Structure and Performance of Informal Enterprises
A Study of Four Cities

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PREFACE

In August 1985, the National Institute of Urban Affairs proposed to the Ministry of Urban Development that as a part of its programme of research on urban employment, it would like to undertake a study of the role of the informal sector in urban development. The proposal grew out of the NIUA's assessment of the global literature on the urban informal sector which showed that most of the literature and research work had focussed on large and capital cities of the developing countries; there were, for instance, studies on the structure and performance of the informal sector of Manila, Jakarta, Seoul, Bangkok, Calcutta, Colombo, Dhaka, Nairobi, Accra, Mexico and large and capital cities of other countries. Only a handful of them had examined the role of the informal sector in the context of the intermediate and small-sized cities. Rarely had any research programme attempted to study the informal sector's structure and performance in cities of different sizes and complexion, leaving researchers and senior policy analysts to guess whether the structure of the informal enterprises was in any way influenced by city-size, and whether those differences had any implications for policy. In India too, the status of research was the same as in other countries. The NIUA's proposed study aimed to fill in this research gap.

There was yet another consideration that underlay the proposal. The Seventh Five Year Plan, 1985-90, published just at the time when this proposal was being formulated, referred to the need for devising policies to generate and promote "self-employment". In a sense, the Seventh Plan recognised the inability of the formal sector -- even

under the most optimistic assumptions, to absorb the fast expanding urban labour force, and indicated that there was no alternative to the promotion of "self-employment" in a country of India's size. The National Institute of Urban Affairs took this as a unique opportunity of collecting direct evidence from the informal sector enterprises on their performance as well as the nature of support that they needed for their growth and development.

The Ministry of Urban Development accepted NIUA's proposal vide letter No. K-14011/49/85-UD.III A dated October 11, 1985. The study commenced soon thereafter, initially with further sharpening of the objectives, and subsequently with detailed working on the methodology, questionnaires for the collection of primary data, identification of hypotheses, selection of cities etc. These are spelled out in the introductory chapter of this report.

As the study was in progress, the Government of India introduced in September 1986 a new programme called the Self Employment Programme for the Urban Poor (SEPUP). This was the first major intervention on the part of the GOI to directly assist the urban poor by extending to them loans for small scale ventures in specified areas. The scheme lent further support to at least one of the hypotheses of the study that there were several informal sector activities which, given the right kind of support, could significantly contribute to employment and income and facilitate the process of urbanisation and economic development.

This study which was completed in August 1987 has brought out several important aspects of the informal sector of which at least two

could bear repetition even in this prefatory note. First, the study establishes the fact that the informal enterprises have an assured place in even the small and intermediate sized urban centres. Thus, this is a feature not only of the large and capital cities. The informal enterprises constitute anywhere between 50 to 60 per cent of the total employment of these cities. They are viable. Their levels of earnings and internal resource generation are high enough to justify further intervention and support to strengthen them and to make them more productive. Second, the study indicates that the informal sector enterprises are not constrained as much as by the lack of capital resources as by various types of structural and technological problems. Structurally, as the study indicated, most of the enterprises have a consumer orientation in the sense that whatever they produce or sell is meant directly for consumption. Their participation in the production of intermediate goods is at present not significant. This study suggests that specific measures will be required to transform the consumer-based informal activities into production-based units so that their contribution can be enhanced. Similarly, the informal enterprises rely on outdated and obsolete equipments and tools and machinery which limit the performance, and keep their productivity at low levels, and, in the process the informal sector activities lose their competitiveness with the formal sector units. It is important to point out that any structural or technological change is hampered by the fact that there are virtually no programmes that would facilitate this change, and also partly because the structures from where the enterprises operate have no fixed and pucca locations, and are thus not in a position to justify

investments in structural and technological transformation. It is here that future attention will be required.

This study has been designed and co-ordinated by my senior colleague, Shri Anil Rai, Research Fellow at the Institute. The manner in which Anil Rai has presented the results of the study shows that he has applied himself seriously to the problems of the informal sector, and that he has done considerable thinking on how the problems of informal sector enterprises can be and should be approached in the future years. Shri Rai was assisted by a team of local coordinators as well as researchers from the Institute. The entire analysis and processing of data was handled by the computer unit of the Institute.

Urban employment issues constitute an extremely important aspect of NIUA's research programme. Other studies on the subject are also in progress. We do hope that the results of this study as well as others which are under way will be useful in taking a view on how the growing informal sector can be further assisted and made more productive.

Om Prakash Mathur
Director

August 1987

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I INTRODUCTION

Informal Sector in Urban Context

The urban informal sector has today become a subject of increasing interest in many developing countries. The logic of this interest can be attributed partly to the marked disillusionment with the industrial growth experience of these countries in the 1960s and 1970s, when contrary to conventional theorising on the subject, high rates of industrial growth were consistent with urban stagnation and poverty. More importantly, however, it appears that the urban informal sector has provided an explanation of how the urban poor manage to survive on the margins of the modern economy in a large number of cities and towns, and of how the urban poor are creating an economy which represents an important source of employment and form of production of goods and services which society needs.

Definition

What then constitutes the informal sector? As the name suggests, the informal sector can be conveniently defined as that which is not a part of the formal organised sector. The organised sector is governed by statutory obligations such as taxation and labour laws, employs formalised procedures such as modern accounting methods, is associated with hierarchical organisational structure, extensive division of labour and specialisation and complex decision-making processes. Its dynamics, nature and operational functions are, more or less, clearly defined.

The complexity of the informal sector, its heterogeneity and varied functions make it virtually impossible to provide a universally accepted definition of this sector. Informal enterprises stand in sharp contrast with formal sector units; at the same time they exhibit sharp differences within themselves. It would be appropriate to state that there are two subsectors - organised and unorganised - within the informal sector itself, one of which exhibits features of the formal sector. In other words, informal sector enterprises display a trichotomous rather than dichotomous urban economic structure and this constitutes an important distinction which should be given due consideration. For the purpose of this study, the informal sector is defined as that portion of the urban economy which is composed of people operating or working in very small businesses or enterprises who lack formal government recognition, registrations, and support for their enterprises; have poor access to commercial sources of credit; earn low incomes; and have limited employment and tenure security.

Genesis

The genesis of the urban informal sector lies in the prevalent rural-urban dichotomy in developing countries which motivates large numbers of people to migrate to cities seeking employment opportunities. Indeed some observers view the emergence of informal sector activities as an unfortunate aberration, in other words, they argue: if structural change in rural areas could create an egalitarian growth path for agriculture and if small-scale enterprises were enabled to operate on the same terms as large-scale units, then

most of the so-called informal activities might no longer exist. Certainly, if there were both less inducement to leave rural areas and a faster rate of creation of acceptable urban jobs, then no doubt the raison-d'etre for informal activities would disappear. However, the important question is whether the formal or modern sector in the cities is capable of generating employment fast enough to absorb the waves of rural migrants. The answer is clearly in the negative and policy planners in many developing countries have begun to realise that informal activities are no longer transitory, but must be viewed as an important catalytic agent in balancing urban growth so as to achieve broader development objectives of benefitting the urban poor.

International Significance

Rural-urban migration, rapid population growth, and national development strategies are interacting to help make the informal sector the primary source of income for many urban inhabitants. As a consequence, the informal sector in many countries has been growing considerably faster than the formal sector which has been unable to absorb the growing labour forces, resulting in widespread participation in informal activities as the only way for many urban inhabitants to earn a living.

One consequence of these differing growth rates is that informal activities in some sectors of many urban economies are more prevalent than formal activities. Many urban economies depend on the informal sector for services, products, and labour, at the same time exhibiting extremely high percentages of informal participation in many types of enterprises. For example, in Jakarta in 1967, more than 60 per cent

of all employment in construction, public utilities, and transport-storage-communication, was in the informal sector. In services, 32 per cent of the employment was in that category as was 22 per cent of the employment in manufacturing.(1)

Other international studies conducted by the International Labour Office have estimated that the per cent of the economically active population employed in informal sector activities ranges from 19 per cent in Colombo (Sri Lanka), 24 per cent in Rio de Janeiro (Brazil), 31 per cent in Belo Horizante (Brazil) and Abidjan (Ivory Coast), 45 per cent in Jakarta (Indonesia) and Nairobi (Kenya), 50 per cent in Lagos (Nigeria) and Santo Domingo (Dominican Republic) to a high of 65 per cent in Kumasi (Ghana), 69 per cent in the urban areas of Pakistan and 70 per cent in Lima (Peru).(2)

The Indian Context

Informal sector participation in economic activities in urban India is substantial and evidence exists to suggest that it is increasing, as rapid migration from rural areas coupled with natural population growth places severe constraints on the absorptive capacity of the formal organised sector. Empirical investigations have revealed that as a proportion of total employment, the workforce engaged in informal sector activities constitutes 45 per cent (Calcutta), 49 per cent (Bombay), 63 per cent (Delhi), 46 per cent (Ahmedabad), 40 per cent (Bangalore), 45 per cent (Ratlam) and 53 per cent (Itarsi).

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(1) S.V. Sethuraman, 1976. Jakarta: Urban Development and Employment (Geneva: International Labour Office).

(2) S.V. Sethuraman, 1981. The Urban Informal Sector in Developing Countries (Geneva: International Labour Office.)

In view of the information gaps particularly relating to the self-employed enterprises and some categories in the shops and establishment sector, the above estimates are subject to a margin of error. They nevertheless testify in terms of sheer magnitude to the significant position the informal sector occupies in cities of varying sizes in India.

The planning process in India while emphasising the need for ameliorating poverty and unemployment has over successive plans, implemented several programmes aimed at combating social and economic inequities prevalent in the system. It has however, provided little attention to the many constraints facing the informal sector and by and large, failed to recognise this sector as a necessary component of the urban economy and to plan for its improvement.

Recently, however, a small beginning seems to have been made through initiation of the Self Employment Programme for Urban Poor (SEPUP) to make a policy intervention for assisting the urban informal sector. Under SEPUP a loan of up to a maximum of Rs.5000 is to be provided to potential beneficiaries whose family income does not exceed Rs.600 per month, for undertaking 33 predetermined informal activities. The terms and conditions (including mode of repayment) make SEPUP loans virtually interest free, with a marginal subsidy element built in. Details of SEPUP together with the list of supported activities are provided in Annex 1.

SEPUP implicitly recognises that for optimal functioning of the informal sector, it is essential to disaggregate the sector into subsectors and subgroups, for effective assistance, and any policy

that attempts to bypass the specific problems of the subsectors and subgroups within the informal sector, is unlikely to be effective.

While the response to the scheme has been overwhelming - banks received over 20 lakh applications during the first phase which ended on 30 September 1986 - the need for careful scrutiny of applications and effective monitoring of loan utilisation cannot be overemphasised. Banks have been instructed to select 5 lakh applications during phase 1, and distribute Rs.200 crores to them. As of March 1987, loans amounting to Rs.107.98 crores have been disbursed to 3,18,898 applicants. However, if SEPUP is not to degenerate into another "loan mela", political interference in the matter of loan distribution, at local levels, has to be minimised. At the same time objective criteria - taking account of income and employment generation as well as productivity of resources employed in different subsectors and groups of informal activities - would have to be delineated for SEPUP.

Objective and Issues

Given the above background of the role and significance of the urban informal sector in the development process, the present study examines the nature and structural attributes of informal enterprises engaged in a wide spectrum of diverse activities. The study investigates and evaluates a number of important growth parameters of informal enterprises with special reference to productivity of factor use (labour and capital), employment levels, income and savings potentials as well as techno-economic characteristics.

The objective of the study was to derive some generalisations which could assist efficient and productive operation of informal

enterprises and enable them to play a more useful role in the urbanisation process. In this context, the present research study focusses on the following questions and issues:

i. What are the nature of economic activities undertaken by informal enterprises and their structural attributes?

ii. What is the pattern of employment, capital investment, earning level, sales turnover, age and physical structure, technology level, demand status, linkages in terms of input use/output disposal of informal sector enterprises?

iii. Which subsectors and subgroups of informal enterprise activity provide the greatest potential for employment generation and can be targeted for most effective results by way of official intervention for planned urban development?

iv. To what extent are informal enterprises productive in the use of resources (capital and labour) and which informal sector activity groups offer the highest potential for economic growth?

v. What is the extent of savings of informal sector enterprises and what is the form of such financial savings?

vi. In the light of such findings, what should be the appropriate policy structure to enable informal sector enterprises to play a more significant role in urban development?

Selected Case Study Cities

As per the proposed design, the following case study cities were selected for detailed investigations: Wardha (Maharashtra), Ghaziabad and Allahabad (U.P.) and Jaipur (Rajasthan). Demographic details of the case study cities are as shown in Table 1.1.

Data

Data requirements of the present study were of two types:

i. Secondary data regarding the urban functions of the case study centres including demographic and economic data; including data on occupational and employment structure; land-use pattern as well as industrial growth, and

ii. primary data pertaining to the informal sector in the four case study urban centres.

Most of the secondary data were obtained from the Registrar General, Census of India and State Government publications.

The relevant primary data on informal enterprises were obtained through extensive field survey investigations supplemented to a limited extent by information from the District Industries Centre (DIC) and District Labour Department.

Table - 1.1

The Case Study Cities: Demographic Features

Cities	Location	Population 1981	Decennial growth rate (%)
Wardha	Maharashtra	88,000	27.5
Ghaziabad	Uttar Pradesh	2,87,000	128.6
Allahabad	Uttar Pradesh	6,50,000	25.2
Jaipur	Rajasthan	10,15,000	57.8

Note: Wardha town (with a population of 88,000 in 1981) has been referred to as a "city" throughout this study, for it had crossed the one lakh population size in 1986.

Methodological Issues

The Establishment Tables of the Census of India and the Economic Census of India, the two most relevant sources of secondary information, were found to be inadequate as sources for constructing the universe of the informal sector for three reasons:

i. These tables were not available for 1981.

ii. These tables present the number of manufacturing, commercial and service establishments by the number of persons employed but give no details about activities or workers.

iii. These tables exclude temporary stalls, hawkers, pavement sellers and the 'hats' or weekly bazaars which form the very core of informal sector activity. Based on the estimates provided in the establishment tables of the census of India 1971 therefore, a sample size of two thousand informal enterprises in four selected case study urban centres was considered satisfactory. A random stratified sampling procedure was followed in all case study urban centres. The target sample in the four case study urban centres was as follows:

Wardha - 200; Ghaziabad - 400; Allahabad - 600; and Jaipur - 800.

Sample size details and coverage are provided in Table 1.2.

TABLE - 1.2

The Size of the Sample, 1986 (Enterprise Survey)

Cities	No. of informal enterprises as per 1971 census	Target sample	Completed schedules received	% of sample informal enterprises to the total informal enterprises in 1971
Wardha	5221	200	200	3.8
Allahabad	16821	600	600	3.6
Jaipur	23028	800	800	3.5

In the case of the fourth case study city, Ghaziabad, there was no information in the Census of India Establishment Tables (1971) as the city was merged with Meerut during 1971. The figures relating to Meerut city could not be used as a proxy as this would have artificially inflated our sample size for Ghaziabad. As such the sample coverage in Ghaziabad city was on a graded population basis.

Information on the classification of informal enterprise activities was gathered during field visits and extensive discussions with local authorities including municipalities, development authorities, town planners, labour officers and so on. On the basis of two-way estimates of informal enterprises - (i) Spatial - covering the entire municipal limits of case study centres, and (ii) activity subsectors and subgroups, the NIUA Informal Enterprise Survey identified thirty four informal activity subgroups in five major divisions, that is, manufacturing, trade/commerce, services/repairs, construction and transport. An effort was made to distribute the sample enterprises across all categories - both physio-structural and economic - though the sample was not proportionately representative of the size of the respective categories.

The sample was drawn on the basis of these estimates so that each major informal cluster and activity group was represented in the NIUA survey in all the case study cities. The list of activities (with their classification codes) covered by the NIUA survey of informal enterprises is given in Table 1.3.

The Questionnaire

The unit of enquiry was the informal enterprise. The study used the following operational classification for identification of informal enterprises. Any income earning enterprise which employs less than 10 persons and does not come under the purview of the Shops and Establishments Act, has been classified as an informal sector enterprise.

The enterprise level questionnaire canvassed the following relevant data regarding the nature, functions and economic performance of informal enterprises in the case study cities for detailed analysis: (i) nature of activity; (ii) location; (iii) employment size and status; (iv) capital structure; (v) physical characteristics; (vi) cost structure; (vii) earning level; (viii) period of initiation (age structure); (ix) sales turnover; (x) contribution to local bodies; (xi) source of capital; (xii) input-output linkages; (xiii) demand status; (xiv) technological change; and (xv) form and amount of informal household savings. The questionnaire was finalised after being pre-tested by the Institute Project Staff.

Operations

The informal enterprise survey in the four case study cities was conducted with the assistance of local investigators most of whom were graduate/postgraduate students. They were appropriately trained in tasks related to the surveys.

Local supervisors were appointed for supervising field investigations, however, the NIUA Project staff was responsible for the allocation of work to the investigators, the day to day scrutiny of completed schedules and for spot-checking every tenth sampled enterprise to ensure that all critical information was available and that it was internally consistent.

Table - 1.3

Urban Informal Sector
List of Activities Covered by the NIUA Survey of Informal Enterprises

Manufacturing		Trade		Services & Repairs	
Code	Description	Code	Description	Code	Description
001	Food products	010	Eggs, milk and milk proudcts	021	Hair cutting, massaging
002	Cotton textiles	011	Fruits & juice vending	022	domestic service
003	Wood and carpentry products	012	Vegetable vending	023	Laundering/pressing of clothes
004	Leather products	013	Manufactured goods (textiles, Leather, paper, chemicals etc)	024	Eating places including dhabas and tea stills
005	Chemical and plastic products	014	Food products vending	025	Rag picking
006	Non-metallic proudcts(earthenware, structural stone goods etc)	015	Grocery including soaps, spices, etc.	026	Tailoring including quilt making and embroidery
007	Basic metal products (brass utensils, hand tools etc.)	016	Exchange of goods (steel utensils for clothes)	027	Automobile and scooter repair
008	Jewellery and bangles	017	Paan, bidis, cigarettes and agarbattis	028	cycle repairs
009	Miscellaneous including stationery products, electrical goods, autoparts	018	Flowers and garlands	029	shoe repairs
		019	Meat, fish and chicken	030	Miscellaneous including watch, radio, sewing machine, stove repairs, painters, band music,tent house,street enterprises, blacksmith, pandas, priests, and malis.
		020	Miscellaneous including selling of: peanuts, bhuttas,kerosene oil, neem datun, toys,mats, baskets etc.)		

Construction		Transport	
Code	Description	Code	Description
031	Unskilled labourers, skilled workers, constructors and jamadars	032	Rickshaws (own and hired)
		033	Auto-rickshaws
		034	Bullock carts, tongas and boats

The survey was conducted during the months of June and September 1986. Processing and tabulation work of the survey was done manually at the Institute.

II SOCIO ECONOMIC BASE AND URBAN PROFILE OF CASE STUDY CITIES

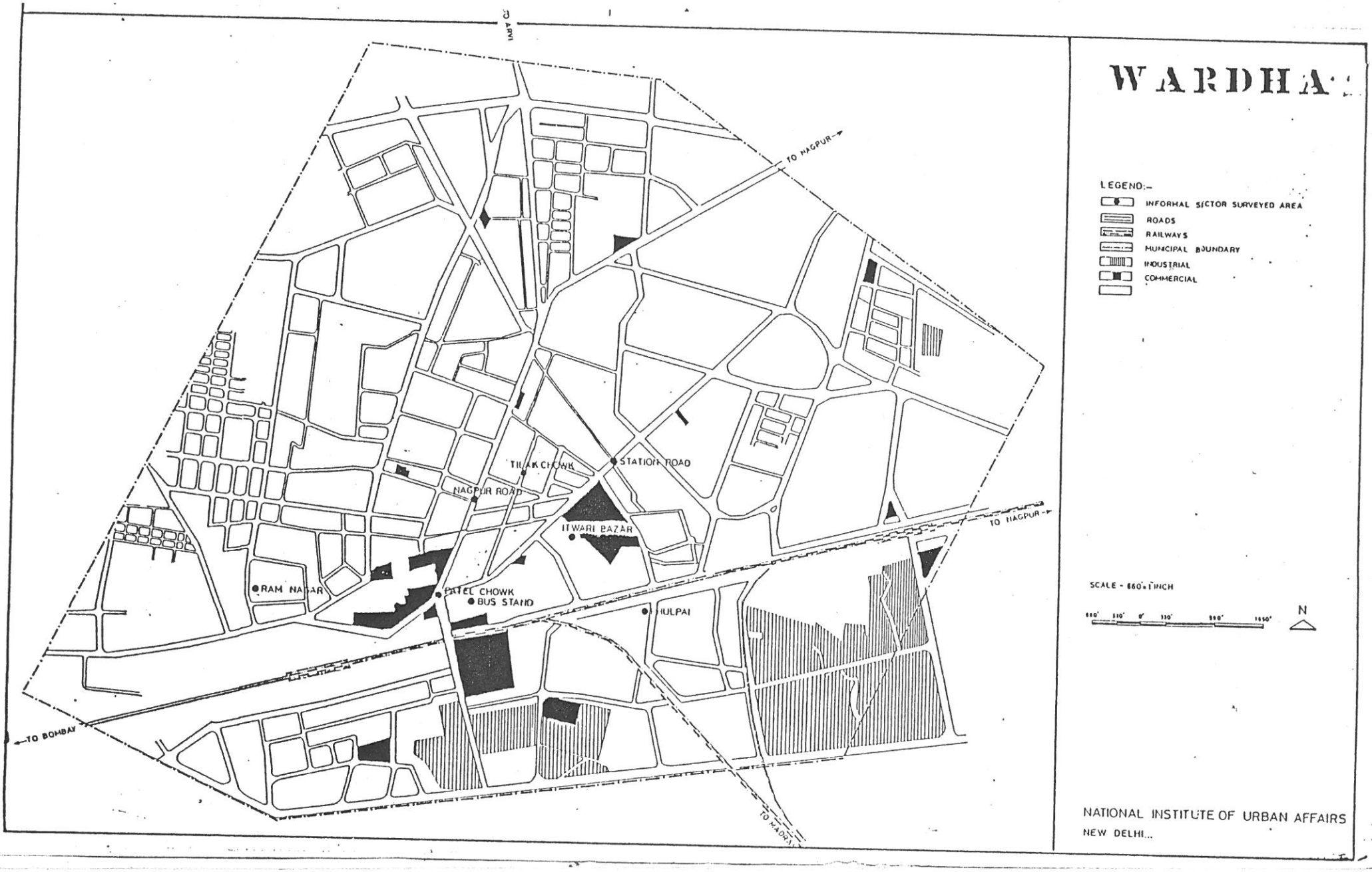
This chapter outlines the socio-economic characteristics and urban profile of the selected case study cities.

WARDHA

Located in Maharashtra State - industrially one of the most developed States of India - Wardha town is only a century old having been founded in 1866 as an administrative headquarters over the old settlement of Palakwadi. Both the town and the district are named after the Wardha river; and until recently the old name of Palakwadi was used by the local population to designate the town. The town has expanded eastwards where most of the administrative offices are located, while the industrial sections have grown westwards along the railway sidings. Wardha city has an important railway junction on the Bombay-Nagpur route and the Delhi-Madras line takes off from here. The town is well connected by roads and railway in all directions leading to important urban centres of the state.

Population

The population of Wardha city has increased nearly ten-fold since the turn of the century; and stood at 88,495 persons in 1981. Over the decade 1971-81, the population growth rate of the city was 28.18 per cent which represents a substantial decline in comparison to a population growth rate of 40.57 per cent recorded in the previous decade (1961-71). But the density of population in the town has increased from 8886 persons per sq. km. in 1971 to 11,389 persons per


WARDHA
LEGEND:-
INFORMAL SECTOR SURVEYED AREA
ROADS
RAILWAYS
MUNICIPAL BOUNDARY
INDUSTRIAL
COMMERCIAL
TO NAGPUR
TO NAGPUR
TO BOMBAY
TO MADRAS
TILAK CHOWK
STATION ROAD
NAGPUR ROAD
ITWARI BAZAR
RAM NAGAR
PATEL CHOWK
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sq. km. in 1981. The literacy rate of Wardha city stood at 70.03 per cent in 1981.

Land Use

Wardha city is divided into 42 municipal wards. Out of the total town area of 7.77 sq.km. (or 822.82 hectares), only 60 per cent of the area (or 544.16 hectares) has been developed. Of this 48.85 per cent is occupied by residential houses, 5.3 per cent by industries, 17.3 per cent by public and semi-public enterprises and offices, 3.74 per cent by the commercial zone, 18.01 per cent by roads and railways and nearly 6.75 per cent by the recreational zone comprising gardens, parks and playgrounds.

Occupational Structure

Table 2.1 provides a detailed breakdown of the occupational structure of Wardha town in 1981, the latest year for which census enumerations are available.

It may be observed that the trading, services, construction, transport and the factory sectors occupy a predominant position in the occupational structure of the town. Total employment ("other workers") in these sectors constitute about 85 per cent of the total workforce in Wardha town. The primary sector (agriculture, live-stock, and mining) account for about 12 per cent of workforce participation; the household manufacturing processing and service sectors engage 3.5 per cent of the town's main workforce.

Table - 2.1

Occupational Structure of Workforce : Wardha City, 1981

S.No.	Workforce description	Total	Males	Females
1.	Total population	88,495	46,061	42,434
2.	Total main workers	21,781 (100.00)	19,089	2,692
	(a) Cultivators	900 (4.1)	857	43
	(b) Agricultural labourers	1,676 (7.69)	1,059	617
	(c) Household industries, including manufacturing, processing and service industry.	759 (3.48)	575	184
	(d) Other workers (trade, commerce, service/repairs construction, factory workers, plantation workers, transport etc.)	18,446 (84.69)	16,598	1,848

Source: Census of India, 1981.

Wardha town continues to be service-oriented in its main economic functions, however, of late there has been a moderate growth of the trade/commerce and industry sector. Among the major industries of the town are cotton textiles, paper and several cottage and village industries in the traditional handicrafts sector (including soap, pottery and basic metallic goods). The town has an important cotton market having quite a few ginning and pressing factories. In addition the town has an oil mill and also undertakes a fair degree of trade in grains and general produce.

GHAZIABAD

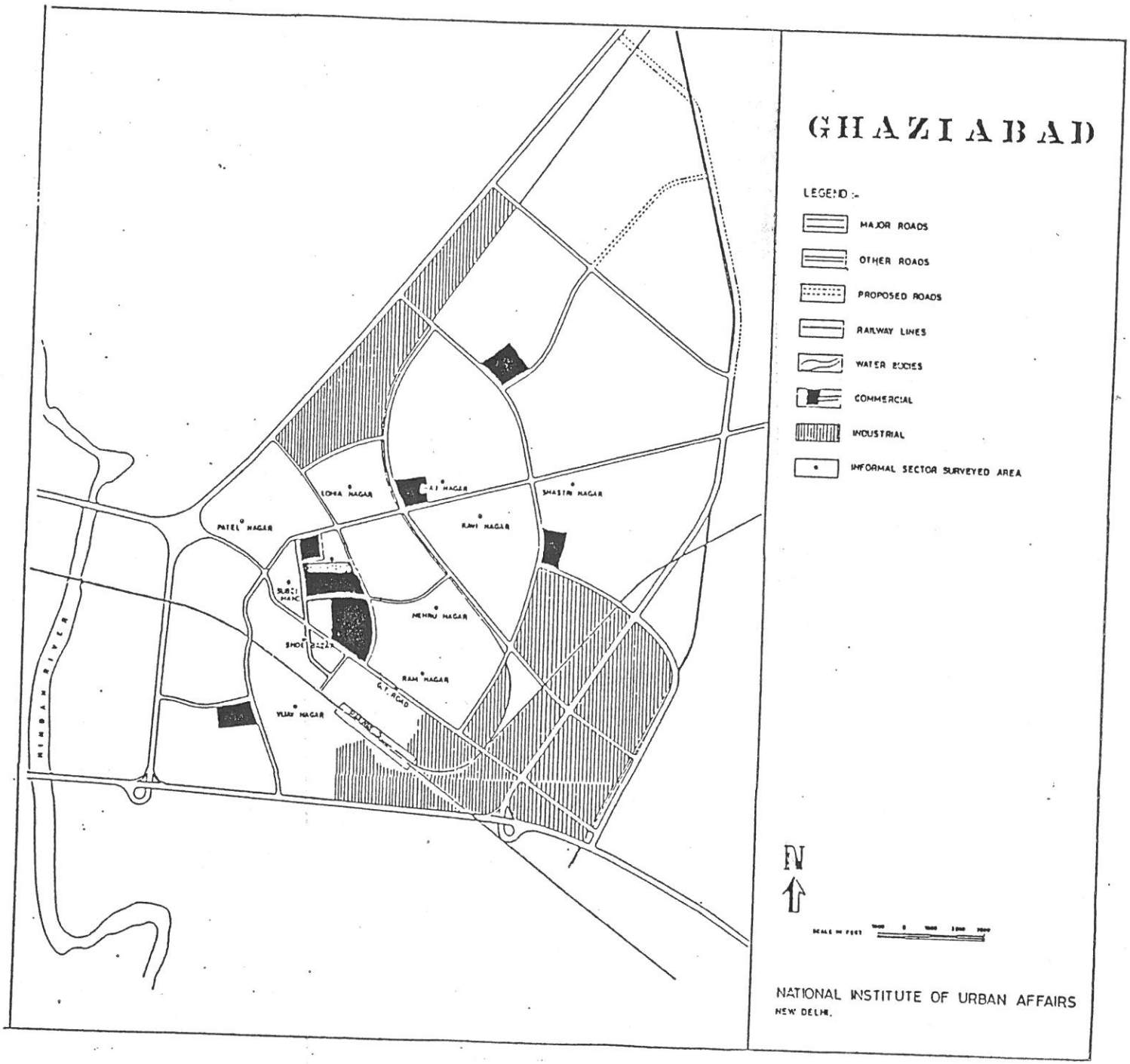
An industrial town of the state of Uttar Pradesh, Ghaziabad has emerged as one of the major ring towns of the National Capital Region (NCR). It is a district headquarters of the district of the same name. The city acts as a gateway to Delhi for Uttar Pradesh and other eastern states and is located at a distance of 20 km. from the capital. It is a major railway junction of the Northern Railway on the Howrah-Delhi route and the National Highway No.2 passes through the city. Being well connected by roads and railways to other important urban centres, Ghaziabad is one of the biggest industrial towns of UP with a fast rate of urbanisation and with development activities taking place in all directions.

Population

The total population of Ghaziabad was 2,75,815 in 1981 and the city registered a rapid population growth rate of 128.6 per cent during the decade 1971-81. The decennial growth rate during the 1960s was 81.3 per cent. Rapid immigration from adjoining rural areas to Ghaziabad town appears to be an important factor responsible for high population growth rates of the city. The density of the population has been estimated at 4228 persons per sq.km and the literacy rate of the local population was 52.5 per cent in 1981.

Land Use

The total developed area of Ghaziabad city covers 65.23 sq.km. Of this 48.05 per cent is occupied by residential houses; 30.29 per cent by public/semi-public and government offices; 9.84 per cent by


GHAZIABAD
LEGEND :-
MAJOR ROADS
OTHER ROADS
PROPOSED ROADS
RAILWAY LINES
WATER BODIES
COMMERCIAL
INDUSTRIAL
INFORMAL SECTOR SURVEYED AREA
LOHIA NAGAR
PATEL NAGAR
RAVI NAGAR
SHASTRI NAGAR
MEHNU NAGAR
RAM NAGAR
VIJAY NAGAR
G.T. ROAD
HINDAN RIVER
N
NATIONAL INSTITUTE OF URBAN AFFAIRS
NEW DELHI.

transport and communications (including railways) and 10.64 per cent by community facilities, playgrounds and open spaces.

Occupational Structure

Table 2.2 shows that Ghaziabad city had a total workforce of 82,876 of which more than 95 per cent were male workers. The most significant occupational category in 1981 was the "other workers" including the factory workers and those engaged in trade and commerce, repairs and construction and transport activities - 93 per cent of the total workforce participation in Ghaziabad was in these sectors. Household industry was next in importance providing employment to 2.82 per cent of the total workers in the city. Agricultural sector activities in Ghaziabad accounted for 2.24 per cent of workers engaged as cultivators and 1.96 percentage as agricultural labour.

Table - 2.2

Occupational Structure of Workforce : Ghaziabad City, 1981

S.No.	Workforce description	Total	Males	Females
1.	Total population	2,75,815	1,53,911	1,21,904
2.	Total main workers	82,876 (100.00)	78,770	4,106
	(a) Cultivators	1,854 (2.24)	1,786	68
	(b) Agricultural labourers	1,622 (1.96)	1,542	80
	(c) Household industries, including manufacturing, processing and service industry	2,334 (2.82)	2,175	159
	(d) Other workers (trade, commerce, service/repairs construction, factory workers, plantation workers, transport etc.)	77,066 (92.99)	73,267	3,799

Source: Census of India, 1981.

The town is economically linked to Delhi which not only forms a vast consuming centre but also provides skilled and specialised services for the people of Ghaziabad.

Manufacturing constitutes an important source of livelihood for the local population and a number of industries flourish. These include the engineering, drugs and pharmaceuticals, chemicals and textiles industries and a range of small manufacturing firms in diverse product lines operating from this city.

ALLAHABAD

As it stands today, Allahabad city occupies the site of the ancient city of Prayag whose mythological history stretches as far back as the early vedic times. The foundations of the modern city were laid by Akbar in the seixteenth century and named 'Illahabas' by him. With the construction of the fort and bunds on the banks of the two rivers - the Ganga and the Yamuna - near the confluence point, the earliest urban structure spread westward and eastwards along the banks of these two rivers. However, the present day morphology of Allahabad city dates from the advent of British rule, more particularly after they transferred the capital of U.P. to Allahabad in 1858. Due to its strategic position as a terminal of water and road routes and with a rail/road network dating from 1857, a flourishing trade and commercial centre developed in Allahabad city.

The Municipal Board was created in 1863 "with the objective of improving the conservancy arrangements and welfare promotion of the city". The growth of business and industry, particularly printing presses and the provision of various public utilities and services

such as water supply, drainage and sewerage and so forth, considerably accelerated the pace of urban growth. Consequently, the population of the city began to show an upward trend and various residential and public/semi-public areas were developed. It continues to be a major educational and cultural centre of India.

Population

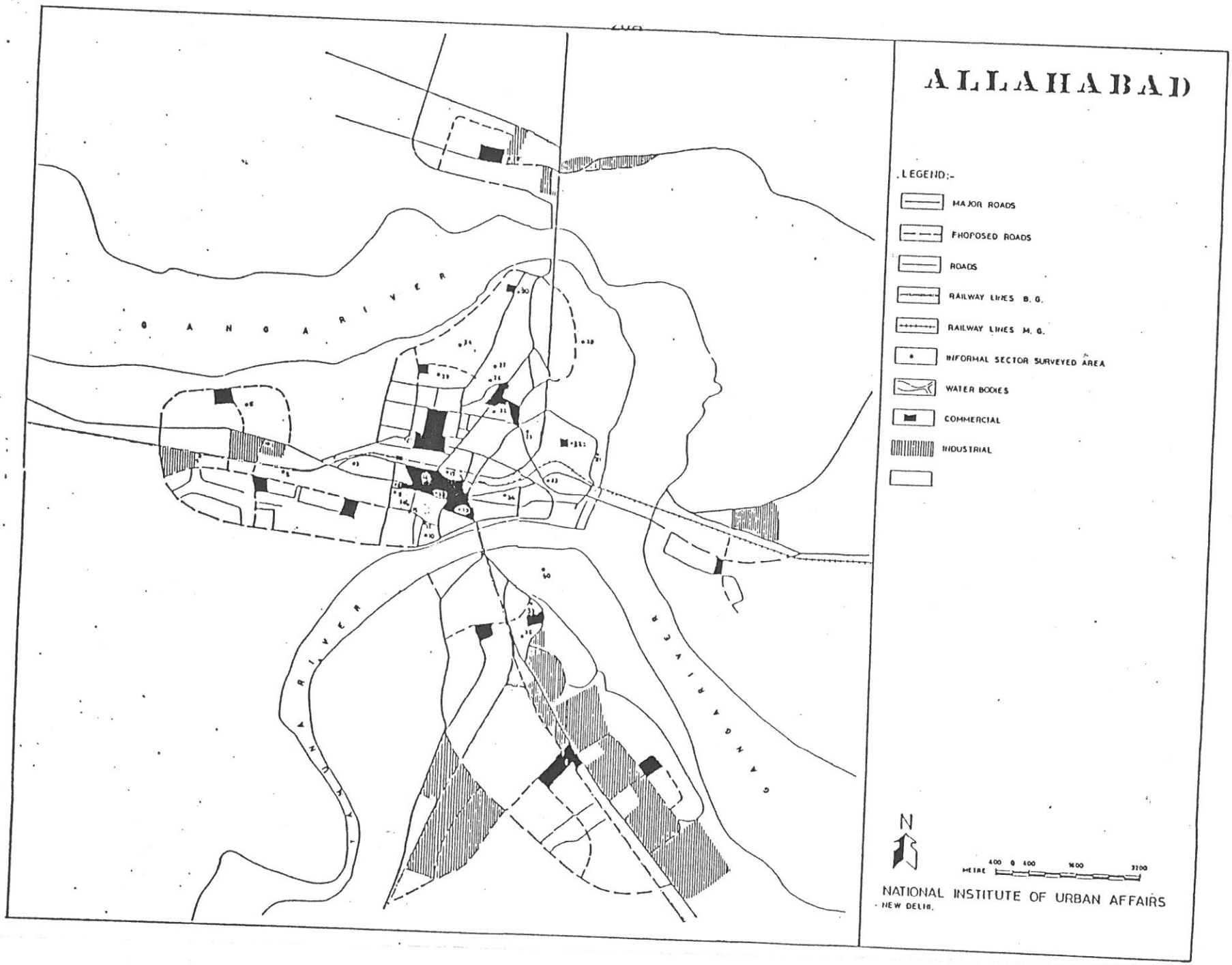
The population of Allahabad city has witnessed a steady increase since Independence, and stood at 6.5 lakhs in 1981. The decennial growth rate of population over the period 1961-71 and 1971-81 is 19.1 per cent and 25.2 per cent respectively. It is estimated that by the year 1991 the population of the city would slightly exceed 9 lakhs. The literacy rate of the local population was about 60 per cent according to the 1981 census.

Land Use

The total developed area of Allahabad in 1981 was 3156 hectares, of this the residential area accounted for 47.1 per cent; the commercial zone 2.5 per cent; and the industrial area 6.8 per cent. Recreational facilities including parks and playgrounds comprised 2.0 per cent, public and semi-public areas 13.7 per cent and roads/streets covered 15.7 per cent of the developed area of the city. 7.9 per cent of the developed area was still lying vacant and the remaining 3.8 per cent constitutes the "other areas".

Occupational Structure

The occupational structure of the workforce in Allahabad city is presented in table 2.3. The "other workers" category of the town


ALLAHABAD
LEGEND:-
MAJOR ROADS
PROPOSED ROADS
ROADS
RAILWAY LINES B. G.
RAILWAY LINES M. G.
INFORMAL SECTOR SURVEYED AREA
WATER BODIES
COMMERCIAL
INDUSTRIAL
G A N G A R I V E R
Y A M U N A R I V E R
B E H A I R A V D N A D
N
METRE 400 0 400 1600 3200
NATIONAL INSTITUTE OF URBAN AFFAIRS
NEW DELHI.

including workers engaged in the factory sector, trade/commerce, services, repairs, construction and transport constituted 91 per cent of the total workforce. Household industries have an important role in the urban economy of the city and 4.8 per cent of the workforce is engaged in this traditional sector. The contribution of the agricultural sector to the city workforce is 4.18 per cent of which cultivators constitute 1.81 per cent and agricultural labourers 2.37 per cent.

Table - 2.3

Occupational Structure of Workforce : Allahabad City, 1981

S.No.	Workforce description	Total	Males	Females
1.	Total population	6,19,628	3,40,339	2,79,289
2.	Total main workers	1,55,888 (100.00)	1,46,789	9,099
	(a) Cultivators	2,837 (1.81)	2,680	157
	(b) Agricultural labourers	3,705 (2.37)	3,215	490
	(c) Household industries, including manufacturing, processing and service industry.	7,483 (4.8)	6,705	778
	(d) Other workers (trade, commerce, service/repairs construction, factory workers, plantation workers, transport etc.)	1,41,863 (91.0)	1,34,189	7,674

Source: Census of India, 1981.

An interesting feature regarding the post-independence evolution of the occupational structure of the workforce in Allahabad city is that the rate of growth of employment in the secondary sector does not

show any perceptible change. This is despite the establishment of several new industries in the city and particularly the industrial complex at Naini. This has been a major factor responsible for the large size of the informal sector in Allahabad. During the festive season of Kumbh and on many other religious occasions, traders, sellers migrate to Allahabad city from the adjoining rural hinterland. Similarly during the lean agricultural season, many kinds of workers including rickshaw-pullers, construction workers and brick kiln workers, seasonally migrate to the city. Thus the occupational structure of the workforce witnesses a highly mobile character of a sizeable proportion of the population, which further adds to the size of the informal sector in the city.

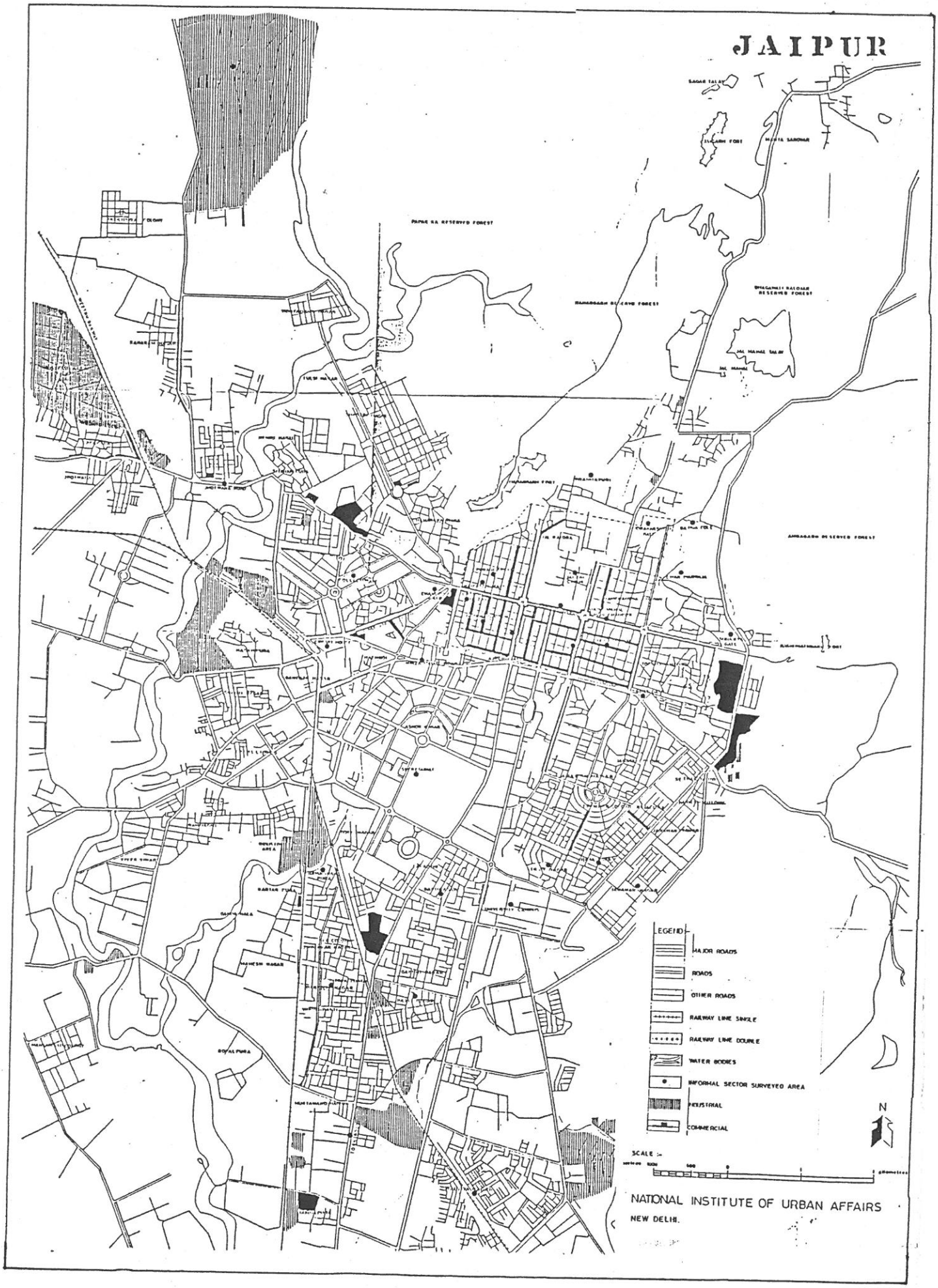
And here lies the contrast. The general trend in the growth of the informal sector in many up and coming cities is attributed to the growth of industrialisation and subsequent urbanisation on the one hand and migration of population from near and far off places on the other. That is why the share of traditional activities is relatively smaller as compared to modern activities even in the informal sector of their economies. The case of Allahabad, however, has a distinctive feature in that the informal sector in this city continues to be dominated by the traditional economic activities including retail and wholesale trade/commerce, transport and social service activities and small cottage and handicrafts activities. The city seems to sustain itself largely due to its predominant religious, civil, educational and military status and the existence of such institutions as the High Court, the University, the A.G.'s Office, the

Board Office and many such other institutions which have been set up in the public sector.

JAIPUR

Jaipur, the first planned city of India and the capital of Rajasthan was founded on 18 November 1727 by the then Maharaja Sawai Jai Singh II (1699-1743). The original city fortified with masonry crenellated walls and seven gates sprawls over an area of 6 sq.km. This is called the walled city and forms the main hub of economic and commercial activity even today. With the passage of time and with population growth, congestion within the walled city increased and consequently therefore, the municipal area of the city had to be expanded. Presently, the entire municipal area of Jaipur city covers about 27 sq.miles while the area of the walled city remains 3 sq. miles only.

The city of Jaipur was planned according to the prastara type of layout, which gives prominence to the cardinal directions. Thus the central axis of the town was laid from east to west between the gates of the sun (Surajpole) and the moon (Chandpole) and this was crossed by three roads at right angles dividing the town into nine blocks which were further subdivided by lanes and alleys. The city's division into nine wards was in conformity with the Hindu caste system which necessitated the segregation of people belonging to different communities and ranks. The original pattern of wards was a centripetal arrangement with the royal palace situated in the centre of the city. The peripheral areas were occupied by the service class. Even the lanes were named after the occupations of the inhabitants,


JAIPUR
LEGEND
MAJOR ROADS
ROADS
OTHER ROADS
RAILWAY LINE SINGLE
RAILWAY LINE DOUBLE
WATER BODIES
INFORMAL SECTOR SURVEYED AREA
INDUSTRIAL
COMMERCIAL
N
SCALE
NATIONAL INSTITUTE OF URBAN AFFAIRS
NEW DELHI.

such as Maniharon Ka Rasta (lane of bangle sellers), Thatheron Ka Rasta (tinkers' lane), Ghee-Walon Ka Rasta (ghee-sellers' lane), Neelgaron Ka Mohalla (tie-and-dye workers' locality) and many others.

The well planned and harmonious construction of the city has made it a distinct model of town planning. The pink terracotta of its main bazaars has led to its being internationally known as the Pink City of India.

Jaipur is directly linked with several large towns inside and outside Rajasthan by road, rail and air. It is an important railway junction on the Delhi-Ahmedabad railway line. Besides, National High ways 8 and 11 run through the city of Jaipur, while a highway links Jaipur with Kota - the industrial city of Rajasthan.

Population

Since the turn of the century, the population of Jaipur has increased more than six-fold. In 1981 the population of the city stood at 10.15 lakhs. Except for a slight decline during the 1960s, the population of Jaipur has been witnessing a steady increase - the decennial growth rate being 55.2 per cent during the 1960s and 57.8 per cent during the 1970s. The literacy rate of the local population in 1981 was 53.5 per cent.

Land Use

The city is divided into 31 wards, out of which 16 are in the walled city and the remaining 15 in the extra-walled city. The total developed area of Jaipur city in 1981 was 33,500 acres. Of this, 51.3 per cent is occupied by residential houses, 13.3 per cent by the

industrial zone, 7.7 per cent by public and semi-public enterprises, 4.8 per cent by the commercial zone, 3.0 per cent by the recreational zone, 1.3 per cent by government offices, 18 per cent by roads and lanes and nearly 0.6 per cent by tourist spots.

Occupational Structure

Census enumerations indicate that in 1981, 27.4 per cent of the total population of Jaipur city constituted the main workforce. As may be observed from Table 2.4, the "other workers" category which includes factory and plantation workers, trade and commerce, service/repairs, construction and transport, engages about 94 per cent of the town's workforce. While household manufacturing, processing and servicing industries engage 4.55 per cent of the total workforce,

Table - 2.4

Occupational Structure of Workforce : Jaipur city, 1981

S.No.	Workforce description	Total	Males	Females
1.	Total population	9,77,165	5,25,180	4,51,985
2.	Total main workers	2,67,724 (100.00)	2,48,836	18,888
	(a) Cultivators	2,985 (1.11)	2,580	405
	(b) Agricultural labourers	1,320 (0.49)	1,098	222
	(c) Household industries, including manufacturing, processing and service industry.	12,182 (4.55)	10,824	1,328
	(d) Other workers (trade, commerce, service/repairs construction, factory workers, plantation workers, transport etc.)	2,51,237 (93.84)	2,34,334	16,903

Source: Census of India, 1981.

the agricultural sector (including cultivators and agricultural workers) is at a low ebb accounting for 1.6 per cent of workforce participation.

The Jaipur Master Plan projects the population of the city in 1991 at 12.5 lakhs, thus estimating a growth rate of 6.5 per cent per annum. It is estimated that by 1991, the workforce of the town will constitute about 35 per cent of the total population. Of this 36.5 per cent is likely to be engaged in the service sector, 33 per cent in industries; 16 per cent in trade and commerce; 8 per cent in transport and communication and 5.5 per cent in construction activities. The number of persons engaged in agriculture, mining and allied activities, in comparison, will be insignificant.

III STRUCTURAL CHARACTERISTICS OF INFORMAL ENTERPRISES IN CASE STUDY CITIES

The vast majority of the urban poor in Indian cities must turn to informal activities for incomes, products and services. It is quite often the case, however, that informal enterprises are unable to provide adequate incomes or sufficient jobs to all the under and/or unemployed that the formal sector fails to accomodate.

While high incomes and high spending are clearly factors that encourage rural-urban migration, the relation of formal to informal activities is diverse. The informal sector enterprises carry on a highly variegated nature of activities. They may supply direct labour services to households with main incomes from the formal sector or may be engaged in manufacturing a range of products catering to the requirements of formal sector units. They may be occupied in the repair and servicing of modern sector products (a prime example being informal metal fabricating/repair units, making intermediate products for large engineering units in the modern sector) or may collect and trade in modern sector products or again be engaged in subcontracted "putting out" work for the modern sector. Some informal activities may be complementary to the modern sector as when bicycle-/autorickshaws take passengers to their official workplaces; or they may compete directly with the modern sector in retailing or in commodity production including the housing construction subsector. In addition, informal activities may create and distribute goods and

services aimed solely at the urban poor and at people who have no connection with the formal sector.

Informal activities are thus by no means all "traditional" activities, although they may rely on traditional patterns of labour relations, contracts and obligations. It is this traditional nature of informal activities that seems to constitute their "informality", particularly as regards access to work. While this informality has often been misunderstood, it remains true that participants in this sector usually can find some income through informal activities.

Size of the Informal Sector

In 1971, the informal sector accounted for 95.53 per cent of the total number of establishments in Wardha; 97.33 per cent in Allahabad and 96.55 per cent in Jaipur, as per data gleaned from the Census of India Establishment Tables.

In terms of employment, the workforce engaged in the informal sector accounted for 61.4 per cent of total workers in Wardha; 53.85 per cent in Allahabad and 58.66 per cent in Jaipur (Table 3.1). Ghaziabad town was merged in Meerut District in 1971, therefore, it was not enumerated in the Census (1971).

The universe of the informal sector consists of all manufacturing, processing and servicing establishments, trading

Table - 3.1

Size of Informal Sector in Case Study Cities

City	Total		Informal sector (Units with less than 10 workers)		% of informal to total	
	No. of establishments	No. of workers	No. of establishments	No. of workers	No. of establishments	No. of workers
Wardha	5465	17345	5221	10651	95.54	61.41
Allahabad	17467	66564	17001	35842	97.33	53.85
Jaipur	23849	82203	23028	48219	96.56	58.66

Source: Census of India (1971).

establishments, and other establishments which employ less than 10 workers.* (Table 3.2)

* Business sector, comprising financing, insurance, real estate establishments and business services or agencies has been considered to be formal, as per the definition of the informal sector adopted for this study, similarly the other sector including such primary and tertiary activities as electricity, gas and water supply; communications; community and social services such as health and education, could not be considered as they generally employ more than ten workers.

Table - 3.2

Sectorwise Distribution of Informal Sector Enterprises in Case Study Cities

City	Manufacturing/ processing/ servicing	Household industry	Trading	Other industry	Total informal enterprises	Total (all enterprises)
Wardha	850 (16.28)	792 (15.17)	2712 (51.94)	867 (16.6)	5221 (100.00)	5465
Allahabad	2998 (17.63)	1740 (10.23)	9062 (53.30)	3201 (18.33)	17001 (100.00)	17467
Jaipur	6797 (29.52)	920 (3.99)	12433 (53.99)	2878 (12.49)	23028 (100.00)	23849

Source: Census of India, 1971.

It may be observed from the above table that the bulk of the informal enterprises, in all the case study cities, were in the trade and commerce sector. They accounted for 51.94 per cent (Wardha); 53.3 per cent (Allahabad) and 53.99 per cent (Jaipur).

Manufacturing/processing and servicing enterprises were significant in Jaipur accounting for about 30 per cent of total informal enterprises in the city. They constituted 16.28 per cent in Wardha and 17.63 in Allahabad - two cities which represent an urban expansion in the rural periphery with a predominant role for the informal sector in their development.

Informal household- and other industries (including agro-based industries, construction and transport) were fairly prominent in all the case study cities, constituting 31.77 per cent (Wardha);

29.06 per cent (Allahabad) and 16.48 per cent (Jaipur) of total informal enterprises operating.

In terms of workforce participation in the informal sector in case study cities, it may be observed that trade/commerce appears to be the most important subsector, while manufacturing ranks second in Allahabad (23.26 per cent) and Jaipur (33.41 per cent). In Wardha, the other industries sector occupies the second place. Table 3.3 shows that workers engaged in household industries as a proportion of total informal sector employment constitute the lowest percentage in all the case study cities.

Table - 3.3

Workforce Participation in Informal Sector in Case Study Cities

City	Manufacturing/ processing/ servicing	Household industry	Trading	Other industry	Total informal	Total (all categories)
Wardha	1816 (17.05)	1523 (14.29)	5371 (50.43)	1941 (18.22)	10651 (100.00)	17345
Allahabad	8340 (23.26)	3857 (10.76)	16728 (46.67)	6717 (18.74)	35842 (100.00)	66564
Jaipur	16110 (33.41)	2238 (4.64)	23405 (48.54)	6466 (13.41)	48219 (100.00)	82203

Source: Census of India, 1971.

While admittedly estimates of the size of the informal sector, (whether in terms of enterprises operating or workforce participation) are beset with drawbacks and limitations, in view of the information gaps in official statistics; it may be reasonably inferred from existing data that the size of the informal sector, in terms of the number of enterprises, ranges between 90 and 95 per cent in the case study cities, and also, in other urban centres in India.

Activity-Structure of Informal Enterprises

Table 3.4 provides an activity-wise distribution of sampled informal enterprises and workers employed, in case study towns and cities. It may be observed that informal enterprises engaged in trade and commerce, and services and repairs predominate in all the case study cities. Taken together these two division majors account for 63 per cent of sampled enterprises in Wardha; 69.8 per cent in Ghaziabad; 74.33 per cent in Allahabad, and 49.75 per cent in Jaipur which is the largest case study city of our survey.

Manufacturing enterprises were next in importance, constituting 21 per cent of the total in Wardha, 7 per cent in Ghaziabad, 18.2 per cent in Allahabad and 25 per cent in Jaipur. The respective share of informal enterprises engaged in construction and transport in the total sampled enterprises in the four case study urban centres are: 5 and 11 per cent (Wardha); 12.5 and 10.75 per cent (Ghaziabad); 2.33 and 5.17 per cent (Allahabad); 3.63 and 21.63 per cent (Jaipur). The table also gives a more detailed classification of activities in each major division in order to have a more precise idea of the structure of activities in the informal sector enterprises.

Table - 3.4

Activity-wise Distribution of Sampled Informal Sector Enterprises and Workers in Case Study Cities

NIUA Code	Description	Number of sample enterprises				Number of workers			
		WDHA	GZD	ALLD	JPR	WDHA	GZD	ALLD	JPR
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
I.	Manufacturing								
001	Food products	6	4	5	2	7	8	7	4
002	Cotton textiles	10	3	15	55	13	8	19	63
003	Wood and carpentry products (baskets)	2	1	24	9	5	4	45	12
004	Leather products	6	4	3	33	9	13	5	39
005	Chemical and plastic products	6	2	28	16	6	6	54	16
006	Non-metallic products (earthenware, structural stone goods etc.)	8	8	16	52	14	16	32	73
007	Basic metal products (brass utensils, hand tools etc.)	2	4	9	7	2	7	14	14
008	Jewellery and bangles	1	1	22	22	1	2	3	37
009	Misc. including stationery products, electronic, goods, autoparts etc.)	1	1	7	4	1	1	11	6
	Sub Total	42 (21)	28 (7)	109 (18.2)	200 (25)	58	65	190	264

Contd....

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
II	Trade & Commerce								
010	Eggs, milk and milk products vending	3	26	28	21	5	56	54	26
011	Fruits and juice vending	11	12	38	68	26	20	73	73
012	Vegetable vending	8	18	35	79	14	30	76	83
013	Manufactured goods, (textiles leather, paper, chemical etc.)	7	1	12	23	7	2	19	28
014	Food products vending	2	1	2	1	2	1	5	2
015	Grocery including soaps, spices	8	5	34	47	8	10	71	49
016	Exchange of goods (steel utensils for clothes)	6	2	3	16	7	2	3	17
017	Paan, bidis, cigarettes and agarbattis	2	26	38	10	4	26	73	10
018	Flowers and garlands	9	2	7	20	12	2	9	26
019	Meat, fish and chicken vending	1	4	9	3	3	4	15	4
020	Misc. including selling of: peanuts, bhuttas, kerosene oil, neem datun, toys, mats etc.	7	5	12	2	7	7	16	2
	Sub Total	64	102	218	290	95	160	414	320

Contd....

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
III.	Services & Repairs								
021	Hair cutting, massaging	5	20	15	6	8	23	39	13
022	Domestic service	5	9	5	6	5	9	5	6
023	Laundering/pressing of clothes	4	17	17	6	11	30	36	9
024	Eating places including dhabas	10	37	48	30	25	89	43	
025	Rag picking	8	7	10	26	12	8	10	26
026	Tailoring including quilt making and embroidery	2	3	19	4	7	5	37	4
027	Automobile and scooter repair	5	26	15	2	13	55	38	5
028	Cycle repair including tyre retreading	11	21	48	10	15	30	101	23
029	Shoe repairs	10	18	30	13	10	24	57	22
030	Misc. including watch, radio, sewing machine, stove repair, painters, band music, tent house, street entertaining, blacksmith, pandas, priests, & malis, books, magazine-sellers, book binding, electric goods	2	19	21	5	7	52	42	11
	Sub Total	62 (31)	177 (44.3)	228 (38)	108 (13.5)	113	303	454	162

Contd....

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
IV.	Construction								
031	Unskilled labourers, skilled workers, contractors and jamadars	10 (5)	50 (12.5)	14 (2.33)	26 (3.62)	19	146	20	63
V.	Transport								
032	Rickshaws (own and hired)	12	30	14	95	12	30	14	95
033	Auto-rickshaws	6	9	4	65	6	9	6	69
034	Bullock carts, tongas and boats	4	4	13	13	4	4	27	19
	Sub Total	22 (11)	43 (10.75)	31 (5.16)	173 (21.62)	22	43	47	183
	Grand Total	200 (100)	400 (100)	600 (100)	800 (100)	307	717	1125	992

Source: Urban Informal Sector Enterprises Survey, NIUA, 1986.

At a disaggregated city level we find that informal enterprises in the trade/commerce and service/repairs division, in all four case study urban centres, are essentially consumer-oriented. Enterprises engaged in vending of vegetables, fruits (and juices), paan/cigarettes, eggs/milk and milk products, grocery items and providing services such as hair-cutting/massaging, laundering/pressing of clothes, dhabas and tea stalls, cycle/scooter repairs and shoe mending, accounted for 61.1 per cent (of total enterprises in these two divisions) in Wardha, 81 per cent in Ghaziabad; 77.6 per cent in Allahabad and 73.4 per cent in Jaipur. Ease of entry in the consumer-oriented activities seems to have been an attractive feature in the case of trading and servicing enterprises in all case study cities.

Among informal manufacturing enterprises, manufacture of textile products constituted the single largest group in Wardha (10 units) and Jaipur (55 units) accounting for 23.8 per cent and 27.5 per cent of total manufacturing enterprises in the two cities. In Ghaziabad and Allahabad the largest groups were manufacture of non-metallic products such as earthenware (28.57 per cent) and chemical and plastic products (25.68 per cent) respectively. Other smaller but significant groups in the manufacturing division include: Food products, leather products, chemical and plastic products, non-metallic products (Wardha); Food products, leather products, basic metal products such as brass untensils and handtools (Ghaziabad); cotton textiles, wood and carpentry products, metallic and non-metallic products, stationery products, autoparts, electronic goods (Allahabad); leather products, non-metallic products and jewellery items (Jaipur).

Informal enterprises in the construction division predominated in Ghaziabad - reflecting the city's emergence as a fast developing urban centre within the NCR - while in the transport division bicycle rickshaws were the most important mode of transport in all case study cities.

Employment Structure of Informal Enterprises

The informal sector is outside the corporate economic organisation, government or mercantile. It therefore does not include organised workers or the employees in central or local government. Nor does it include the professional - doctors, engineers and others. Informal sector activities are generally family businesses/enterprises which also use unpaid family labour and one or two (often casual) workers. In employment status the informal enterprise owners may be classified as "self-employed" and also as small scale employers.

It will be observed (from Table 3.4) that 2000 sample enterprises in four case study cities employed 3141 workers including self-employed, casual, contract, apprentices and unpaid family workers. The most significant employment generating sector in our sample was construction in which 103 informal enterprises provided employment to 248 workers. This was followed by the services and repairs sector, wherein 575 enterprises provided employment to 1032 workers. The manufacturing sector was next in importance: 379 manufacturing enterprises employing 577 workers. Trading and commercial enterprises employed 989 workers and informal transport enterprises were by and large one-person dominated. The average number of workers per

enterprise therefore works out to construction - 2.4; service/repairs - 1.79, manufacturing - 1.52; trade and commerce - 1.46 and transport - 1.09.

An intercity comparison from data presented in Table 3.4 reveals that in Wardha, Ghaziabad and Jaipur, employment generation in the informal construction enterprises is most significant. This is perhaps a reflection of the high level of building construction activity ongoing in these case study urban centres. In Allahabad, informal enterprises in the construction sector were not significant, indicating perhaps saturation point having been reached within the municipal limits of the city, although not capturing the fast industrial development-led informal sector growth in the urban fringes adjoining areas outside the municipal boundary. While informal enterprises engaged in the services and repairs division are predominant in Allahabad, they constitute significant employment generators in the remaining three case study cities. In Wardha 62 informal servicing and repair enterprises provided employment to 113 workers (average/enterprise ratio 1.8); in Ghaziabad 177 enterprises generated employment for 303 workers (average 1.7) and in Jaipur the average employment generated per enterprise in this sector works out to 1.5. The manufacturing enterprises are of considerable significance in employment generation for the informal sector in Ghaziabad, Allahabad and Jaipur as can be deduced from the data presented.

Table 3.5 gives the divisionwise distribution of informal enterprises according to size of employment. It will be seen that more than half the manufacturing enterprises in Wardha and Ghaziabad were of a relatively larger size employing between 2-5 persons. Single worker enterprises in the "manufacturing" division predominated in Allahabad and Jaipur.

Trading and commercial enterprises were predominantly single-person units in all the four case study cities. The percentage of single-person enterprises in this sector was as follows:

Wardha - 70.31; Ghaziabad - 76.47; Allahabad - 63.66;
Jaipur - 89.66.

In the services and repairs division, only Allahabad witnessed informal enterprises employing between 2 - 5 persons. Fifty three per cent were in this category. In the other three cities, informal enterprises were typically one person units.

In the construction sector in Ghaziabad, informal enterprises employing 6-9 persons constituted 14 per cent of the total, while in Jaipur informal enterprises in this sub-sector employing 2-5 persons accounted for 27.5 per cent of the sample.

Informal transport enterprises were predominantly one person units in the four case study cities. Exceptions to this were in Ghaziabad and Jaipur where 27.9 per cent and 5.8 per cent of the enterprises employed 2-5 persons respectively.

Table - 3.5

Distribution of Informal Enterprises in Case Study Cities by Size of Employment

Major division	Single person	Number of establishments with 2-5 persons	Number of establishments with 6-9 persons	Total
(1)	(2)	(3)	(4)	(5)
I. Manufacturing				
WDHA	14 (33.33)	27 (64.28)	1 (2.38)	42
GZD	11 (39.28)	17 (60.72)	-	28
ALLD	58 (53.21)	51 (46.78)	-	109
JPR	129 (64.5)	64 (32.00)	7 (3.5)	200
Sub-Total	212 (55.94)	159 (41.95)	8 (2.11)	379 (100)
II. Trade & Commerce				
WDHA	45 (70.31)	17 (26.56)	2 (3.13)	64
GZD	78 (76.47)	22 (21.57)	2 (1.96)	102
ALLD	139 (63.76)	79 (36.24)	-	218
JPR	260 (89.65)	30 (10.34)	-	290
Sub-Total	522 (77.45)	148 (21.96)	4 (0.59)	654 (100)
III. Services & Repairs				
WDHA	40 (64.52)	22 (35.48)	-	62
GZD	115 (64.97)	59 (33.33)	3 (1.69)	117
ALLD	100 (43.85)	121 (53.07)	7 (3.07)	228
JPR	90 (83.33)	18 (16.67)	-	108
Sub-Total	345 (60.00)	220 (38.26)	10 (1.74)	575 (100)
IV. Construction				
WHDA	10 (100.0)	-	-	10
GZD	41 (82.00)	2 (4.00)	7 (14.00)	50
ALLD	12 (85.71)	2 (14.29)	-	14
JPR	17 (58.62)	8 (27.59)	4 (13.79)	29
Sub-Total	80 (77.67)	12 (11.65)	11 (10.68)	103 (100)
V Transport				
WDHA	22 (100.0)	-	-	22
GZD	31 (72.09)	12 (27.91)	-	43
ALLD	27 (87.09)	4 (12.90)	-	31
JPR	163 (94.22)	10 (5.78)	-	173
Sub-Total	243 (90.33)	26 (9.67)	-	269 (100)
I-V All Cities Total				
WDHA	131 (65.5)	66 (33.00)	3 (1.5)	200 (100)
GZD	276 (69.00)	112 (28.00)	12 (3.0)	400 (100)
ALLD	336 (56.00)	257 (42.83)	7 (1.17)	600 (100)
JPR	659 (82.38)	130 (16.25)	11 (1.38)	800 (100)

Source: Informal Sector Enterprises Survey, NIUA, 1986.

Turnover Employment Ratios of Informal Enterprises

The estimates of turnover/employment ratios of informal enterprises given in Table 3.6 indicate that, on an average, an annual sales turnover of Rs.1 lakh generated employment for 3.77 workers in Wardha; 4 workers in Ghaziabad; 6.14 workers in Allahabad and 2.55 workers in Jaipur. In the case of manufacturing, trade and commerce and repair and services divisions, a turnover of Rs.1 lakh generated employment for 3.11, 3.69 and 5 workers respectively in Wardha; 3.88, 2.63 and 4.65 workers respectively in Ghaziabad; 3.36, 7.21 and 7.37 workers in Allahabad and 2.55, 1.56 and 4.56 and 4.79 workers respectively in Jaipur.

At a further disaggregated groupwise level, annual turnover of Rs.1 lakh in the manufacturing division generated the maximum employment for 5.56 workers in group 007 (manufacture of basic metal products) in Wardha; for 8.33 workers in group 003 (wood/carpentry products) in Ghaziabad; for 18.52 workers in group 008 (jewellery and bangles) in Allahabad and for 7.27 workers in group 003 (wood/carpentry products) in Jaipur. The minimum employment generation in this division was 2.08 workers per Rs. 1 lakh turnover in the case of group 008 (jewellery and bangles) in Wardha; 1.98 workers in group 007 (basic metal products) in Ghaziabad; 2.53 workers and 1.66 workers in group 002 (cotton textiles) in Allahabad and Jaipur respectively.

In the trade and commerce division, the maximum employment per Rs.1 lakh of yearly turnover has been estimated for group 016 (exchange of steel utensils for clothes) at 4.86 workers in Wardha;

for group 015 (grocery items) at 12.82 workers in Ghaziabad; group 012 (vegetable vending) at 10.22 workers in Allahabad and group 014 (food products vending) at 2.67 workers in Jaipur. The minimum employment generation was in group 013 (Wardha), group 019 (Ghaziabad), group 013 (Allahabad) and group 011 (Jaipur).

In the services and repairs division, the maximum turnover/employment ratio has been estimated for group 023, (laundering/pressing of clothes) at 18.33 workers (Wardha), for group 029 (shoe repair) at 9.52 workers (Ghaziabad), for group 021 (hair-cutting/massaging) at 10.24 workers (Allahabad) and for group 028 (cycle repair) at 10.09 workers (Jaipur). The minimum employment generation potential was in group 025 (rag-picking) in all four case study cities .

Physical Structure of Informal Enterprises

Table 3.7 relates to the type of structure of urban informal enterprises. It is based on a joint consideration of the materials used for roof, walls and floor. Pucca structures are those where both walls and roof are made of burnt bricks, stone, cement concrete and timber. Tiles, galvanised iron or asbestos cement sheets used in roofs is also regarded as pucca material. A semi-pucca structure is one which is not pucca but where either plinth or wall or roof is made of burnt bricks, stones, cement concrete or timber. A kutcha structure is one where the walls, roof and plinth are all made of unburnt bricks, bamboo, mud, grass or leaves, reeds and/or thatch.

Table - 3.6

Informal Enterprises in Case Study Cities: Turnover/Employment Ratios

NIUA Code	Turnover/Employment ratios							
	WDHA	Rank	GZD	Rank	ALLD	Rank	JPR	Rank
I. Manufacturing								
001	2.38	7	3.07	6	3.95	2	3.89	1
002	2.46	6	9.22	2	1.73	4	0.34	6
003	2.78	5	10.42	1	0.34	8	3.03	2
004	3.03	4	3.26	4	13.64	1	0.41	5
005	4.00	3	6.45	3	0.53	7	1.18	3
006	4.44	2	3.17	5	2.51	3	0.69	4
007	5.56	1	0.56	8	0.63	6	0.41	5
008	2.08	8	2.08	7	0.74	5	0.16	7
009	-	-	-	-	-	-	-	-
Sub Total	3.11		3.46		1.15		0.56	
II. Trade & Commerce								
010	2.38	7	0.23	10	1.77	5	0.46	7
011	3.43	5	3.51	5	2.85	3	0.44	8
012	3.17	6	1.21	7	1.88	4	2.17	2
013	2.05	10	17.50	2	0.88	8	0.46	7
014	2.15	9	2.67	6	1.63	6	2.67	1
015	4.76	2	10.26	3	1.05	7	0.26	9
016	4.86	1	5.47	4	8.97	1	0.99	5
017	2.22	8	0.37	9	0.58	9	0.60	6
018	4.04	3	33.33	1	7.14	2	1.20	4
019	4.00	4	0.86	8	0.50	10	1.32	3
020	-	-	-	-	-	-	-	-
Sub Total	3.69		1.56		1.66		0.46	
III. Service & Repairs								
021	7.02	5	2.69	5	2.10	5	5.80	6
022	16.67	2	9.26	2	16.67	1	13.89	2
023	18.33	1	2.26	7	2.89	2	7.97	3
024	4.23	7	1.17	8	2.20	4	3.50	7
025	1.84	9	2.55	6	2.84	3	0.92	9
026	8.97	4	10.61	1	1.81	7	7.29	4
027	4.51	6	0.96	9	2.03	6	16.67	1
028	13.16	3	4.03	3	1.01	9	6.58	5
029	3.88	8	3.97	4	1.64	8	2.21	8
030	-	-	-	-	-	-	-	-
Sub Total	5.00		1.73		1.84		3.34	

Contd.....

NIUA Code	Turnover/Employment ratios							
	WDHA	Rank	GZD	Rank	ALLD	Rank	JPR	Rank
IV. Construction								
031	2.31		0.78		2.22		1.06	
V. Transport								
032	8.00	1	2.50	2	9.52	1	1.24	1
033	1.52	3	0.90	3	3.45	2	0.35	3
034	4.76	2	8.33	1	1.75	3	2.67	2
Sub Total	3.49		1.84		4.17		0.78	
(I-V)	3.76		4.00		6.14		2.55	

Note: Codes 009, 020 and 030 have been excluded as they consist of heterogeneous and miscellaneous urban informal sector groupings.

Table 3.7 shows the joint distribution of informal enterprises by type of physical structure and according to broad informal activity - divisions.

A little more than one-third of all informal enterprises (35.4 per cent) in case study urban centres operated from pucca (or semi-pucca) dwelling structures. Mobile enterprises accounted for 29.25 per cent while those operating from the pavements/footpaths constituted 16.55 per cent of sampled enterprises in all case study cities . A little less than one-fifth of the enterprises (18.8 per cent) were makeshift arrangements with kutcha physical attributes.

Among the informal enterprises operating from pucca/semi-pucca dwelling structures retail trade and commercial enterprises accounted for 34.32 per cent, manufacturing for 30.79 per cent and service/repairs for 29.94 per cent in all case study cities . Among

informal enterprises with kutcha physical structure, services/repairs and trade/commerce together accounted for 72.6 per cent of all informal enterprises in case study urban centres. Among enterprises on the pavement/footpath 53.5 per cent and 29.6 per cent respectively were in retail trade and services/repairs. Among mobile enterprises, transport accounted for 45.64 per cent; trade and commerce for 21.36 per cent; services/repairs for 20.68 per cent and construction for 10.26 per cent in all case study urban centres.

There appears to be a strong relationship between the physical/structural attributes and economic activity of informal enterprises in case study urban centres. Except for Wardha, manufacturing enterprises in the case study cities functioned from pucca/semi-pucca structures. Footpath and barrows enterprises were largely retail trade oriented, except in Jaipur where 35.86 per cent of retail trade/commerce enterprises operated from pucca/semi-pucca structures and Ghaziabad where 34.32 per cent of retail trade activity was conducted from kutcha enterprises. Informal enterprises in the services/repairs division mostly operated from kutcha, pavement, or mobile structures in Ghaziabad, Allahabad and Jaipur. In Wardha however, 56.45 per cent of these enterprises functioned from pucca structures. The bulk of the informal enterprises in the construction and transport division were mobile, in all case study urban centres, except for Jaipur where all construction enterprises possessed pucca physical attributes.

Table - 3.7

Distribution of Informal Enterprises in Case Study Cities by Physical Structure

Major division	Sample size	Enterprises by their physical structure			
		Pucca/ Semi pucca	Kutcha	Pavement/ Footpath	Mobile/ Barrows
I. Manufacturing					
WDHA	42	7	8	24	3
GZD	28	12	4	6	6
ALLD	200	126	58	16	-
JPR	109	73	30	3	3
II. Trade & Commerce					
WDHA	64	18	4	19	23
GZD	102	14	35	11	42
ALLD	218	58	38	95	27
JPR	290	153	52	52	33
III. Services & Repairs					
WDHA	62	35	9	11	7
GZD	177	37	69	32	39
ALLD	228	90	51	47	40
JPR	108	50	15	8	35
IV. Construction					
WDHA	10	-	1	3	6
GZD	50	6	-	-	44
ALLD	14	-	-	4	10
JPR	29	29	-	-	-
V. Transport					
WDHA	22	-	-	-	22
GZD	43	-	2	-	41
ALLD	31	-	-	-	31
JPR	173	-	-	-	173
(I-V)					
WDHA	200 (100)	60 (30)	22 (11)	57 (28.5)	61 (30.5)
GZD	400 (100)	69 (17.25)	110 (27.5)	49 (12.25)	172 (43)
ALLD	600 (100)	221 (36.83)	119 (19.83)	149 (24.83)	111 (18.5)
JPR	800 (100)	358 (44.75)	125 (15.63)	76 (9.5)	241 (30.16)
All cities total	2000 (100)	708 (35.4)	376 (18.8)	331 (16.55)	585 (29.25)

Age Structure of Informal Enterprises

The rapid growth of informal sector enterprises during the recent part is evident form the fact that a large number of them have been initiated only recently : around 41 per cent of sample enterprises were started during the last five years, that is, in the period 1981-1986; 35.5 per cent enterprises were between 5 to 10 years old while only 23.6 per cent more than 10 years of age, in the case study urban centres (Table 3.7).

An intercity comparison of data presented reveals that informal sector activity has been the highest in Ghaziabad with 61.75 per cent of new enterprises being started during the last five years. This is perhaps to be expected, as the pace of urbanisation in Ghaziabad city has gathered momentum recently with its emergence as an urban growth centre within the NCR. New informal enterprise formation in Allahabad has tended to decline with only 28 per cent of enterprises being initialed during 1981-86. In both Wardha and Jaipur the increasing trend of informal enterprises initiation, witnessed over the last decade and more, continues to be maintained with 40.5 per cent (Wardha) and 40.25 per cent (Jaipur) of new enterprises being started during the last five years.

In the manufacturing division more than half the sampled informal enterprises in Wardha and Ghaziabad are less than five years old whereas informal manufacturing enterprises in Jaipur and Allahabad display a more stable age structure. The dramatic fall in new enterprise creation in these two cities indicates perhaps a slow down in manufacturing activity, to some extent. While trading and

commercial enterprises seem to be witnessing a boom in Ghaziabad and a moderate increase in Jaipur, both Wardha and Allahabad face a marked slow down in informal trading sector enterprise formation. A similar picture prevails in the services and repairs division. In the construction division, informal enterprises are facing a decline in Allahabad with only 14.29 per cent of new enterprises in our sample being initiated during the period 1981-86, while in Wardha only 20 per cent of construction enterprises were started during this period. While there is a trend to slow down in the construction division in Jaipur, there was a moderate recovery in Ghaziabad during the latest period of our study. In the transport division, Wardha and Allahabad had 36.36 per cent and 45.16 per cent of informal transport enterprises which were more than 10 years old while in the remaining two case study urban centres bulk of the transport enterprises were of recent origin.

In brief, informal enterprises in case study cities , in practically all major activity divisions, have registered fast growth in numbers during the last one decade. This growth has been fastest in the retail trade and services & repairs division, and fairly, substantial in the transport and manufacturing division, intercity variations notwithstanding.

IV INFORMAL ENTERPRISES IN CASE STUDY CITIES : INVESTMENT, INCOMES, LINKAGES AND SAVINGS POTENTIAL

One of the reasons why informal enterprises have an attraction in development terms is that they are generally labour intensive in relation to capital. In other words, they generate relatively high levels of employment from a given quantum of savings and investment. In this chapter we examine the structure and economic performance of informal enterprises in four case study cities, at disaggregated sectoral and sub-sectoral levels, with a view to identifying the activity groups with relatively high income and employment generation potentials. Another aspect of informal enterprise growth which is explored in this chapter is the area of informal sector finance and the sources thereof. Finally a brief assessment has been made of the financial savings of informal enterprises in the case study cities.

Capital Investment

The NIUA field survey investigations reveal that most enterprises in the informal sector are structurally characterised by a relatively small capital base. It is this aspect of informal enterprise growth which has resulted in a relative ease of entry for enterpreneurs on the one hand, and a mushrooming of informal enterprises in all case study urban centres, over the last decade or so, on the other. At an aggregate level, the 2000 sample enterprises covered in the NIUA survey possessed fixed capital of Rs.102.2 lakhs and working capital

of Rs.61.62 lakhs.* Total productive capital investment defined to include both working and fixed capital of sample enterprises in all case study urban centres was, therefore, of the order of about Rs. 164 lakhs.

Table 4.1 gives the sectoral distribution of investment in informal enterprises in the case study centres. It may be seen that 200 sample enterprises in Wardha had a capital investment of Rs. 13.49 lakhs of which Rs. 8.22 lakhs was in fixed capital formation and the remaining Rs. 5.27 lakhs in working capital. The 400 sample enterprises in Ghaziabad possessed a productive investment of Rs.29.41 lakhs of which Rs.20.82 lakhs was in the form of fixed investment and Rs. 8.59 lakhs in working capital. In Allahabad 600 sample informal enterprises had a total productive investment of Rs.41.53 lakhs of which Rs. 28.29 lakhs was in fixed capital of the enterprises and Rs. 13.24 lakhs in working capital. The 800 sample informal enterprises in Jaipur had a capital investment of Rs.79.44 lakhs of which Rs. 44.91 lakhs was on fixed capital and Rs.34.53 lakhs in working capital. The citywise sample coverage of total productive capital investment, therefore, works out to: Wardha - 8.24 per cent; Ghaziabad - 17.95 per cent; Allahabad - 25.35 per cent and Jaipur - 48.49 per cent.

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* Fixed capital refers to the amount spent in purchasing the machinery and equipment, vehicles, fixed assets (such as furniture etc.) of the enterprise, as well as the cost of land, building and other fixed structures (such as Khoka). Working capital is the amount required (and spent) for daily expenses incurred in running the enterprise. This includes the cost of raw materials and maintenance/repair of machinery and tools. It does not include wages and salaries reimbursed to employees.

Table - 4.1

Informal Sector Enterprises in Case Study Cities:
Pattern of Capital Investment

Major Division	Sample Size	Fixed Capital (Rs.in lakhs)	Working Capital	Productive Capital Investment
I. Manufacturing				
WDHA	42	1.51	1.22	2.73
GZD	28	1.33	0.95	2.28
ALLD	109	3.64	3.45	7.09
JPR	200	10.48	9.35	19.83
II. Trade & Commerce				
WDHA	64	1.99	2.63	4.62
GZD	102	5.50	3.82	9.32
ALLD	218	9.07	5.81	14.88
JPR	290	9.61	19.65	29.26
III. Services & Repairs				
WDHA	62	2.07	1.40	3.47
GZD	177	7.92	3.56	11.48
ALLD	228	12.67	3.95	16.62
JPR	108	4.48	3.39	7.87
IV. Construction				
WDHA	10	0.49	-	0.49
GZD	50	3.73	0.19	3.92
ALLD	14	0.74	0.01	0.75
JPR	29	1.67	0.01	0.75
V. Transport				
WDHA	22	2.16	0.02	2.18
GZD	43	2.34	0.07	2.41
ALLD	31	2.17	0.02	2.19
JPR	173	18.67	2.04	20.71
All Cities Total	2000	102.20	61.62	163.82

Source: Urban Informal Enterprises Survey, NIUA, 1986.

Sectorwise details of productive capital investment presented in Table 4.1 reveal that in Wardha and Jaipur, informal enterprises engaged in trading/commercial activities had the highest proportion of capital investment in relation to the other major activity divisions. Enterprises in this sector accounted for 34 per cent (Wardha) and 37 per cent (Jaipur) of total capital investment in these two case study centres.

In Ghaziabad and Allahabad, however, the highest proportion of productive investment was in the enterprises engaged in the services/repairs sector, accounting for 39 per cent (Ghaziabad) and 40 per cent (Allahabad) of total capital investment of sample enterprises.

The above two sectors of informal enterprise activity taken together accounted for between one-half and three-quarters of total productive investment of sample enterprises in the four case study cities.

Other informal activity sectors which possessed significant levels of productive capital investment in the NIUA survey were:

Manufacturing - Jaipur (25 per cent);
Wardha (20 per cent); and
Allahabad (17 per cent).

Construction - Ghaziabad (13 per cent) and

Transport - Jaipur (26 per cent).

Sales Turnover

The aggregate annual sales turnover of sample informal enterprises in the four case study urban centres was reported at Rs.81.54 lakhs (Wardha); Rs.179.04 lakhs (Ghaziabad); Rs.183.34 lakhs (Allahabad) and Rs.389.07 lakhs (Jaipur). The average per annum turnover of an informal enterprise was estimated at about Rs.40,770 in Wardha; Rs.44,760 in Ghaziabad; Rs.30,557 in Allahabad and Rs.48,634 in Jaipur. The size of turnover varies significantly among the various informal sector activity divisions in the case study urban centres surveyed.

Sectorwise details of annual sales turnover given in Table 4.2 show that in Wardha and Jaipur, sample enterprises engaged in trading/commercial activities had the highest sales percentage among all major activity divisions accounting for 31.57 per cent (Wardha) and 52.89 per cent (Jaipur) of total turnover of sample enterprises per annum.

In Ghaziabad and Allahabad the highest aggregate sales were reported by the services/repairs enterprises which accounted for 36.41 per cent and 33.58 per cent of total annual sales turnover in the two case study cities respectively. Taken together, enterprises engaged in the above two major divisions of the informal sector accounted for the bulk of aggregate sales in all the four case study urban centres covered by the NIUA survey - constituting about 60 per cent (Wardha); 71 per cent (Ghaziabad); 65 per cent (Allahabad) and 61 per cent (Jaipur) of total annual sales turnover of single enterprises in the four cities.

Table 4.2

Informal Sector Enterprises in Case Study Cities:
Pattern of Annual Sales Turnover (Rs. Lakhs)

NIUA Code		Annual turnover (Rs. Lakhs)			
		WDHA	GZD	ALLD	JPR
I.	Manufacturing	18.66 (42)	16.77 (28)	50.55 (109)	103.39 (200)
II.	Trade and commerce	25.74 (64)	60.78 (102)	57.40 (218)	205.77 (290)
III.	Services and repairs	22.62 (62)	65.19 (177)	61.56 (228)	33.81 (108)
IV.	Construction	8.22 (10)	24.33 (50)	8.55 (14)	17.91 (29)
V	Transport	6.30 (22)	11.97 (43)	5.23 (31)	28.19 (173)
(I-V)	All cities total	81.54 (200)	179.04 (400)	183.34 (600)	389.07 (800)

Note: Figures in parentheses denote the sample size.
Source: Urban Informal Enterprises Survey, NIUA, 1986.

Other informal activity sectors which possessed significant annual sales turnover in the NIUA survey were:

Manufacturing: Wardha (23 per cent);
Allahabad (28 per cent); and
Jaipur (27 per cent)

Construction: Wardha (10 per cent);
Ghaziabad (14 per cent)

Income Generation

A bulk of the sample enterprises in all the case study urban centres reported no secondary source of income apart from the main informal activity engaged in. The distribution of sample enterprises according to their income stratification is provided in Table 4.3.

Table 4.3

Distribution of Informal Enterprises in Case Study Cities According to Income Stratification

Major division	Wardha			Ghaziabad			Allahabad			Jaipur		
	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income	Low income	Middle income	High income
I. Manufacturing	15 (35.71)	26 (61.90)	1 (2.38)	10 (35.71)	9 (32.14)	9 (32.14)	37 (33.71)	52 (47.71)	20 (18.35)	51 (25.5)	121 (60.5)	28 (14)
II. Trade and commerce	36 (56.25)	23 (35.94)	5 (7.81)	36 (35.29)	41 (40.2)	25 (24.51)	99 (45.41)	97 (44.5)	22 (10.09)	111 (38.27)	152 (52.41)	27 (9.31)
III. Services and repairs	33 (53.23)	24 (38.71)	5 (8.06)	74 (41.81)	65 (36.72)	38 (21.47)	74 (32.46)	138 (60.53)	16 (7.02)	28 (25.93)	79 (73.15)	1 (0.92)
IV. Construction	5 (50)	4 (40)	1 (1)	27 (54)	11 (22)	12 (24)	10 (71.43)	4 (28.57)	-	29 (100)	-	-
V. Transport	4 (18.18)	17 (77.27)	1 (4.55)	12 (27.91)	29 (67.44)	2 (4.65)	18 (58.06)	11 (35.48)	2 (6.45)	104 (60.11)	69 (39.88)	-
Grand total	93 (46.5)	94 (47)	13 (6.5)	159 (39.75)	155 (38.75)	86 (21.5)	238 (39.67)	302 (50.33)	60 (10)	323 (40.38)	421 (52.62)	56 (7)

Source: Urban Informal Enterprises Survey, NIUA, 1986.

Informal enterprises in all four case study urban centres were predominantly low-income and middle-income enterprises.* Considering all the major activity divisions, it may be observed that 93.5 per cent of sample enterprises in Wardha belonged to the low-income/middle-income category. In Ghaziabad, Allahabad and Jaipur, the percentage of sample enterprises falling in these two income categories were respectively 78.5, 90 and 93.

Sample enterprises in the manufacturing division had relatively high income generating potential in all four case study urban centres. The informal manufacturing enterprises falling in the middle-income/high income range constitute 64.28 per cent (Wardha and Ghaziabad), 66 per cent (Allahabad) and 74.5 per cent (Jaipur) of total manufacturing enterprises surveyed in all four case study cities. In the trade/commerce division, only Ghaziabad and Allahabad reported significant percentages of high-income informal enterprises. In the services/repairs sector, 22 per cent of sample enterprises in Ghaziabad were in the high income range, while among construction enterprises in the city 24 per cent constituted high income informal enterprises.

Annual aggregate net income of sample enterprises in 1985-86, (Table 4.4) was Rs.16.59 lakhs (Wardha); Rs.42.88 lakhs (Ghaziabad); Rs.55.84 lakhs (Allahabad) and Rs.69.28 lakhs (Jaipur).

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* There are three categories of informal enterprises: low-income falling within the income range of up to Rs.600 per month; middle-income between Rs.600 and Rs.1,000 per month and high-income between the income range Rs.1,000 and Rs. 3,000 per month.

Table 4.4

Annual Aggregate Net Income of Informal Enterprises in Case Study Cities

Major division	Sample size	Annual net income per enterprise (Rs.)	Annual aggregate net income ('000 Rs.)
I. Manufacturing			
WDHA	42	8772	368.4
GZD	28	11484	321.55
ALLD	109	10308	1123.57
JPR	200	10380	2076.00
II. Trade & Commerce			
WDHA	64	8196	524.54
GZD	102	10824	1104.05
ALLD	218	9096	1982.92
JPR	290	9276	2690.04
III. Services & Repairs			
WDHA	62	7608	471.69
GZD	177	10776	1907.35
ALLD	228	9348	2131.34
JPR	108	8316	898.13
IV. Construction			
WDHA	10	8040	80.40
GZD	50	10512	525.60
ALLD	14	6768	94.75
JPR	29	2436	70.64
V. Transport			
WDHA	22	9768	214.89
GZD	43	9996	429.83
ALLD	31	8124	251.84
JPR	173	6900	1193.70
(I-V) All Cities Total			
WDHA	200	8299.70	1659.94
GZD	400	10720.95	4288.38
ALLD	600	9307.40	5584.44
JPR	800	8660.64	6928.51

A sector-wise analysis of data presented in Table 4.4 shows that annual net income per enterprise was highest among manufacturing enterprises in three case study centres. In the Ghaziabad sample informal manufacturing enterprises earned Rs.11,484 per annum, in Allahabad Rs.10,308 per annum and in Jaipur Rs.10,380 annually. The per enterprise net annual income in Wardha was highest (Rs.9,768) for the transport sector, followed by the manufacturing sector in which informal enterprises earned Rs.8,772 per annum. In terms of income earned, informal trading and commercial enterprises in Ghaziabad and Jaipur ranked second while in Allahabad informal service/repairs enterprises were next in importance after manufacturing sector enterprises.

Taking all the major activity divisions together, we find that informal enterprises in Ghaziabad possessed the highest net annual income followed by Allahabad, Jaipur and Wardha, in that order.

Linkages

Informal sector enterprises in the case study cities depend on one another and also on the formal sector units in regard to raw material procurement, disposal of their products and services. In order to estimate the magnitude of such linkages, sample informal enterprises were requested to indicate their dependence with respect to the various aspects mentioned above. The NIUA survey results (Table 4.5) reveal that about 87 per cent of the informal enterprises bought their raw materials locally (41 per cent from registered wholesalers, 46 per cent from retailers and hawkers) 12 per cent from registered/unregistered formal sector manufacturers. The extent of

linkages with formal organised dealers were most widely prevalent in the case of the manufacturing enterprises. Some informal enterprises faced difficulties in procurement of raw materials mainly on account of shortages and high prices and inability to buy in bulk.

As far as the sale of products of informal enterprises is concerned, linkages with the individual customer is the rule indicating the strong consumer orientation (94 per cent). Manufactured products are almost wholly sold to individuals in sharp contrast to the organised sector manufacturers who tend to sell to wholesalers/dealers rather than direct to the customer.

Table 4.5

Linkages of Informal Enterprises in Case Study Cities

All case study cities	Households	Registered/ unregistered manufacturing units (formal sector)	Registered/ unregistered local shops & hawkers	Total
Procurement of raw materials	29 (1.45	236 (11.8)	1735 (86.75)	2000 (100)
Sale of final products	1882 (94.1)	39 (1.95)	79 (3.95)	2000 (100)

Source: Urban Informal Enterprises Survey, NIUA,1986.

Disaggregative Economic Performance

In this section we present the data on the basic economic indicators of informal enterprises at the sub-group level and indicate the activity lines with high/medium growth potential. Tables 4.6 (A

to B) present relevant information for 34 indicated activity lines in the four case study urban centres where the NIUA field survey was conducted.

It may be observed from the data in Tables 4.6 that except for Wardha, where the informal transport enterprises have the highest monthly net incomes, in all other case study cities, informal manufacturing enterprises have the highest income levels followed by retail/wholesale trade and service/repairs enterprises in all case study urban centres surveyed. Construction enterprises in Ghaziabad and transport enterprises in all case study cities had relatively high income generation.

Considering, first the informal manufacturing/processing enterprises we note that monthly income ranges from a low of between Rs.250 to Rs.500 per month in the case of stationery products and food products (Wardha), stationery products (Ghaziabad), cotton textiles, autoparts (Jaipur). Allahabad interestingly did not possess any informal manufacturing enterprise in this low income category. The medium income category with net incomes between Rs. 600-1,000 per month predominated in all other activity lines. In the high incomes category with income levels beyond Rs.1,000 we find that Ghaziabad had a large number of enterprises in different activity lines but these were restricted to only a few in the other case study cities such as leather products, jewellery/bangles (Wardha), wood/carpentry

Table 4.6 (A)

Basic Economic Indicators of Informal Enterprises - Wardha (n=200)

NIUA classification code	Sample size	Mean figures					
		Monthly sales (Rs.)	Monthly net income (Rs.)	Capital investment (Rs.)	Working capital (Rs.)	Workers*	Capital workers ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. Manufacturing							
001		4083	483	4583	3750	1.17 (7)	3917.09
002		4400	730	1750	3000	1.30 (13)	1346.15
003		7500	650	20250	3000	2.50 (5)	8100.00
004		4100	1000	2917	3750	1.50 (9)	1944.67
005		2000	683	917	1750	1.00 (6)	917.00
006		3300	763	2750	2688	1.75 (14)	1571.43
007		1500	600	1000	1750	1.00 (2)	1000.00
008		4000	1000	15000	3000	1.00 (1)	15000.00
009		1500	250	3000	3000	1.00 (1)	3000.00
Sub Total	42	3702	731	3583	2917	1.38 (58)	2596.38
II. Trade & Commerce							
010		5800	800	4500	7667	1.67 (5)	2694.61
011		5700	909	8773	6182	2.36 (26)	3717.37
012		4600	775	2000	4500	1.75 (14)	1142.86
013		4100	757	2214	4286	1.00 (7)	2214.00
014		3900	500	7750	7750	1.00 (2)	7750.00
015		1800	425	813	2063	1.00 (8)	813.00
016		2000	500	500	2583	1.17 (7)	427.35
017		7500	750	1750	5250	2.00 (4)	875.00
018		2800	589	778	2167	1.33 (12)	584.96
019		6300	1800	3000	7500	3.00 (4)	1000.00
020		4100	543	2643	3000	1.00 (7)	2643.00
Sub Total	64	3352	683	3102	4109	1.48 (95)	2095.95

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
III. Services & Repairs							
021		1900	680	2500	1000	1.60 (8)	1562.50
022		-	100	-	-	1.00 (5)	500.00
023		1300	350	2875	1125	2.75 (11)	1045.45
024		4900	790	2200	3900	2.50 (25)	880.00
025		6800	1050	2625	4000	1.50 (12)	1750.00
026		3300	750	20000	3000	3.50 (7)	5714.28
027		4800	840	10700	3000	2.60 (13)	4115.38
028		900	382	2273	727	1.36 (15)	1671.32
029		2200	650	1500	2500	1.00 (10)	1500.00
030		3300	650	1750	3000	3.50 (7)	500.00
Sub Total	62	3040	634	3331	2266	1.82 (113)	1830.22
IV. Construction							
031		6900	670	4850	-	1.90 (19)	2552.63
V. Transport							
032		1000	667	2583	500	1.00 (12)	2583.00
033		5500	1033	26667	2583	1.00 (6)	26667.00
034		1800	925	6375	500	1.00 (4)	6375.00
Sub Total	22	2686	814	9241	1068	1.00(22)	9841.00

* : Figures in parentheses denote total number of workers.
Worker includes full time employees plus owner.

Source: Urban Informal Enterprises Survey NIUA, 1986.

Table 4.6 (B)

Basic Economic Indicators of Informal Enterprises - Ghaziabad (n=400)

NIUA classification code	Sample size	Mean figures					
		Monthly sales (Rs.)	Monthly net income (Rs.)	Capital investment (Rs.)	Working capital (Rs.)	Workers*	Capital workers ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. Manufacturing							
001		4800	1400	6500	8250	2.00 (8)	3235.00
002		3900	800	2167	7000	2.67 (8)	811.61
003		4000	2500	3000	3000	4.00 (4)	750.00
004		5800	1325	7500	5250	3.25 (13)	2307.69
005		3900	1400	1750	1750	3.00 (6)	583.33
006		4600	575	4313	500	2.00 (16)	2156.50
007		3400	525	4625	875	1.75 (7)	2642.86
008		4000	1000	3000	3000	2.00 (2)	1500.00
009		4000	500	7500	3000	1.00 (1)	7500.00
Sub Total	28	4991	957	4857	3393	2.32 (65)	2093.53
II. Trade & Commerce							
010		6900	873	8346	3000	2.15 (56)	3881.86
011		5100	1025	2333	5125	1.67 (20)	1397.00
012		5300	972	3889	4917	1.67 (30)	2328.74
013		4000	300	25000	15000	2.00 (2)	12500.00
014		6300	500	500	3000	1.00 (1)	500.00
015		1300	580	14000	-	2.00 (10)	7000.00
016		5100	1000	1750	3000	1.00 (2)	1750.00
017		3500	781	2596	3153	1.00 (26)	2596.00
018		1500	650	500	500	1.00 (2)	500.00
019		7300	1625	10250	7625	1.00 (4)	10250.00
020		4100	1140	5300	3300	1.40 (7)	3785.71
SUB TOTAL	102	4966	902	5392	3745	1.57 (160)	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
III. Services & Repairs							
021		1200	520	2700	600	1.15 (23)	2347.83
022		-	356	-	-	1.00 (9)	-
023		2400	1147	2647	1676	1.76 (30)	1503.98
024		4800	957	5662	4067	1.81 (67)	3128.18
025		5600	600	1500	6214	1.14 (8)	1315.79
026		1800	1667	2167	1333	1.67 (5)	1297.60
027		4300	1138	8173	1731	2.12 (55)	3855.19
028		4500	662	3524	857	1.43 (30)	2464.34
029		1200	561	639	-	1.33 (24)	480.45
030		4600	1458	8632	2394	2.74 (52)	3150.37
Sub Total	177	3069	898	4475	2011	1.71 (303)	2616.96
IV. Construction							
031	50	4100	876	7460	460	2.92 (146)	2554.79
V. Transport							
032		1300	753	2583	116	1.00 (30)	2583.00
033		6200	1167	13722	1722	1.00 (9)	13722.00
034		1000	675	8250	476	1.00 (4)	8250.00
Sub Total	43	2320	833	5442	2180	1.00 (43)	5442.00

* : Figures in parentheses denote total number of workers.
Worker includes full time employees plus owner.

Source: Urban Informal Enterprises Survey NIUA, 1986.

Table 4.6 (C)

Basic Economic Indicators of Informal Enterprises - Allahabad (n=600)

NIUA classification code	Sample size	Mean figures					
		Monthly sales (Rs.)	Monthly net income (Rs.)	Capital investment (Rs.)	Working capital (Rs.)	Workers*	Capital workers ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. Manufacturing							
001		3000	740	1500	2400	1.40 (7)	1071.43
002		4200	773	3233	4066	1.27 (19)	2545.67
003		5100	1013	3638	4395	1.88 (45)	2094.68
004		1800	800	6167	1333	1.67 (5)	3692.81
005		3400	879	1571	2946	1.93 (32)	813.99
006		2900	650	1450	1593	2.00 (32)	875.00
007		2900	822	5611	3666	1.56 (14)	3596.79
008		5600	1000	5250	3000	0.14 (25)	37500.00
009		5500	1029	8786	23714	1.57 (11)	5596.18
Sub Total	109	3865	859	3335	3170	1.74 (190)	1916.67
II. Trade & Commerce							
010		1900	814	7839	2839	1.93 (54)	4061.66
011		2000	732	3921	2236	1.92 (73)	2042.19
012		1800	737	5100	1928	2.17 (76)	2350.23
013		5500	950	4500	4416	1.58 (19)	2548.10
014		5100	750	11250	5250	2.50 (5)	4500.00
015		1900	821	4088	2544	2.09 (71)	1955.98
016		2200	300	500	2166	1.00 (3)	500.00
017		1500	780	2737	2276	1.92 (73)	1425.52
018		2000	529	500	1571	1.29 (9)	387.60
019		5600	970	1833	5277	1.67 (15)	1097.60
020		4200	625	1542	3375	1.33 (16)	1159.40
Sub Total	218	2194	758	4158	2667	1.9 (414)	2188.42

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
III. Services & Repairs							
021		2100	753	9233	633	2.60 (39)	3551.15
022		-	380	-	-	1.00 (5)	-
023		1900	700	9765	1823	2.12 (36)	4606.13
024		2000	785	4792	2364	1.85 (89)	2590.27
025		3500	420	750	1600	1.00 (10)	750.00
026		1700	653	5868	2184	1.95 (37)	3009.23
027		3600	827	9767	1900	2.53 (38)	3860.47
028		2600	827	6792	1885	2.10 (101)	3234.28
029		1700	873	583	500	1.90 (57)	306.84
030		2700	871	5762	2380	2.00 (454)	2881.00
Sub Total	228	2250	779	5557	1735	1.99 (454)	2792.46
IV. Construction							
031	14	5100	564	5536	464	1.43 (20)	3871.33
V. Transport							
032		800	500	2808	461	1.00 (14)	2808.00
033		3600	650	12625	1500	1.50 (6)	8416.67
034		1400	850	9286	500	2.00 (27)	4643.00
Sub Total	31	1419	677	7000	612	1.52 (47)	4605.26

* : Figures in parentheses denote total number of workers.
Worker includes full time employees plus owner.

Source: Urban Informal Enterprises Survey NIUA, 1986.

Table 4.6 (D)

Basic Economic Indicators of Informal Enterprises - Jaipur (n=800)

NIUA classification code	Sample size	Mean figures					
		Monthly sales (Rs.)	Monthly net income (Rs.)	Capital investment (Rs.)	Working capital (Rs.)	Workers*	Capital workers ratio
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. Manufacturing							
001		7500	550	9000	5250	2.00 (4)	4500.00
002		5700	469	3618	5645	1.15 (63)	3146.09
003		1500	937	1889	3500	1.33 (12)	1420.30
004		5500	1051	7318	6000	1.18 (39)	6201.69
005		2700	631	1438	4312	1.00 (16)	1438.00
006		3300	825	5596	5307	1.40 (73)	3997.14
007		5800	914	13428	6500	2.00 (14)	6714.00
008		2400	1036	6727	2636	1.68 (37)	4004.17
009		1300	500	4125	3500	1.50 (6)	2750.00
Sub Total	200	4308	865	5240	4675	1.32 (264)	3969.70
II. Trade & Commerce							
010		4300	1076	18167	2857	1.23 (26)	14769.92
011		7300	832	1529	10323	1.07 (73)	1428.97
012		6600	711	1722	8335	1.05 (83)	1640.00
013		5500	769	3565	4565	1.21 (28)	2946.28
014		6300	1000	25000	-	2.00 (2)	12500.00
015		5500	740	3383	6319	1.04 (49)	3252.88
016		3700	525	813	3187	1.06 (17)	766.98
017		5600	1000	2750	10900	1.00 (10)	2750.00
018		4200	650	1125	3475	1.30 (26)	865.38
019		6300	867	2167	6000	1.33 (4)	1629.32
020		4000	600	1750	3000	1.00 (2)	1750.00
Sub Total	290	5913	773	3312	6775	1.1 (320)	3010.91

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
III. Services & Repairs							
021		1800	850	13917	833	2.17 (13)	6413.36
022		-	200	-	-	1.00 (6)	-
023		1900	633	500	500	1.50 (9)	333.33
024		2000	733	6117	5416	1.43 (43)	4277.62
025		4200	708	1654	4500	1.00 (26)	1654.00
026		2000	775	7125	2375	1.00 (4)	7125.00
027		3300	1000	20000	500	2.50 (5)	8000.00
028		1900	660	1250	2250	2.30 (23)	543.48
029		2900	677	692	884	1.69 (22)	409.47
030		3500	760	5400	3750	2.20 (11)	2454.55
Sub Total	108	2609	693	4148	3143	1.5 (162)	2765.33
IV. Construction							
031	29	5100	203	5759	3310	3.32 (63)	1734.64
V. Transport							
032		800	708	4110	473	1.00 (95)	4110.00
033		2200	402	21346	2269	1.06 (69)	20137.74
034		1000	469	6808	885	1.46 (19)	4663.01
Sub Total	173	1358	575	10789	1179	1.06 (183)	10178.30

* : Figures in parentheses denote total number of workers.
Worker includes full time employees plus owner.

Source: Urban Informal Enterprises Survey NIUA, 1986.

products, jewellery/bangles (Allahabad), leather products, jewellery/bangles (Jaipur)

Among informal trade/commercial enterprises the low income category is fairly large with enterprises engaged in grocery vending (015), food products vending (014), in Wardha textiles, stationery products (Ghaziabad), flowers/gardens (Allahabad) exchange of goods for steel utensils, and so on (016) in Jaipur. Most of the other activity lines possessed medium income levels in all the case study urban centres. A few informal trading/commercial enterprises had high income such as meat/fish chicken vending, fruits/juice vending, eggs/milk vending and food products selling.

In the service/repairs division except for domestic servants most other subgroups possessed enterprise which fell in the medium-income class (Rs.600-1000). Informal tailoring, automobile/scooter repairing units, had fairly high income levels largely due to the fact that they employed more skilled labour.

Field investigations revealed that the demand status for informal products/services was rising for the bulk of the activity lines, with certain enterprises facing fluctuating and seasonal patterns. Trading and service categories dealing in perishables experienced the problem of unsold goods. Most enterprises possessed strong links with the individual customer indicating the consumer/mass orientation of informal enterprise in most activity subgroups.

Table 4.7 reveals that per unit employment in the trade/commerce and services/repairs division is typically more than in the manufacturing division. Partly, of course this is due to the nature

of enterprise operation, but more significantly among informal manufacturing enterprises it seems to be the case that family labour is extensively utilised. Most of the enterprises are owner-operated with one or two casual wage workers.

Capital investment (including both fixed and working capital) per enterprise ranged from about Rs.3000 for such activities like rag-picking (025) and grocery (015) to a high of about Rs.25,000 for wood/carpentry products manufacturing (003), jewellery/bangles (008) and informal transport enterprises (033). The bulk of informal enterprises in all case study urban centres had capital investment ranging between Rs.5,000 and Rs.10,000. The nature of investment varies from a caution deposit in the case of self- employed rickshaw and autorickshaw drivers to investment in fixed assets such as tools and equipments in the case of repair mechanics.

Source of Finance

Most informal enterpreneurs depend on their own resources or on funds obtained from close relatives and friends to meet their requirements for financing fixed capital formation. While commercial banks and other financial institutions have begun to realise the importance of informal enterprises and their economic potential for employment and income generation, they have yet to emerge as significant sources of financial assistance flows to this sector.

Data presented in Table 4.7 show that sample informal sector enterprises, in four case study urban centres, utilised their own resources and funds obtained from relatives/ friends for financing

Table 4.7

Source of Capital of Informal Enterprises in Case Study Cities

Major division	Own resources	Relations	Source of capital		Bank & institutions	Total (in lakhs)
			Friends	Private money lenders		
1.	2.	3.	4.	5.	6.	7.
I. Manufacturing						
WDHA	56.73	2.61	-	-	40.66	1.51 (100.0)
GZD	69.32	19.19	1.95	2.05	7.50	1.33 (100.0)
ALLD	40.15	40.15	0.36	2.45	16.89	3.64 (100.0)
JPR	60.51	11.10	0.44	3.63	24.32	10.48 (100.0)
II. Trade & Commerce						
WDHA	30.38	3.83	-	-	65.79	1.99 (100.0)
GZD	79.21	4.26	1.52	0.04	14.97	5.5 (100.0)
ALLD	68.77	16.95	2.68	5.40	6.20	9.07 (100.0)
JPR	50.53	35.45	0.95	5.71	7.36	9.61 (100.0)
III. Services & Repairs						
WDHA	79.84	15.11	-	2.30	2.76	2.07 (100.0)
GZD	71.58	12.28	1.67	4.94	9.53	7.92 (100.0)
ALLD	52.86	24.61	8.69	6.55	7.28	12.67 (100.0)
JPR	54.83	41.89	1.23	2.05	-	4.48 (100.0)

Contd....

1.	2.	3.	4.	5.	6.	7.
IV. Construction						
WDHA	73.00	-	-	-	27.00	0.49 (100.0)
GZD	94.97	3.95	-	1.08	-	3.73 (100.0)
ALLD	78.95	-	-	21.05	-	0.74 (100.0)
JPR	100.00	-	-	-	-	1.67 (100.0)
V. Transport						
WDHA	52.25	9.38	-	-	38.38	2.16 (100.0)
GZD	67.60	27.90	1.29	2.58	0.64	2.34 (100.0)
ALLD	78.00	13.25	1.10	-	7.65	2.17 (100.0)
JPR	8.63	70.63	0.69	1.22	18.83	18.67 (100.0)
(I-V) Total						
WDHA	56.21	8.59	-	0.86	34.34	8.22 (100.0)
GZD	76.64	11.81	1.35	2.14	8.06	20.82 (100.0)
ALLD	61.78	22.53	2.75	3.90	9.04	28.29 (100.0)

Source: Urban Informal Enterprises Survey, NIUA, 1986.

64.8 per cent of fixed capital formation in Wardha; 89.8 per cent in Ghaziabad; 87.1 per cent in Allahabad and 80.2 per cent in Jaipur. The sectorwise position is similar.

Contrary to popular opinion, recourse to private moneylenders for financial requirements of informal business was reported to be insignificant in all case study centres surveyed.

Banks and financial institutions, however, constituted an important source of finance for informal enterprises - financing fixed investment to the extent of 34.34 per cent for sample enterprises in

Wardha; 8.06 per cent in Ghaziabad; 9.04 per cent in Allahabad and 17.04 per cent in Jaipur. Sectorwise analysis reveals that banks and other financial institutions concentrated largely on trading and commercial enterprises in Wardha and Ghaziabad financing 65.79 per cent and 14.97 per cent of fixed investment of sample enterprises in these two case study centres respectively. In Allahabad and Jaipur bank financing was geared to the manufacturing enterprises, which were provided to the extent of 16.89 per cent and 24.32 per cent of their fixed investment from this source.

While the above represents an encouraging trend the operation of an organised financial delivery system for informal enterprises in India has yet to emerge. Perhaps there exists a case for creating separate financial/credit agencies catering to the needs of informal enterprises. As it is, even after expansion and opening of new bank branches, the existing commercial banking network seems to be overburdened with bank branches performing a variety of functions such as deposit mobilisation, lending larger amounts to agriculture and other crucial sectors of the economy. As a result informal enterprises with inadequate knowledge and expertise to prepare bankable projects often get ignored and neglected. Unless, therefore, a serious attempt is made to develop alternative credit agencies centred on the informal sector, and geared to handle its complex problems, one of the most crucial inputs required for the rapid growth of informal enterprises namely, finance at reasonable terms, would be denied to existing and prospective entrepreneurs.

Financial Savings

One of the distinguishing features of the NIUA survey was that it considered informal enterprises in conjunction with the people involved in the running of these enterprises. As such the survey made an estimation of financial savings of informal enterprises in the four case study urban centres.

Most of the sample units were self-financing family enterprises with a single main income source. This was apart from other personal loan arrangements such as support from money lenders and banks/other financial institutions. Most enterprise owners interviewed were reluctant to disclose much on the savings aspect of their business. However, to the extent possible Table 4.8 provides an estimate of aggregate savings of sample informal enterprises in the case study cities and the form in which such financial savings are made.

It may be observed (from Table 4.8) that aggregate financial savings of sample informal enterprises in the case study urban centres were reported to be of the order of: Rs.4.2 lakhs (Wardha); Rs.18.66 lakhs (Ghaziabad); Rs.21.25 lakhs (Allahabad) and Rs.37.8 lakhs (Jaipur).

A bulk of sample enterprises in all four centres chose to keep their financial savings in cash or in the form of gold and other ornaments. 82.5 per cent of sample enterprises in Wardha saved Rs.49,236 in the form of cash while 70.5 per cent of sample enterprises had Rs.2.27 lakhs worth of ornaments. In Ghaziabad about 70 per cent of sample enterprises had Rs.7.41 lakhs savings in cash while only 17.25 per cent of survey sample enterprises had savings in

Table 4.8

Financial Savings of Informal Enterprises in Case Study Cities (In Rs.)

City	Cash	Bank		Loan	Post office saving	Orna-ments	Total
		Fixed deposit	Others				
Wardha	49236 (165)	56009 (21)	49500 (104)	16700 (24)	21450 (44)	227435 (141)	420330
Ghaziabad	741360 (277)	334000 (56)	501880 (88)	19200 (8)	97800 (43)	172150 (69)	1866390
Allahabad	342672 (485)	233300 (54)	855640 (318)	88870 (98)	112380 (112)	492105 (265)	2124967
Jaipur	1570750 (607)	114300 (125)	503150 (283)	158555 (118)	355365 (203)	1077926 (424)	3780046

Note: Figures in parentheses denote the number of sample enterprises.

Source: Urban Informal Sector Enterprises Survey, NIUA,1986.

the form of ornaments (Rs.1.72 lakhs). In Allahabad over 80 per cent of sample enterprises had a cash savings of Rs. 3.43 lakhs while about 44 per cent possessed savings in the form of ornaments (Rs.4.92 lakhs). In Jaipur 75.88 per cent of sample enterprises possessed savings in liquid form amounting to Rs. 15.71 lakhs whereas 53 per cent of enterprises had ornaments worth Rs.10.78 lakhs.

The habit of keeping financial savings in fixed deposits with commercial banks was not widespread among informal enterprises in the case study centres. Only 10.5 per cent of sample enterprises in Wardha; 14 per cent in Ghaziabad; 9 per cent in Allahabad about 16 per

cent in Jaipur had fixed deposits with commercial banks. Total financial savings in fixed deposits with commercial banks, in all case study urban centres, amounted to Rs.7.38 lakhs.

Other financial instruments available with commercial banks, such as savings deposits cooperative societies and so forth, appear to be more popular, 104 sample enterprises in Wardha had about Rs.50,000 in savings/other deposits with commercial banks; in Ghaziabad 88 sample enterprises had Rs.5.02 lakhs (or 26.9 per cent of total financial savings); in Allahabad 318 sample enterprises had Rs.8.56 (or about 40 .pa per cent of total saving); and in Jaipur 283 sample enterprises possessed Rs.5.03 lakhs (or 13 per cent of total saving) in this form.

Considering all the case study cities together it may be said that post office saving certificates did not constitute a significant instrument of financial saving. Only 20.1 per cent of the NIUA sample possessed savings in this form. Aggregate post office savings in all the 7.17 centres surveyed amounted to Rs.5.87 lakhs (or 7.17 per cent of total saving in the four case study centres).

Another feature of informal saving behaviour highlighted by the NIUA survey was that a small percentage of sample enterprises (12.4) were advancing loans (on an informal basis) to others. The extent of such loan advances was Rs.2.83 lakhs (or 3.46 per cent of total savings) all four case study urban centres combined.

The above analysis though restricted by non-availability of information on several important aspects of savings throws significant light on the overall trends. It may be stated that the informal

sector enterprises account for a substantial part of aggregate savings of the urban economy and their saving behaviour shows a definite leaning towards higher savings in informal financial forms. With increasing incomes, the informal sector enterprises in urban areas will be able to effect even a relatively higher proportion, and thus a relatively greater volume of savings in the future.

V TECHNOLOGY LEVEL AND PRODUCTIVITY PATTERN OF INFORMAL ENTERPRISES IN CASE STUDY CITIES

The importance of a study of technology levels and productivity patterns of informal enterprises can hardly be overemphasised, particularly in a developing country where the task of planned growth of the urban economy has been undertaken. In India emphasis on technological upgradation and a more efficient utilisation of production resources has been present since the beginning of the planning era and the Seventh Plan has reiterated this emphasis as being, perhaps, the only feasible alternative to make the country economically self-reliant and technologically competent.

Technology

Considering the important question of prevailing technology levels of informal enterprises, in general, we note that one of the strange paradoxes of informal enterprises is that while they are developmentally attractive because of their low requirements for capital investment in relation to labour, they are often inhibited by a lack of adequate or modern machinery. A common complaint of informal enterpreneurs is that the technology used by them is old and unsuitable, therefore production is slower and the quality of the product inferior, when compared with similar, and often competitive, products produced in the more organised sectors of the urban economy. A few examples may be quoted here of instances where the use of out-dated technology by small informal enterprises acts as a constraint on

their ability to produce quality products. In the brass industry around 90 per cent of the work is done by hand, using traditional techniques. Power is generally only used to drive lathes used in planning and polishing and for electroplating. In order to increase the speed of production turnover there is a need to reduce costs and improve the quality of the finished products. While some of the small units have succeeded in reducing the engraving time, through the use of brass moulds with a pattern already engraved on them, further advances are possible: (a) pressure die-casting for the newer plain brass items being produced, such as builder's ware; (b) better silver-plating equipment which would allow higher quality (and value) items to be produced than is possible with the technology presently used.

Informal enterprises producing gems and jewellery items argue that newer techniques are required if they have to increase value-added and scale of production and standardise their products with a better finish.

There are numerous other examples, among small informal enterprises, of simple improvements yielding considerable productivity gains: in the case of pottery, ball-bearings on the wheel can triple output; metal crafts are held back by lack of electriciy for metal turning machines, lacquerware production needs electric saws, fretwork machines, a seasoning plant and other small items.

2000 sample informal enterprises surveyed in four case study urban centres reported that a majority of them witnessed no technical change during the course of their operations. The all-city mean percentage figure for enterprises undertaking technical improvements,

Table 5.1

Technological Change in Informal Sector Enterprises in Case Study Cities

Major division	Percentage of enterprises witnessing technical change	No technical change	Total no. of enterprises
I. Manufacturing			
WDHA	40.48	59.52	42 (100.0)
GZD	50.00	50.00	28 (100.0)
ALLD	43.12	56.88	109 (100.0)
JPR	34.00	66.00	200 (100.0)
All Cities	38.52	61.48	379 (100.0)
II. Trade & Commerce			
WDHA	45.31	54.69	64 (100.0)
GZD	34.31	65.68	102 (100.0)
ALLD	46.33	53.67	218 (100.0)
JPR	36.90	63.10	290 (100.0)
All Cities	40.36	59.64	674 (100.0)
III. Services & Repairs			
WDHA	35.48	64.52	62 (100.0)
GZD	30.51	69.49	177 (100.0)
ALLD	53.51	46.49	228 (100.0)
JPR	26.86	73.14	108 (100.0)
All Cities	39.48	60.52	575 (100.0)
IV. Construction			
WDHA	-	100.00	10 (100.0)
GZD	90.00	10.00	50 (100.0)
ALLD	14.28	85.72	14 (100.0)
JPR	55.17	44.83	29 (100.0)
All Cities	61.17	38.83	103 (100.0)
V. Transport			
WDHA	4.54	95.46	22 (100.0)
GZD	55.82	44.18	43 (100.0)
ALLD	35.48	64.52	31 (100.0)
JPR	43.35	56.65	173 (100.0)
All Cities	41.26	58.74	269 (100.0)

Source: Urban Informal Enterprises Survey, NIUA, 1986.

was as low as about 40 per cent in the major division heads of manufacturing; trade and commerce; services and repairs and transport. Only in the construction division, the percentage of technically upgraded units crossed 60 per cent (Table 5.1).

The findings of the NIUA survey of informal enterprises clearly indicates the need for a greater R & D effort centred on these enterprises. However, it must be remembered that most of the informal enterprises in Indian cities, are too small to take risks or are averse to undertake expensive R & D, and so this task has to become the government's responsibility. Under the Sixth Plan, various design and technical development centres were to be set up at a total cost of around Rs. 750 lakhs, for carpets (180.00), gems and jewellery (150.00), woodenware (50.00), toys and dolls (50.00), handprinting (38.00), cane, grass and bamboo items (35.00); pottery (20.00) and so on. While this represents a step in the right direction, technological upgradation of informal enterprises should be regularly monitored by banks and other concerned agencies engaged in the task of making this sector productive and efficient.

Productivity - Concept and Measurement

In the context of the urban informal sector, it may be stated that "productivity" is an objective indicator of the transformation of this sector to a higher stage. It is an indicator of the extent to which the resources of urban informal enterprises - the existing capital equipment and labour are effectively utilised for optimal development.

It should be noted at the very outset however, that a proper study of "productivity" is beset with difficulties both conceptual and practical, and consequently our study has its limitations also. Despite its importance and the wide attention it has drawn, "productivity" is a subject surrounded by considerable confusion. One of the major difficulties in the way of measuring "productivity" is that the term has been defined in various and perhaps conflicting ways, and interpreted in a variety of senses.

From a technical standpoint, "productivity" may be defined as "production per factor unit". If production is considered in relation to a given factor - capital or labour - the specific productivity of the factor concerned is obtained. In other words, productivity is the quotient obtained by dividing output by one of the factors of production.

The difficulty arises due to the fact that "productivity" is influenced by the combined effect of a large number of separate but interrelated factors, such as the quality of equipment and raw material, technological improvements, managerial efficiency, degree of utilisation of equipment and so forth. A better measure of productivity, therefore, is one that compares output with the combined use of all resources. Building such comprehensive "total factor productivity" estimates is virtually impossible since insurmountable practical difficulties are involved in taking into account all the input factors as they are not additive.

Estimates of Productivity

In this section, therefore, we make an estimation of "productivity" taking one input at a time to give what may be termed "partial productivity" measures for informal enterprises in different activity lines.* The estimates of labour productivity are given in absolute value terms that is, productivity per man- hour, while capital productivity estimates are in the form of indices.

Labour Productivity

It may be observed from Table 5.2 that the productivity of labour engaged in manufacturing activities is highest in Jaipur (10.88) followed by Wardha (8.94), Allahabad (7.40) and Ghaziabad (7.17). Informal manufacturing activities which possess the top three ranks in terms of labour productivity are as follows:

Jaipur	-	Cotton textiles; leather products and food products
Wardha	-	Jewellery products/bangles; food products and cotton textiles.
Allahabad	-	Cotton textiles; chemical/plastic products and wood/carpentry products
Ghaziabad	-	Food products; non-metallic products and jewellery products/bangles

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* Sales turnover has been taken as a proxy of the value of output. Dividing the mean monthly sales turnover per enterprise by the mean number of workers employed, we get a measure of labour productivity per man - hour for a cross-section of over 30 informal activity subgroups in the four case study cities. Similarly, dividing the mean monthly sales turnover by productive capital (the sum of average fixed and working capital) per enterprise we obtain a measure of capital productivity of informal enterprises in different activity lines.

Table 5.2

Informal Sector Enterprises in Case Study Cities
Labour Productivity Per Man-Hour (Rs.)

NIUA Classification Code	WDHA	Rank	GZD	Rank	ALLD	Rank	JPR	Rank
I. Manufacturing								
001	11.63	2	8.00	1	7.14	5	12.50	3
002	11.28	3	4.87	6	11.02	2	16.52	1
003	10.00	4	3.33	8	9.04	4	3.76	8
004	9.11	5	5.95	5	3.59	8	15.54	2
005	6.67	6	4.33	7	9.94	3	9.00	5
006	6.29	7	7.67	2	4.83	7	7.86	6
007	5.00	8	6.48	4	6.20	6	9.67	4
008	13.33	1	6.67	3	16.52	1	4.76	7
009	-		-		-		-	
Sub Total	8.94		7.17		7.40		10.88	
II. Trade & Commerce								
010	11.58	4	10.69	5	3.28	7	11.65	7
011	8.05	6	10.18	7	3.47	6	22.74	1
012	8.76	5	10.58	6	2.76	9	20.95	2
013	13.67	1	6.67	8	11.60	1	15.15	6
014	13.00	2	21.00	2	6.80	4	10.50	10
015	6.00	9	2.50	10	3.03	8	17.63	4
016	5.70	10	17.00	3	7.33	3	11.64	8
017	12.50	3	11.67	4	2.60	10	18.67	3
018	7.02	7	5.00	9	5.17	5	10.77	9
019	7.00	8	24.33	1	11.18	2	15.79	5
020	-		-		-		-	
Sub Total	7.55		10.54		3.85		17.92	
III. Service & Repairs								
021	3.96	5	3.48	7	2.69	8	2.76	7
022	-		-		-		-	
023	1.57	8	4.55	5	2.99	5	4.22	6
024	6.53	3	8.84	3	3.60	4	4.66	4
025	15.11	1	16.37	1	11.67	1	4.00	1
026	3.14	6	3.59	6	2.91	7	6.67	2
027	6.15	4	6.76	4	4.74	2	4.40	5
028	2.21	7	10.49	2	4.13	3	2.75	8
029	7.33	2	3.01	8	2.98	6	5.72	3
030	-		-		-		-	
Sub Total	5.57		5.98		3.77		5.80	
IV. Construction								
031	12.11		4.68		11.89		5.12	
V. Transport								
032	3.33	3	4.33	2	2.67	2	2.67	2
033	18.33	1	20.67	1	8.00	1	6.92	1
034	6.00	2	3.33	2	2.33	3	2.28	3
Sub Total	7.95		7.73		3.11		4.27	

SOURCE: Urban Informal Enterprises Survey, NIUA, 1986.

In the trade/commerce division, labour productivity is maximum in Jaipur (17.92) followed by Ghaziabad (10.54), Wardha (7.55) and Allahabad (3.85). Informal activities with the top three ranks are:

Jaipur - Fruits/juice vending; vegetables vending and paan/bidi vending

Ghaziabad - Food products vending; exchange of steel utensils for clothes ; and paan/bidi vending

Wardha - Manufactured goods (textiles/paper etc) vending; food products vending; and paan/bidi vending

Allahabad - Manufactured goods (textiles/paper etc) vending; exchange of steel utensils for clothes; and food products vending.

In the service/repairs division, the highest labour productivity of informal enterprises is in Ghaziabad (5.98) followed by Jaipur (5.8), Wardha (5.57) and Allahabad (3.77). The top three labour productivity subgroups are the following.

Ghaziabad - Cycle repair (including tyre-retreading); eating places; automobile and scooter repairs

Jaipur - Tailoring (including quilt making & embroidery): shoe repair; and eating places

Wardha - Shoe repair; eating places and automobile/scooter repairs

Allahabad - Automobile/scooter repair; cycle repair (including tyre retreading) and eating places

In the construction division, labour productivity of informal enterprises was highest in Wardha (12.11), followed by Allahabad (11.89), Jaipur (5.12) and Ghaziabad (4.68).

Among informal transport enterprises, those operating in Wardha possessed the highest labour productivity (7.95) followed closely by Ghaziabad (7.73), Jaipur (4.27) and Allahabad (3.11). In all case

study urban centres informal auto-rickshaw enterprises possessed the first rank with regard to labour productivity.

Capital Productivity

Estimates of capital productivity presented in Table 5.3 show that in the manufacturing division, informal enterprises in Ghaziabad had the highest capital productivity index (60.49), followed by Allahabad (59.42), Wardha (56.95) and Jaipur (43.45). The top three highest capital productivity sectors were as follows:

Ghaziabad - Basic metal products; chemical/plastic products and non-metallic products (including earthenware, structural stone goods etc.)

Allahabad - Non-metallic products; cotton textiles; and chemical/plastic products.

Wardha - Cotton textiles; chemical/plastic products; leather products.

Jaipur - Cotton textiles; food products and chemical/plastic products.

Capital productivity in the trade/commerce division was highest in Jaipur (58.62) followed by Ghaziabad (54.35), Wardha (46.48) and Allahabad (32.15). The three highest capital productivity subgroups in this division were as follows:

Table 5.3
Informal Sector Enterprises in Case Study Cities
- Capital Productivity

NIUA Classification Code	WDHA	Rank	GZD	Rank	ALLD	Rank	JPR	Rank
I. Manufacturing								
001	49	6	54	5	76	2	53	2
002	93	1	43	7	57	5	62	1
003	33	7	67	4	61	4	28	7
004	62	3	45	6	24	7	42	4
005	78	2	111	2	75	3	46	3
006	61	4	95	3	87	1	30	5
007	55	5	134	1	31	6	29	6
008	22	8	67	4	6	8	26	8
009	-	-	-	-	-	-	-	-
Sub Total	57		60		59		43	
II. Trade & Commerce								
010	48	8	61	5	18	10	21	9
011	38	9	69	3	32	5	62	5
012	68	3	62	4	25	9	66	4
013	63	5	8	9	62	4	67	3
014	25	10	18	7	31	6	25	8
015	61	6	9	8	28	8	31	7
016	65	4	106	2	81	2	17	10
017	107	1	62	4	30	7	41	6
018	93	2	150	1	97	1	90	1
019	60	8	40	7	78	4	78	2
020	-	-	-	-	-	-	-	-
Sub Total	46		54		32		59	
III. Service & Repairs								
021	54	2	38	6	21	4	13	7
022	-	-	-	-	-	-	-	-
023	31	4	55	2	16	5	192	1
024	81	1	49	4	28	3	17	5
025	-	-	-	-	-	-	-	-
026	14	6	52	3	21	4	21	4
027	35	3	44	5	30	2	16	6
028	29	5	34	7	30	2	54	3
029	54	2	204	1	156	1	184	2
030	-	-	-	-	-	-	-	-
Sub Total	54		47		31		36	
IV. Construction								
031	55		52		85		56	
V. Transport								
032	34	1	49	1	23	2	18	1
033	19	3	40	2	26	1	9	3
034	26	2	12	3	15	3	12	2
Sub Total	22		30		19		11	

SOURCE: Urban Informal Enterprises Survey, NIUA, 1986.
Note: Codes 009,020 and 030 have been excluded as they consist of heterogeneous/miscellaneous urban informal sector groupings.

Jaipur - Flowers/garlands selling; meat/fish/chicken vending: manufactured goods (textiles, leather, paper etc) vending.

Ghaziabad - Flowers/garlands selling; exchange of steel utensils for clothes; fruits/juice vending.

Wardha - Paan/bidi vending; flowers/garlands selling; vegetables vending

Allahabad - Flowers/garlands selling; exchange of steel utensils for clothes; meat/fish/chicken vending

In the services/repairs division, productivity of capital was maximum in the informal enterprises operating in Wardha (54.26) followed by Ghaziabad (47.32), Jaipur (35.78) and Allahabad (30.86). The top three ranks were occupied by the following informal activity subgroups:

Wardha - Eating places; shoe repair and automobile/scooter repairs

Ghaziabad - Shoe repair; laundering/pressing of clothes and tailoring (including quilt making and embroidery)

Jaipur - Laundering/pressing of clothes; shoe repair and cycle repair (including tyre retreading)

Allahabad - Shoe repair; cycle repair; and eating places

The above field survey results indicate that there exist wide and significant differences in productivity levels between informal enterprises engaged in different activity lines in the case study cities. At the same time no uniform pattern of productivity is noticed. Considered in terms of the long term needs of an expanding urban informal sector, productivity improvements constitute a

formidable task. It also needs to be emphasised that productivity depends on managerial efficiency and organisation of work flow, as much as on technology and labour skills. The quest for higher productivity must spring at the microlevel in response to the logic of competitiveness to which the urban informal sector is being increasingly exposed.

Upgradation of Informal Enterprises

The preceding discussion on technological change and productivity patterns of informal enterprises in the case study urban centres indicates that the bulk of these enterprises are economically disadvantaged and their operations are such as to result in an overall adverse impact on the productivity of factor use. No doubt sharp differences are observed in these parameters in different informal activity lines, nevertheless for the balanced development of informal enterprises and acceleration of the urban development process in Indian cities, there is a need for coordinated efforts, particularly from the institutional sector, to enable informal enterprises to improve efficiency and productivity.

A meaningful and effective strategy for upgradation of informal enterprises would therefore possess two essential components: first, direct measures of assistance and support to upgrade the productivity of informal enterprises; second, a strategy for effecting a greater integration with the basic and productive functions of the urban economy, enlargement of the informal activity range and structural changes in the share of and relationship between the formal and informal sectors.

As regards the first component of upgradation, greater attention needs to be focussed on imparting training to existing and new enterpreneurs; providing adequate credit at reasonable terms; improving the urban infrastructure for informal sector operations and so forth. Simultaneously, the existing functions of informal enterprises may be extended to cover hitherto unexplored areas. For example, weavers of handloom cloth could be trained to produce blended textiles, manufacturers of plastic bead ornaments could be encouraged to take to the production of plastic washers and other such industrial products. In relation to the second component of the strategy for upgradation, it would be appropriate to transfer some of the activities which are normally carried out in the formal sector to the informal sector. For example, matchbox making can be conveniently promoted in the informal sector. Promotion of linkages between the informal sector and organised sector developmental activities in the nature of input-output or technological relationship would form an important component of upgradation of informal enterprises.

An upgradation strategy of this nature would significantly increase the value-added content of informal sector growth. Such value-addition in the production process would benefit not only the informal enterprises themselves but would also significantly contribute to the national domestic product of the country, considering the size and economic functions of the urban informal sector. Such an upgradation strategy would have an effective and positive impact on : (i) expanding employment in urban areas; (ii) upgrading the skills of local manpower; (iii) creating backward linkages by using the informal enterprises to stimulate the inflows of

local raw materials, semi-finished goods, packing materials, (iv) promoting the growth of ancillary informal industries and activities, and (v) developing the backward regions of the urban economy, by appropriate location and town planning methods.

VI MAJOR CONCLUSIONS AND POLICY IMPLICATIONS

The earlier chapters have analysed different aspects of the performance of informal sector enterprises in the context of their role and significance in urban development in four case study cities in India. This analysis was undertaken with the objective of deriving some generalisations which could assist efficient and productive operation of informal enterprises and enable them to play a more useful role in the urbanisation process. The study provides an analytical and empirical basis for undertaking necessary measures to improve the performance of urban informal enterprises. The present chapter attempts to recapitulate the main findings of the study to provide an integrated picture of the informal sector in the case study cities. Recommendations and policy implications on the role of the informal sector in the development of the urban economy are drawn on the basis of and along with the discussion of these findings.

The informal sector occupies a predominant position in the urban economies of all the case study cities and its size in terms of total number of enterprises is estimated at above 95 per cent of all the economic establishments in the four cities. In terms of employment, workforce participation in the informal sector ranged between 53-62 per cent of total workers in the case study cities.

This study brings out the heterogeneity existing in the informal sector with respect to the diversity of activities engaged in, and

also in terms of structural attributes, nature of production and distribution, employment generation potential, technology and productivity patterns and levels of income. Informal enterprises stand in sharp contrast with formal sector units, at the same time they exhibit sharp differences within themselves. It appears that there are two subsectors - organised and unorganised - within the informal sector itself, one of which exhibits features of the formal sector. Policy planning should take into account this existing trichotomy rather than dichotomy in the urban economic structure, as the urban informal sector with its trichotomous structure of organised and unorganised segments may present different sets of problems requiring unique policy measures.

More than half of the informal enterprises in the case study cities were in the retail trade and the commercial sector; the reason for this may be the low capital base and hence small credit requirements of this sector, particularly for fixed capital. While the informal manufacturing and processing enterprises were significant, informal household industries (including agro-based industries and cottage sector) as well as informal construction and transport enterprises are fairly well represented in the structure of informal enterprises in all case study cities. A strong consumer-orientation in the nature of operations has become a characteristic feature of most informal enterprises. One of the recommendations in this context is that attempts should be initiated at slow conversion of consumer-oriented activities to producer-oriented ones. For example, manufacturers of plastic bead necklaces (an article of final consumption) might be encouraged to take to the production of plastic

washers and other such industrial items (an intermediate product). Such an upgradation approach would have the effect of (i) expanding employment; (ii) upgrading of skills of local manpower; (iii) creating backward linkages by using informal sector enterprises to stimulate the inflows of local raw materials, semi-finished goods, packing materials and promotion of ancillary industry growth and (iv) increased value addition in the informal sector.

Most informal enterprises displayed a strong correlation between the physio-structural attributes and the nature of informal activity. Thus informal manufacturing enterprises functioned from pucca-structures, footpath/barrows enterprises were retail trade oriented, while informal service/repairs enterprises operated mostly from kutcha, pavement of mobile structures. In terms of location, most informal enterprises lacked permanency and often resulted in encroachment on public spaces, footpaths and roads. While laudable efforts are being made in all case study cities by local authorities to provide appropriate locations for informal enterprises, a permanent lease may be provided to specified high productivity informal activity lines as an incentive for upgradation of the urban site-service structure and hence increase in value-added by the informal sector.

In terms of employment structure, the bulk of the informal enterprises comprised small family businesses utilising unpaid family labour with one or two (often casual) workers. There was a distinction in the case of manufacturing and services/repairs enterprises which employed between 2-5 persons and informal construction enterprises which generally employed between 6-9 persons. Estimates of turnover/employment ratios (employment generation

per Rs. 1 lakh of annual sales turnover) indicate that in Wardha and Jaipur - the smallest and largest case study city - informal servicing and repairs enterprises possessed the highest employment potential. In Ghaziabad and Allahabad, on the other hand, informal manufacturing and transportation enterprises offered relatively high levels of employment.

Informal enterprises witnessed rapid growth during the recent past and bulk of these enterprises, in all case study cities, are of recent origin and not more than 10 years of age. New enterprise formation has been highest in Ghaziabad essentially due to the accelerated pace of urbanisation following Ghaziabad's emergence as an important urban growth centre within the NCR. While Wardha and Jaipur maintained an increasing trend, in Allahabad a saturation point seems to have been reached with a decline in new informal enterprise formation in the period 1981-86 compared to earlier periods. An inter-city comparison reveals that informal enterprises in all the four case study cities, have registered fast growth in numbers in all major activity divisions. This growth has been fastest in the retail trade/commerce and services/repairs sector, and fairly substantial in the transport, construction and manufacturing divisions, intercity variations notwithstanding.

Most informal sector enterprises are structurally characterised by a small capital base and low employment per unit. On an average they possessed a capital base ranging between Rs. 5,000 and Rs.10,000, though some enterprises engaged in manufacture of wood/carpentry products and jewellery items had a capital investment

of about Rs.25,000 per enterprise. The retail trade/commerce and services/repairs divisions accounted for between one-half and three-quarters of total productive investment of informal enterprises in the four case study cities. Bulk of these enterprises bought raw materials and goods locally - from registered wholesalers operating at the mandis, retailers and hawkers. The extent of linkages with formal organised dealers were most widely prevalent in the case of manufacturing enterprises. In order to have a more adequate comprehension of backward and forward linkages and for determining the interdependence of the formal and informal sector in terms of input-output linkages, a further detailed study is required for policy purposes.

Distribution of informal enterprises according to income stratification reveals that a large number of them in all case study cities were low-income and medium-income enterprises. The average income levels of informal manufacturing enterprises was highest in all case study cities; followed by trade/commerce, services/repairs, transport and construction enterprises. Net incomes of informal enterprises are low and range from about Rs.200 to Rs.950 per month.

Despite low income levels, informal enterprises account for a substantial part of aggregate savings of the urban economy. The bulk of this savings is, however, in informal financial forms, particularly in the form of gold and other ornaments. While savings with commercial banks and cooperative societies is on the increase, the habit of keeping financial savings in fixed deposits with commercial banks and other official financial instruments is not widespread. In

this context appropriate policy measures may be devised for assistance to informal enterpreneurs, artisans and craftsmen, who display higher propensity for savings in official financial instruments as with increasing incomes, informal enterprises in urban areas will be able to effect a relatively greater volume of savings in the future.

A sizeable majority of informal enterprises in all case study cities, utilise old and unsuitable machinery and have not undertaken any significant technical change. As a result their production is slow and the quality of the product inferior when compared with similar and often competitive products produced in the formal sector. In order to increase the speed of production turnover, there is a need to reduce costs and improve the quality of finished products. While the need for greater R & D centred on informal enterprises is recognised in plan documents, it is not adequately appreciated that such enterprises are too small or risk averse to undertake expensive R & D. In this context, technological upgradation of informal enterprises becomes the Government's responsibility and can be achieved through further expansion of design and technical development centres, at local levels, for different informal activity lines.

A major bottleneck in the development of informal enterprises is the lack of infrastructural support and linkages, particularly in respect of raw materials supply and marketing. Informal enterprises faced difficulties due to inadequate and inequitable access to raw materials, high prices and irregular supplies of raw materials of indifferent quality. Therefore, an integrated system of marketing of informal sector products through promotion of cooperatives and

Government-sponsored agencies should be evolved. More and more items for exclusive purchase from the informal sector should be identified, besides implementing vigorously a policy of price preference for informal sector products.

There exist wide and significant differences in productivity of labour and capital of informal enterprises engaged in different activity lines in the case study cities. While no uniform pattern is noticed, productivity indices show that the informal sector constitutes an economically disadvantaged segment of the urban economy. It needs to be emphasised that productivity improvements depend as much on managerial efficiency and organisation of work flow, as on technology and labour skills. The non-availability of skilled workers and technical personnel is hindering the progress and development of informal enterprises. Hence imparting necessary training to informal enterpreneurs and workers, to upgrade their skills is a necessary precondition for the progress of informal enterprises.

The study observes that it is necessary to recognise that for informal enterprises generally, adequate finance is the crux of the problem. While commercial banks/financial institutions are operating innovative schemes for financing informal enterprises (the most recent being SEPUP), the operation of an effective financial delivery system for the informal sector is yet to emerge. By and large, banks are diffident and sceptical in extending credit to informal enterprises, in spite of encouragement by the Government. Hence, for financing informal sector enterprises, establishment of an apex bank (similar to National Bank for Agriculture and Rural Development, NABARD) could be

considered. Alternatively the creation of a separate fund for the development of urban informal sector enterprises with the Industrial Development Bank of India (IDBI) or any other credit agency geared specifically to the informal sector, would constitute a welcome policy initiative. Such intervention would have a favourable impact on productivity improvement of informal enterprises provided effective monitoring/evaluation of their performance at the micro-level is made a regular feature.

The urban informal sector has emerged as a significant and dynamic source of employment, incomes, production and distribution of essential goods and services in Indian cities. Proper and systematic planning of this sector would not only hasten and accelerate the development process but also initiate balanced development of urban areas.

Prospects for further development of the urban informal sector in India are bright because of its very favourable capital-output ratio and labour-intensive nature. Informal sector enterprises generally require relatively low investment and have linkages with the local economy and contribute to net value addition in the economy. The State and Central Governments should support and strive for the development of the urban informal sector by providing adequate financial assistance, incentives, subsidies and marketing facilities.

Due care is to be taken in selecting the industries/activities to be promoted in the informal sector, and the official/institutional assistance package may be linked to the net earning and productivity potential of the informal enterprises. The very significant factor in

this selection procedure is maximum absorption of labour and the use of little capital.

Timely availability of such infrastructural facilities such as land, power and water is a prime necessity for improved performance of informal enterprises.

Appropriate sites and locations on permanent leasehold basis may be provided to informal enterprises. Town/city planners may focus on selecting appropriate areas of the city for promoting selected informal enterprises. Provision may therefore be made in the existing Master Plans for correct locations for informal enterprises. This calls for a locational study.

A proper mix of private initiative in urban development and government policies towards the informal sector is required. Coordinated efforts on the part of planners and all organisations/ institutions connected with urban development is required to enable informal enterprises to give a new thrust to urbanisation in India.

ANNEX I

MINISTRY OF FINANCE
DEPARTMENT OF ECONOMIC AFFAIRS
(BANKING DIVISION)

SELF EMPLOYMENT PROGRAMME
FOR URBAN POOR (SEPUP)

This is a Government of India Programme.
This will come into effect from 1st September, 1986.
This Programme is applicable in Metropolitan/Urban/Semi Urban Centres having population exceeding 10,000 as per 1981 census.

ELIGIBILITTY

Applicant should be a permanent resident of the City or Town and should have lived therein continuously for atleast 3 years immediately prior to the date of application.
He/She should be holder of Ration Card.
He/She should have aptitude and previous experience for undertaking the proposed activity.
His/Her family income should not exceed Rs.600/- per month.
The applicant should not have availed of loan from any Bank/Credit Institution under any other scheme.
The applicant should not be a defaulter to any Bank/Credit Institution.
The scheme will also cover persons engaged in certain professions, e.g. Safaiwallas, who will be eligible to take upon an activity to enable them to change their traditional professions and improve their economic condition.

LOAN

Maximum Rs.5,000/-

SUBSIDY

25% of the total assistance to be kept in fixed deposit with the Bank. This amount will be adjusted against the loan after 75% of assistance is repaid by the borrowers.

RATE OF INTEREST

@ 10% p.a.

SECURITY

Hypothecation of the assets created out of the loan. No collateral security - No third party guarantee.

LIST OF ACTIVITIES COVERED
UNDER THE SEPUP SCHEMES

1. Rickshaw-Pulling
2. Weavers
3. Shoe Repair (Cobblers)
4. Carpentry
5. Potters
6. Book Binders
7. Vegetable Vendors
8. Cycle, Thela, Mobile Shops
9. Launderers and Press Workers
10. Groundnut vendors
11. Blacksmith
12. Plumbers
13. Caning of Chairs
14. Paan Bidi Shop
15. Scooter Repair Shop
16. Furnishers and Printing Shop
17. Tea Shop
18. Stove and Pressure Cooker Repair Shop
19. Welding and Fabrication Shop
20. Clay Moulding and Statue Making
21. Paper Bag and Polythene Bag Vendors
22. Magazine, Novel and Newspaper Shop
23. Fruit Vendors
24. Juice Vendors
25. Tailoring/Ready-made Garments
26. Agarbatti Making
27. Card-Board Box Making
28. Tyre Retreading Shop
29. Newspaper Boys
30. Shoeshine Boys
31. Milk Vendors
32. Fish Vendors
33. Bidi-Rollers

and

Other similar activities.

ANNEX II

PROJECT TEAM

Project Coordinator	:	Shri Anil Rai
Local Coordinators	:	Shri S. Ghanorkar, Wardha Dr. Rajesh Dhingra, Ghaziabad Shri Bimal Kumar, Allahabad Dr. H.S. Mathur, Jaipur
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Field Investigators	:	Students of Wardha, Ghaziabad, Allahabad and Jaipur
Special Assistance	:	Mr. Rajesh Chandra Dr. Indu Patnaik
Typing & Secretarial Assistance	:	Mr. T.P. Tiwari Mrs. Meera Kumari
Word Processing Assistance	:	Mrs. Sangeeta Vijh Mr. T.C. Sharma
Cartographic Assistance	:	Mr. Ajay Kashyep Mr. R.K. Mehta Mr. M. Usman

GLOSSARY

agarbattis	:	incense sticks
bhuttas	:	corn-on-the-cob
bidis	:	indigenous cigarettes handrolled in specially dried leaves
dhabas	:	wayside eating places
ghee	:	clarified butter
hats	:	weekly bazaars
jamadars	:	refers here to construction labour supervisors
khoka	:	kiosk
Kumbh	:	religious festival
kutcha	:	refers here to temporary structure made of non-durable scrap material
malis	:	gardeners
neem datun	:	twigs of neem tree used for brushing teeth
paan	:	refers here to specially spiced betel leaf often chewed for its aromatic juice
pandas	:	temple attendants/priests' assistants
prastara	:	traditional pattern of city layout
pucca	:	refers here to permanent structure made of durable material
safaiwallas	:	sweepers, cleaners
semi-pucca	:	refers here to semi-permanent structure where one element is made of durable material
thela	:	handcart
tongas	:	horse-drawn carts