Pradesh	6360	22089	13086
9. Maharashtra	10791	29437	22400
10. Orissa	2882	23124	4868
11. Punjab	16680	24021	21149
12. Rajasthan	9224	20225	13687
13. Tamil Nadu	6638	18083	12678
14. Uttar Pradesh	6244	15506	9138
15. West Bengal	6592	14881	8909

Notes: 1. "All sectors" covers manufacturing, trade, hotels and restaurant, transport and services

2. "Labour Productivity" is defined as GVA per worker per year

3. "Common Year" estimates have been derived by interpolation/extrapolation from periodic figures for the separate subsectors, for which the reference years differ.

Appendix Table 6: Prevalence of Poverty (Head Count Ratio) among Persons in Rural Households engaged in Specified Subsectors, by State 1993-94.

State	1993-94									
	Agriculture (all workers)	Cultivators	Agricultural Labourers	Manufactu ring	Construction	Trade	Transport	Services (all workers)	Health & Education	Other Services
1. Andhra Pradesh	16.31	9.67	23.30	12.97	18.71	8.90	8.02	7.01	0.83	9.89
2. Assam	47.83	36.34	67.76	37.33	43.09	34.80	29.67	18.07	5.78	27.88
3. Bihar	56.98	42.25	77.69	56.97	63.27	42.88	49.50	39.54	17.36	50.12
4. Gujarat	21.62	12.29	35.37	16.78	45.80	8.33	10.44	8.43	4.76	10.94
5 Haryana	23.87	15.95	56.57	26.69	32.62	15.45	29.49	23.74	13.85	26.10
6. Himachal Pradesh	30.80	30.03	46.23	30.72	43.69	12.94	10.16	13.19	8.84	14.08
7. Karnataka	28.83	18.97	46.60	23.11	17.36	22.86	9.22	15.23	7.34	18.04
8. Kerala	25.01	12.65	37.71	31.90	31.42	21.86	24.32	12.08	9.02	14.08
9. Madhya Pradesh	38.08	29.00	59.48	38.87	42.19	21.59	37.81	18.57	9.81	22.44
10. Maharashtra	37.10	22.54	56.57	26.52	42.90	16.62	18.93	12.10	5.52	16.62
11. Orissa	47.85	34.32	65.41	41.14	59.79	40.97	37.62	20.89	9.23	29.94
12. Punjab	11.95	2.52	32.37	9.27	20.25	7.38	11.36	7.44	0.00	10.22
13. Rajasthan	20.87	18.26	40.43	24.37	52.36	15.30	20.68	15.46	5.32	20.59
14. Tamil Nadu	35.34	18.32	49.98	22.29	18.73	16.94	26.35	11.05	5.86	14.60
15. Uttar Pradesh	37.04	31.06	62.78	43.19	54.04	32.04	35.38	27.45	16.24	32.40
16. West Bengal	40.13	24.87	60.90	43.04	51.09	23.77	38.59	17.40	7.20	25.75
All India	35.96	26.35	54.65	32.24	42.42	24.85	27.64	17.79	8.41	23.91

Notes: 1. Estimates for 1993-94 are based on ungrouped, NSS unit level data. The official poverty lines are adopted in all cases.

2. Head count ratios for 1993-94 are taken from Appendix tables 7,8,9 and 10 in Bhalla, Sheila (2002), "Behind Poverty: The Qualitative Deterioration of Employment Prospects for Rural Indians" (pp702-727) in (eds) Acharya, S.S., Surjit Singh and Vidya Sagar "Sustainable Agriculture, Poverty and Food Security" Agenda for Asian Economics Vol 2. Asian Society of Agricultural Economics. Rawat Publications, Jaipur and New Delhi.
These tables also give estimates for 1987-88.