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**Issues in Worker's Health of Unorganised Sector :
A Case Study of Some Stainless Steel Utensil Making
Units of Wazirpur Industrial Area**

Dissertation submitted to the Jawaharlal Nehru University
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MASTER OF PHILOSOPHY

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CERTIFICATE

Certified that the Dissertation entitled "ISSUES IN WORKER'S HEALTH OF UNORGANISED SECTOR: A CASE STUDY OF SOME STAINLESS-STEEL UTENSIL MAKING UNITS OF WAZIRPUR INDUSTRIAL AREA," submitted by Mrs. Jyoti Mudgal is in partial fulfillment of six credits for the degree of Master of Philosophy of this university. The dissertation has not been, submitted for any other degree of this university or any other university, and is her own work.

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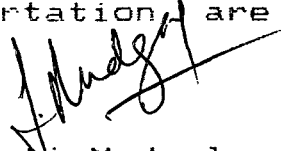
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Entire responsibility for whatever mistakes or shortcoming of the dissertation are mine.

New Delhi

Dated:


Jyoti Mudgal

CHAPTER 1.

INTRODUCTION

My interest in worker's health dates back to 1988. While working with the miners on the issue of their poor health, I felt that the existing theories were inadequate in explaining it. Later, I participated in a study on the health problems of workers in the unorganised sector. The study took the case of "stone quarry workers of South Delhi".¹ This gave me further insights into the problem. A number of basic issues emerged out of the study:

- i) Although there were many dangers to their health due to the work they did, the workers accepted it as a fact of life. Thus, in spite of their deteriorating health, they continued to work till they got incapacitated [to the extent that their ability to work got affected]. Then they would leave quietly for their village to suffer and die. A new set of

workers would replace them and the process would continue.

- ii) The health related questions which one asked them seemed trivial and unimportant.
- iii) The simplistic professional approach to worker's health problems which blamed the ignorance of the workers and which demanded technical health interventions no more seemed adequate.

One realised it was not just a simple process of extraction of stone by the workers. There was much more to it which gave rise to the plight of the workers than we realized. As a study team, we tried to understand the work organisation of the stone quarries, the relationship between various levels of ownership, the power of the contractor and the government on the one hand and the workers on the other.

What we found was not only the existence of a complex organisation of production but also the existence of complex social conditions. This

made it difficult to conclude explicitly one -to -one cause -effect relationship between the organisation of production and the health hazards faced by workers. It was difficult to pinpoint who exactly was responsible for the continued existence of the health hazards. There were multiple factors dynamically interlinked with each other. It became clear subsequently that the question of workers' health cannot be tackled as a technical problem. In fact, a broader and more integrated prespective is required to deal with such issues.

This is critical because the problems of health and safety of the worker is intrinsically related to the social relations of production. Therefore, it has to be understood in the context of political economy of workers' health and safety. To understand the condition of health of the workers in the unorganised sector, it is necessary to know the process and nature of industrial growth in India since independence. The economic processes which gave birth to the

unorganised sector (which is today an extremely important and dynamic part of the Indian economy), the role of already existing social stratification in society, the nature of government and legislation which gave the unorganised sector an impetus, and finally, the impact of the interventions of welfare organisations and trade unions are needed for a full grasp of the problem of workers health in the unorganised sector. The linkages between these factors and the industrialization process in general ultimately determines the health of the workers by influencing their working and living conditions. We shall therefore explore these factors below:

Nature of Industrialisation Process:

The issue of the Nation's industrial development was upper most in the minds of the country's leadership during the time of independence. Several models of development strategies were discussed. The two most important

models could be categorised as Nehruvian and Gandhian models. The Nehruvian model sought to create a solid foundation for heavy industries. The elements of the industrial economy thus offered were an extensive network of basic core industries, high productivity, employment generation and all-round growth. It was argued that such a pattern of industrial growth would improve the standard of living due to the trickle down effect.

The Gandhians on the contrary believed that such a pattern of growth would amount to imitating the West. An alternative was presented in the form of self-reliant village economy leading to broad-based development. Emphasis was made on agro-based small units.

What was finally implemented was a mixed economy based on Nehru's model. Both the public and private sector were called to take the lead. The public sector, however was on a disadvantageous position vis-a-vis its

counterpart. While the public sector went into high investment and long - term returns based areas, the private sector grabbed the low investment and high profit areas. The core industries and infrastructure were provided by the public sector while the rest of the market was captured by the private sector.

The government, though following the Nehruvian model did not decide to reject the Gandhian principles outrightly. The virtues of small scale industries as a means to create employment, to tap unused resources and to disperse industry could not be denied. The policies to encourage small industries to complement large ones became an essential part of the plan strategies from the beginning. Spheres of production were reserved for small scale industries, especially cottage industries and production by large firms was restricted or taxed. Through the Khadi and village industries board the government subsidised cottage industries directly.² These heavily subsidised cottage

industries could not become self sufficient. The capitalist system was developing in the industrial sector and its aggressive drive for profit maximisation was giving rise to a new set of industries and products. The handloom started losing out in its competition with powerloom and synthetic cloth. Jute was wiped out completely. New products such as machine tools, agricultural and electrical equipments, electronic items, engineering goods, aluminium and petroleum products, rubber, paper and plastics emerged.³

This change in products and technology gave rise to small scale unorganised sector of a new kind altogether. Firstly, many intermediary goods could be produced in smaller units. This gave rise to "ancilliarisation". Secondly, the whole production process itself could be broken down into smaller units and this gave rise to "decentralisation".

With the rise of the unorganized sector, a distinctive pattern of industrial and labour

relations emerged ⁴ The owners of small units and the big capitalists alike bagged all the advantages of an unguarded productive system. They virtually had no responsibilities toward the workers:

- a) The supervision cost of workers is reduced by shifting the responsibility of production to smaller producers.
- b) The workers could be kept apart in separate small units, to curb their ability to organise.
- c) The overhead costs of providing welfare, safety, health and other benefits including wages is reduced substantially.

By taking advantage of the policies of the government a tremendous growth of such small scale industrial units in the unorganised sector took place in the post - independence period. As against this growth, the local cottage, handicrafts and agrobased rural industry expanded only at the cost of government subsidies.

The small scale industrial sector now had the handloom and traditional crafts which represented the old and small scale industrial units which represented the new. Unlike the old units, the new ones ushered into the market novel and modern products, which are extremely popular amongst the emerging middle class. The predominantly urban bias of such new units is understandable. The urban centers provided a well connected transportation system, easy accessibility of raw materials, well developed product market, a large supply of cheap and uprooted labour, and the benefit of close proximity to political and financial centers.

Social Stratification

Among the social and political factors which supported the growth of the unorganised sector are the existing social stratification, the legislations and trade unions.⁵ The social stratification from preindustrial India was

incorporated in the industrial society India was aspiring to become. For instance, the hierarchy and difference in the social origin parallels the differentiation within the production process. The differentiation of workers into permanent, temporary and casual or contract⁶ is not simply the categorisation of workers. It relates to the levels of security, wages, benefits and exposure to health hazards. The following tendencies have been observed in India.

- a) Amongst the migrant workers, the ones with better bargaining power due to their skills and social links (mostly cultivators from the middle & upper castes) dominate the permanent & temporary jobs.
- b) Though landless labourers coming from schedule castes and schedule tribes are placed in all the three categories it is the contract or casual work in which they are largely found.
- c) That while there is a definite link between

different strata or categories of the labour force and the village, caste and regional background, some of these same traditional links also act to divide the working class in a developing economy like India where competition for survival is intense.

- d) Women and children maintain their lower status in work, just as they do at home.

If the majority of workers in the unorganised sector are temporary, casual or contract workers and also belong to the weaker sections of the society (mostly schedule castes, schedule tribes, women and children), it makes the process of organisation and collective bargaining an extremely difficult task.

The Role of Government and Legislation.

There are various legislations to safeguard worker's health. Some of them are:

1. Factories Act 1948.

2. Workmen's Compensation Act 1923.
3. Employee's State Insurance Act.1948.
4. The Maternity Benefit Act.
5. Employee's Liability Act.
6. Provident Fund and Family Pension Act.
7. The Minimum Wages Act.
8. The Contract Labour Act.1970.
9. The Inter state Migrant Workers Act.1979.

At the same time, a firm is liable to these laws when it reaches the threshold for registration under the Factories Act (ten workers if power is used, otherwise twenty). And if a firm is not registered at all, which is the case with most small scale firms, it has no obligation whatsoever vis a vis the law.

In other words to say that the new small scale industry in the unorganized sector has developed due to its freedom from labour laws and from unions won't be an exaggeration. We have discussed earlier that the new small scale industrial sector grew up in response to the

existence of difference in wages and fringe benefits between the organised and unorganised sectors. This is because various labour laws are enforced in the former. Besides, the trade unions are active in large firms. This is seldom the case in small firms. However, all this does not imply that an organised sector worker gets the protection from the law very easily. He has a chance only if he has a union behind him to fight the case in court and outside, through negotiations, through the official machinery or through protests. Therefore, keeping the firm small is a way out of this situation for an industrialist. Sometimes splitting up of a firm into smaller ones could be fictitious. For example National Commission on Labour reports.⁷

"Splitting of large units into smaller one's only in name. Signboards dividing a unit in two or more parts even within the same premise are not unusual, Particularly in handloom and powerloom factories and small engineering units."

Besides, the laws are only useful if the

administrative machinery works. Because of the shortage of personnel to implement these laws, they are hardly enforced. In addition, to meet the welfare of the workers there is supposed to be one inspector for 150 factories. The work load this involves for an individual inspector is tremendous. This affects the quality of inspection and indirectly helps the industrialists. On top of this the relevant departments are understaffed. For instance, there are only four inspectors for over six thousand factories in the Delhi area alone.⁸ Along with this, there is a shortage of resources and manpower such as jeeps, medical vans, medical officers and other supporting staff.

d) The Role of Trade Unions.

The Indian trade union movement had to grow against heavy odds. The industrial sector grew slowly. In addition, there was a large number of pauperised workers with poor bargaining power. To make things worse, they were politically and socially divided. All these obstacles hampered

the consolidation of the Indian Trade Union Movement.⁹ The movement also suffered because of splits within the left parties in the sixties and because of the growing involvement of the parties of the Right, which realised the elect^oral benefits of organizing workers. The socio-economic and political divisions have helped employers in attacking and weeding out trade unions with a working class ideology articulating a conflicting set of interest and in encouraging those that acted as collaborators and lubricants. The later provided the required industrial order and peace for profit maximization. Lastly, since a large majority of workers are still unorganised, their area of influence is extremely limited.

The Indian trade union movement has been largely confined to the organised sector. It is a great failure of the big, organized trade unions. They have been unable to understand the implications of the growth of the unorganised sector for the organised sector workers and of the process of industrialisation in general. Lately,

some of them have realised this failure and in an effort to overcome it, they are engaged in organising the workers in the unorganised sector.

The task of organising the workers of the unorganised sector is tough. The differentiation of workers into various categories and their social underpinings encouraged and maintained by the industrialists, have found support of the existing unions in the unorganised sector.

The varying motives of the different trade unions and their political objectives make working class solidarity even more difficult to achieve. As a result, the only historical force that can ensure well-being of workers remains weak in India. Worker's health is only a part of that well being. It is not only a cumulative result of their working and living conditions but is also dependent upon the same socio - economic and political parameters which determine these conditions.

All the factors explored above , influenced the direction of organised as well as unorganised sector. The constraining influence of legislation and trade unions on the organised sector has taught both the entrepreneurs and the government the utility of overt or covert support of the unorganised new small scale sector. The strategy for development emphasising the unorganised new small scale sector as an alternative to the strategy of relying on large scale modern production units has thus found a central place in the planning process.

The argument is primarily based on two presumed characteristics of the unorganised sector. Firstly its proportion is quite large in most of the urban settlements in developing countries and it seems to be increasing rather than decreasing. Secondly, being low capital intensity it makes a greater use of abundantly available human labour. This is made easy because there is no rigid bars on employment in

this sector. It is accessible to even those lacking economic and social endowment. Growth based on nonformal organisation is presumed to be more effective in tackling the problems of unemployment, poverty and inequality.

This approach is supported by ILO. In its 'basic needs strategy', which in addition to these material goals also seeks to increase the population's participation in decision making process through involvement in organisation of their own choice.¹⁰

There is no denying the fact that in developing countries the productive activities are critical in the development process. Small scale unorganised sector plays a critical role in providing employment to a very large section of the dispossessed. What really concerns us is that does a government which promotes this sector and protects the small entrepreneurs (through subsidies and reserving products) also looks

after the interests and rights of the workers in the sector.

This to our mind is important because the very existence of small scale sector depends on its ability to compete with others by keeping the cost of production low. It achieves this primarily by maintaining low wages, by employing poor and dangerous technologies and by operating bad working conditions. Invariably the labour it gets comes from the unskilled agrarian peasantry which has been pauperized through the process of land concentration.

We would like to understand to what extent the interest of this group of worker i.e. the weakest of the poor, is looked after by the government.

The three basic questions that we would attempt to understand in the subsequent chapters are:

- Can the concept of health be independent of the notion of subsistence?

- Can subsistence be brought down to levels which are socially unacceptable for any other section?

- Can we talk of health without talking of the socio - economic and political context?

To look for answers to these questions within the perspective illustrated earlier, an intensive field study of one small scale industry was taken up. The idea behind the study was to verify the information at an empirical level and also explore certain aspects of worker's health in the unorganised industry.

We chose the small steel utensil making units of Wazirpur Industrial area for this purpose.

CHAPTER I

NOTES

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CHAPTER-II

METHODOLOGY

OBJECTIVES:-

Within the perspective laid out in chapter I, the objectives of the study were:

1. to understand the impact of working conditions prevalent in the small scale steel utensil making industry in Wazirpur on the health of its workers.
2. to explore the responses of the workers towards these conditions and toward their health problems
3. to study the role of the government in safeguarding the interest of the working population of the steel utensil making industry in Wazirpur.

AREA OF STUDY:

Wazirpur industrial area was chosen because it is one of the most important and oldest industrial area of the city. Located in the east of Lawrence Road industrial area, it is surrounded by huge residential colonies. In fact to a passer-by on the Ring Road it is almost invisible. But as soon as one steps out of ~~from~~ the Ring Road and walks a kilometer inside, one finds a huge industrial area with busy and congested roads, shops, restaurants and thousands of small and medium factories within a few square miles. Along with this, there are an estimated 50,000 workers living in tiny self-made shacks built along the railway tracks and in the spaces left for public parks.

The area is recognisable by its filth, blocked drains, and garbage collected on the roads. There are illegal encroachments on pavements and roads by some owners, on which they operate, without much overheads, many lucrative

productive activities such as collecting of scrap, acid washing, polishing or cutting of 'flats'. The workers too illegally encroach on pavements and roads. However, they do so because of the lack of any housing space. They have put up their shacks on the sides of the roads. It is an unhealthy and hazardous environment the workers live in. There are collections of dirty water and industrial waste all around the industrial units.

Secondly, Wazirpur is also known as a success story to all small entrepreneurs. The steel utensil making industry has captured a large chunk of the market in just two decades. From a handful of industries in late sixties and early seventies, today more than seventy percent of industrial units of Wazirpur are in the business of steel utensil making.

Lastly, there are a few worker's organisations, which despite being small are concerned about the problems faced by the workers and try to find solutions to these problems. Their

presence in the area makes accessibility to the workers somewhat easier and less inhibited.

STUDY POPULATION :-

This study was confined to two hundred workers from twenty seven steel utensil making units. Since steel utensil making process is divided into various steps and not all units do the same job, we stratified the sample according to the steps involved. The selected workers from the 27 units represented all the steps involved in steel making. There were workers from 3 cutter units, 5 hot rolling units, 7 cold rolling units, 4 acid washing units, 5 pressing units and 3 polishing units. Only for the 'flat' producing unit, we had to go out from Wazirpur to Badarpur, where workers were interviewed.

There were workers among the sample who were members of the local trade union. This union is affiliated to Indian Federation of Trade Unions.

Scope of Study :-

To realize our stated objectives, we attempted to collect the following information:

1. The organisation of steel utensil making industry of Wazirpur. Given the fact that organisation of work is a complex issue depending upon the economics of operation, the socio - economic background of the labourers and entrepreneurs and the available technologies, we attempted to study each organisation to understand the specificity and complexity.
2. The process of production and its related health hazards.
3. Responses of the workers to their conditions of work, to their health problems and to their perceptions of government and legal institutions.

4. Role of government machinery and perceptions of its officials regarding the problems of the unorganised sector.
5. Legal institutions and their relevance to the health of the workers.
6. Medical facilities available for the workers.

Research Techniques and Tools:

Given the complexity of the problem and constraints of time and resources, it was necessary to restrain ourselves from an extensive quantitative study without an exploration of the sociological processes at work. We therefore did an intensive qualitative study of two hundred workers from twenty seven units living in nearby slums.

Information was collected through a number of ways. Focused and unfocused discussions opened up the world of the workers to the

researcher. Through observation a lot of vital information was collected. The whole chain of the production process of at least one unit of each kind was closely observed. Along with this, the conditions and hazards of work also observed. To achieve some standardization, an interview schedule was administered.

Information was also gathered from secondary sources like government reports. The government data on the unorganised sector is extremely limited. Through interviews of individual entrepreneurs, contractors, key office bearers of the association of entrepreneurs and union activists, a rough calculation of the number of units, the number of workers and the economics of operation was obtained. Certain precautions to authenticate the data was taken. Thus, rapport building and cross checking were constantly exercised.

LIMITATIONS OF THE STUDY:

Inspite of all these efforts, there are certain limitations the study faced. These are:

1. We have been unable to quantify the responses of the workers. This is because the workers were free only on holiday. Even on this day, they had many other preoccupations. Thus, the time constraint faced by both the researcher and the workers led to difficulties in elaborate quantification of this study.
2. Inspite of the close rapport with the workers, they would get hassled if a note book was taken out and their answers written down. The owners, on the other hand, did not appreciate the researcher's curiosity regarding their business. These units are as a rule 'unauthorised' and they are neither registered nor have any account of their business.

ANALYSIS :

Our study is largely a descriptive one. It attempts to bring together the various dimensions of the lives of the workers in the unorganised sector into sharp focus. The basic effort is not only to highlight the inter relationship between these dimensions and the health of the workers but also to understand the poor living and working conditions of the workers and the reasons why the workers accepted them. Lastly, the study attempts to arrive at an informed opinion of the official attitude towards the workers and the unorganised sector.

CHAPTER III

PART I : Industrial Growth in Delhi.

Since independence there has been a tremendous growth of industries as well as industrial workers in Delhi. All kinds of products are being made in various small, medium and large industries, and the workers working therein can be categorised into various categories such as skilled, semiskilled, unskilled permanent, temporary and casual, men, women, children, organized or unorganized workers.

According to the Master Plan of Delhi for 2001, it is predicted that Delhi will have 93,000 industrial units and there will be an increase of 37% of jobs of the total workforce as compared to that of 1988. Further due to the centralization of the industries Delhi will become an important industrial and business centre of the country.

TABLE - I

INDUSTRIAL GROWTH IN DELHI

Year	No. of Indust- real units (in thousands)	Investment (Rs. in crores)	Production (Rs. in crores)	No. of workers Employed in thousand
1951	8160	18.13	35.35	69266
1961	17000	60.00	121.00	138000
1965	19038	81.00	176.00	159731
1968	23496	129.00	280.00	192711
1978	40000	600.00	1100.00	350000
1988	73000	1420.00	3850.00	657000

SOURCE DELHI ADMINISTRATION -DEPT. OF INDUSTRIES²

1951, 1965, 1968 - based on survey conducted by industries department.

1961, 1978, 1988 - project on the basis of part trends and partial surveys.

TABLE II
 THE BREAK UP OF UNITS REGISTERED UPTO
 AUGUST 1989 ACCORDING TO NATIONAL INDUSTRIAL
 CLASSIFICATION WITH THE DEPARTMENT OF INDUSTRIES ⁽³⁾

NAME OF THE PRODUCT	NO.OF INDUSTRIES
Manufacture of food products	383
Beverage, Tobacco and Tobacco products	18
Manufacture of cotton textiles	172
Manufacture of wood,silk, synthetic fibre	65
Manufacture of Jute, Hemp,Mesta products	2
Textile products (including wearing apparel other than footwear)	1942
Wood and wood products, furniture and fixtures	349
Paper and paper products, printing,publishing and allied industries	1856
Leather and leather products	827
Rubber,plastic,petroleum,	

coal products.	2060
Chemical and allied products	1601
Non Metallic mineral products	304
BASIC metal and alloy industries	1447
Metal products except machinery and transport equipment	2809
Machinery, machine tools, machine parts except electrical machinery	1237
Electrical machinery apparatus, appliances (including electronics)	2484
Transport equipment	
Other manufacturing industries	1007
Misc and Servicing industries	405
Total	206.25

SOURCE Dept of Industries Delhi Administration

TABLE III
ESTIMATED WORK FORCE
in the year 200%⁽⁴⁾

AREA	INSIDE URBAN BOUNDARY (number in thousand)	OUTSIDE THE URBAN BOUNDARY (IN THOUSAND)	TOTAL
Agriculture	13 (0.30)	59 (30.00)	72 (1.60)
Construction	1071 (25.00)	39 (20.00)	1110 (24.80)
	214 (5.00)	6 (3.00)	220 (4.90)
Business and trade	964 (22.50)	12 (6.00)	976 (21.80)
Transportation	488 (11.40)	16 (8.00)	504 (11.30)
Other services	1306 (30.50)	61 (31.00)	1367 (30.50)

Percent	4283	197	4180
	(100.00)	(100.00)	(100.00)
Non steady majority	428		428

SOURCE DELHI MASTER PLAN 2001

TABLE IV
Categorization of industrial units

No.of works	No.of units	Percentage of total unit	Total workers	precent
1-5 Worker	71	16.71	256	4.03
6-9 Worker	155	36.47	1140	17.96
10-19 Worker	132	31.06	1766	27.82
20-49 Worker	44	10.35	1329	20.95
50-99 Worker	19	4.47	1244	19.60
100-more ,,	4	.97	612	9.64
Total	425	100.00	6347	100.00

=====

In last ten years there has been on the one hand a tremendous growth of metal , electrical and electronic industries, and on the other, a large output of rubber, plastic and petroleum products in Delhi.⁶ There have also been some unsuccessful efforts to regularize and control this growth through various administrative measures. As a result, thousands of unauthorized units run side by side with the authorised units . The statistics given is invariably incomplete in nature as they do not have an account of the unregistered, unauthorized units and about those working in them. Secondly, even the registered units many a times do not give full account of it's workers inorder to escape from the demands of the labour laws. This has been shown in a study on light industries in Gujarat.

"Commonly, proprietors officially admitted to employing fewer workers than they actually employed in their firms. It is in the proprietor's interest to keep the number of workers on paper as low as possible in order to cut down on labour costs."⁷

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Labour legislation, which in significant measure is attached to the Factories Act, apply only to firms where production is based on non-animal traction and where ten or more labourers work. The Factory Act regulates hygiene and safety in the work place sets the number of obligatory paid holidays and places restrain on child labour. The definition of an industrial enterprise used in the Factories Act additionally serve as a base line for other labour laws such as the Payment of Bonus Act, 1965 which specifies that profit sharing must occur in industrial concerns with 10 or more workers."

The unofficial estimates are that there are 90,000 industrial units and 7 lakh industrial workers in Delhi.⁸

Mainly there are three categories of Industrial units⁹:

- a) Small - 10 to 50 workers
- b) Medium - 50 to 300 workers
- c) Large 300 to 5000 workers

In category (a) the industries mostly produce plastic, rubber, electronic, cloth, wood and leather. In category (b) rubber, machinery and metal are produced. Cloth, machinery machine tools, electrical goods, electronic, metal products and chemical industries are produced by category (c) units.

We observe a great deal of overlap amongst the categories. To understand why, we have to trace the reasons historically. Initially the small scale sector was expected to produce items mainly artisinal based using simple technology. Government policies ~~was~~ protected this small sector and its produce~~r~~. With the coming of the new small scale sector the situation changed. What we observe today is that a lot of new small scale units are producing 'high tech', modern products. Many of the small scale units have been organised by large firms. By splitting the production process, the big firms are able to get either parts of a product, or the whole product in parts, made in small units. The small scale units of the unorganised sector are therefore

not homogenous anymore.

The debate on the issue of the definition of organised - unorganised sector, the small scale, informal and unorganised sector has been taken up by many social scientists in early seventies. Some of them are Ian Breman¹⁰ Mark Holmstrom,¹¹ Ray Bromley¹² T.S. Papola,¹³ and Deepak Mazumdar¹⁴ .

For purposes of keeping our analysis simple we shall use the terms 'small scale' and 'unorganized' equivalently, knowing fully well that there are problems involved in doing so. These problems, however, do not effect our study. Hence, the terms 'small scale' or 'unorganised' would be used to indicate units which have below 20 workers, are not majorly influenced by the trade union movement and/or which can manage to avoid the scope of the Factories Act and other major labour legislations. It is estimated that 70% of the industrial units in Delhi are small scale, employing between 1 and 4 persons; 27% , medium, employing 5 to 19 persons and 3% large employing more than 20

persons¹⁵. Thus most of the workers of Delhi work in the 'unorganized sector' as defined by us.

The Department of Industries has divided the entire union territory of Delhi into 12 zones, based on the municipal zonal system. These twelve zones are:

1. City zone
2. Paharganj zone
3. Karol Bagh zone
4. West Zone
5. Civil lines zone
6. Narela zone
7. Najafgarh zone
8. South zone
9. New Delhi zone
10. Shahadra zone
11. NDMC zone
12. Delhi Cantonment zone.

In these twelve zones, the most important industrial areas are Wazirpur, Rajasthan Industrial

town, Narela, Badli, G.T. Road, Mangolpuri, Lawrence Road, Rohtak Road, Nazafgarh, Naraina, Kirti Nagar, Mayapuri, Jhilmil, Patparganj and Okhla.

Promoting industrial growth in the capital city of India was a crucial decision the planners had to take carefully. It is predominantly an urban area without much hinterland. Secondly, the rate of growth of the population of Delhi is high. Keeping in mind the above constraints, an industrial policy statement for the union territory of Delhi was prepared and announced in 1982.¹⁶

This policy statement placed special emphasis on promotion of industries which can achieve optimum level of production with minimum space utilization and power consumption and which can generate maximum employment of local skilled persons. Sophisticated industries producing high-value added items that can cover areas of new technology that do not cause congestion and transportation bottlenecks, and that are of a non-pollutant, and non-hazardous nature were given preference. Apart from this, the

policy statement also placed emphasis on traditional industries viz handicrafts, handlooms, Khadi, and village industries, leather goods and household industries. The future growth of industries in Delhi was to be in line with this policy statement.¹⁷

The Department of Industries has also announced many programmes to promote such a growth. For example, in the seventh five year plan (1985-90), there were 94 schemes and in the first 3 years of the plan Rs.39.64 crore was spent. This amount was spent mainly for upgradation of technology, modernization of industries, quality control, pollution control and for starting of industrial training centers.

TABLE

FIVE YEAR PLAN OUTLAY AND EXPENDITURE OF INDUSTRIES DEPARTMENT¹⁸

In fact, the Master Plan of Delhi¹⁹ for the year 2001 suggests a number of modifications to the Industrial policy. The important ones include

disallowing the opening of new big industrial units in the area, improvement of the licensing policy, the transfer of big, dangerous, polluting units in industrial or non industrial areas and modernization of the big units to decrease pollution and to improve industrial environment. The Master plan also indicated that thousands of illegal, dangerous and polluting industries in the Delhi region be moved out to the "National Capital Region" or other regions.²⁰

In the light of the above discussion, we can now take a look at our region of study

WAZIRPUR

Wazirpur is one of the most important and oldest industrial areas of the city. It is located east of Lawrence Road industrial area. It is surrounded by huge residential areas such as Model town, Ashok Vihar, Shalimar Bagh and Rohini township. In fact, to a passer-by on the Ring Road it is almost invisible. But, as soon as one steps out of the main road and walks a kilometer inside, one finds

a different world altogether. It is a typical industrial township with busy and congested roads, full of rickshaws, thela's and trucks. The shops of wholesale dealers sprawl on the outskirts. The whole place is crowded and noisy with hoards of people among whom one can find workers, mechanics, and contractors. The factory owners are easily identified as they drive past in their 'Maruti' cars. The loaders wait to load or unload their burden from the trucks. There are a number of small tea shops and food shops catering to the needs of workers. In just a few square miles of an area, one will find not only thousands of small and medium factories but also an estimated 50,000 work force living in tiny self-made shacks built along the railway tracks and in the spaces left for public parks.

The whole area is divided into three blocks: A, B, and C. One part of Block A is called group A plots. It consists of small plots (250 sq.mts.) with workers shacks next to it. In this area I have observed both workers and factory owners throw household and industrial waste and

dirty water into the street. The drains are perpetually blocked. As a result, the whole street looks like nothing but a big, filthy drain. Both workers and owners have to use this street - turned - filthy drain to reach their factories and homes.

The rest of block A and blocks B and C have bigger plots (500 sq.meters) with better roads. In spite of space, there are illegal encroachments on the pavements and roads by some owners. On the encroached public space they put their acid tanks, collection of scrap and the cutter machines. They also organise buying and selling of the scrap, and acid washing. Due to the lack of any housing space for the workers, even workers have put up their shacks on the sides of the road. In between these shacks are innumerable union offices belonging to various groups.

Congestion, poor drainage and dumping of industrial waste have led to the collection of dirty water and industrial waste all around the industrial

units and the worker's shacks and on the roads in the whole of the Wazirpur.

There are mostly three kinds of industrial units in Wazirpur:²² (1) plots, allotted by the Delhi Development Authority, (2) shades, allotted by the Delhi Industrial Development Corporation, and 3) Plants, allotted by the Department of Industries.

A survey was conducted by the Department of Industries, Delhi Administration in 1983. It shows the predominance of manufacturers of cotton cloth, basic metals, mixed metal and metal products. A few rubber, plastic, chemical, electrical equipment, transport equipments and leather industries also exist. The survey also reveals that out of the total of 837 plots, 248 are vacant and the rest 589 plots houses around 831 industrial units. But since one plot is allowed to house only one industrial unit, the above fact implies that there are many unauthorised units functioning within one authorised plot. A plot does not imply only land but the three

storey building. The survey goes on further to show that many industrial units have changed their products without taking the necessary permission from the Department of Industries.

My observations of the area show that today there is a predominance of steel utensil making units. Most of those plants which were allotted for manufacturing rubber, plastic, chemicals and leather products are today producing stainless steel sheets for utensils. In the course of my discussions with workers, trade union leaders and entrepreneurs, I came to know that more than 70 per cent of industrial units in Wazirpur are involved in the process of making stainless-steel sheets for utensils. (There was a near unanimity on the stated figure of 70 per cent by all those whom I talked to)

Mukul Sharma during the course of his study in the area observes the tendency of changing products without informing the Department

of Industries.²³ This practice I believe is still continuing. When this was mentioned to some senior officials of the Department of Industries they said that they are aware of the fact that the units producing stainless steel utensils in Wajzirpur today are mostly 'unauthorized' and 'illegal'. Infact plants manufacturing cotton cloth, rubber, plastic, basic metal, and mixed metal products, for which these plants were originally allotted, are very few in number in Wazirpur. Today, Wazirpur has come to be known as the steel area of the city.

Let us now briefly go into the history of Wazirpur. I shall reconstruct the history of Wazirpur from stories narrated to me by workers, entrepreneurs and unionists.

The Department of Industries had developed Wazirpur as an industrial are in late 60's. The infrastructural facilities were provided in the form of developed plots and "built up flatted factories" to the manufacturers of

cloth, leather goods, rubber and plastic goods etc.²⁴. Later some more workshades were constructed for poor handloom workers. These plots were given mostly to handloom and small manufacturers of cotton textiles and who were rooted in the old Delhi areas such as Chandni Chowk. They were dependent on the facilities of the local goods and credit market and family labour and hence found it extremely difficult to shift business completely to a new area such as Wazirpur. In addition, the upsurge of the powerloom sector and the decline of cotton textile industry at a national level made it extremely difficult for them to generate profits from the same business. Therefore, those who had capital to invest in machinery started changing their products and those who did not have the capital found it easier to rent their plots to other industrialists. Today the rent of these plots is as high as Rs.10,000 per storey. (Usually there are three storeys in each plot).

On the other hand there were many enterprising men not only with capital to invest but also a eye on the products of the future. One such product was steel utensils. It was a new product which in early 60's was popular only among the rich, gradually, the steel utensils became popular amongst the middle class households as well.

Today, steel utensils are used not only by the urban middle class in India, but also by the poorer sections such as the rural households and the industrial workers. This is because of a number of reasons. Steel is easy to handle. It is durable. It looks good and at the same time it is cheap. It is the relative lower cost in particular which makes the steel utensil manufacturers of Wazirpur successful. By keeping the price of utensils cheap they have captured a huge domestic market.

The price of steel utensils produced at Wazirpur is half that of steel utensils produced

by organized sector. One can take the example of Selam Steel utensils. The utensils made in Wajzirpur are sold at Rs.80 per kg. where as the cost of Selam steel utensils is Rs.160 per kg.²⁵

Some of the means evolved by manufacturers to keep prices low include cutting down on quality by using primitive and unsafe technologies and slashing labour costs. The latter is done through splitting the whole composite process of steel utensil making into smaller units. The entrepreneurs have withdrawn from direct control over labour process and shifted to trade. This has put the burden of production on petty producers or workers. Big traders are getting their goods manufactured by simply advancing raw material to small independent units on a job work basis.

Today, 70 percent of the industrial units in Wazirpur are involved in the production of stainless steel. The obvious reason for this, seems to be it's relative profitability as

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compared to the profits from other products which are being manufactured in Wazirpur. A study of the relative profitability of steel utensils and other products is beyond the scope of my research. It is, however, pertinent for my work to enquire into the cost and profit - structure of the steel utensil business. I shall deal with it later. Here I would like to explore the organisation of work in steel utensil production units. I would also examine wages, terms of work and conditions of work. It is my intention to unearth the implications of the above on the health of the workers.

PRODUCTION PROCESS, TECHNOLOGY AND THE WORK FORCE OF STEEL UTENSIL MAKING. (ALSO SEE APPENDIX FOR THE FLOW CHART)

The first stage in the making of stainless steel utensils involves the rolling of stainless steel into sheets. The basic raw material is stainless steel 'flats', (in short S.S.Flats) which are converted into stainless steel sheets.

Wazirpur does not have any 'S.S.Flat' producing units. The flats are brought for re-rolling in Wazirpur from other parts of the city such as Badarpur, G.T. Karnal road, etc. Since 'S.S. Flats' producers come first in the chain of steel utensil making process, inspite of their absence in Wazirpur, a survey of them was taken up. For this purpose a representative unit in 'Badarpur' was observed.

(A) INGOT PRODUCING UNITS (ALSO KNOWN AS RE-MELTING UNITS) FOR MAKING S.S. FLATS

There are roughly 30-40 ingot producing units all over Delhi. Here, ingots weighing roughly 180 Kg. and 4" x 4" x30" in size are produced in a 'Medium Frequency Induction Furnace'.

The process starts by first cleaning the scrap in an 'Annealing Furnace.' This is a small furnace run on 3-4 horse power motor. Later, they

are weighed and charged into the 'Induction Furnace'. The melted sample is taken out for chemical testing. Accordingly, Nickel, Chromium or Manganese to make steel more malleable are added. Once again the sample is taken out for the final adjustment of the composition. When the adjustment is completed, the melted material is poured out in 'Chilled Cast Iron Molds'. This is done with the help of a crane. When the metal cools down, it is removed from the mold by hitting on the sides. Later the edges are ground by portable grinding machines. There are a total of about 50 workers. Around twenty of them work at the 'Annealing' chamber for cleaning and separating the scrap, four at the Furnace itself, pushing the scrap inside the furnace and the rest are timmerman (the worker who adds chemicals to the scrap), the craneman, and workers who take out the Ingots from the molds. These are the workers of the labour contractor. Besides them, there are nearly 10 workers who are known as 'staff of the owner'. These are chemists, electricians and foreman.

There are usually two shifts of 12 hours

each. This includes 4 hours of overtime. This is also true for most of the steel utensil making units in Wazirpur. (But we are talking of Ingot producing units, which are located elsewhere, i.e. Badarpur).

(B). THE FLAT MAKING UNIT

The second stage in the production of steel utensils is the rolling of Ingots into 'Flats'. The technical term is 'stainless steel flats'. These are separate units mostly doing job work for ingot producers. The ingots are, first heated in a furnace and rolled (known as Hot rolling process). Later, the edges of the 'Flats' are ground with portable grinding machines to smoothen the sharp edges, cracks and breaks.

There are about 5 such 'flats' making Hot-rolling units in Delhi. One is located in Wazirpur. The size of the work force in each of these units is roughly 40 workers composing of 8

Mistries (the skilled workers), 8 Helpers (semiskilled) , 8 Grinding men (skilled job) and 16 Loaders (unskilled workers).

C. CUTTER UNITS.

At the third stage comes the cutter units. Here the long 'Flats' are cut into small square pieces by a cutter machine . The 'Flats' are passed through the machine by a 'Mistry'. The helper, on the other side of the machine, helps him press the 'Flat' Nearly 4 to 6 workers work in loading, unloading and weighing the Flat pieces. The total number of workers in this stage is around 8.

There are roughly 30 cutter units all over Delhi. Around 10 of them are in Wazirpur. All these units take up the job on contract from either a trader or a ingot producer and earn piece rates for it (calculated in terms of Kgs.).

D. HOT RE-ROLLING UNITS

The fourth stage in the production process is of Hot Re-rolling of the Flat Pieces into Stainless Steel Sheets. First the Flat pieces are heated in an 'Oil Fired chamber'. After this they are passed through a 'Four High Rolling Mill' to reduce the thickness. Usually at this stage the Flat pieces turn into 2 feet long sheets. There are about 200 such Hot Rolling units in Wazirpur.

The job is performed by roughly 4 to 6 workers. In this one is a 'Mistry', i.e. the skilled man, and, the rest are either semiskilled or unskilled helpers or loaders.

E. ACID WASHING UNITS.

The fifth stage consists of Acid Washing units. Here the steel sheets are washed in an acid tank and later rinsed with a shower of water. Roughly 6 to 8 workers are involved in the process. Almost all of them are unskilled.

There are roughly 60 acid tanks in Wazirpur. They are either independent units owned by different people or a part of the Rolling unit itself.

F. COLD RE-ROLLING UNITS:

The sheets are further re-rolled in a Cold Rolling Machine. This time the Cold sheets are passed through the rollers and pressed hard by workers and machine. This reduces the thickness further. The process continues till a 2 feet sheet is pressed to 4 to 6 feet long.

Total number of workers in one unit is 5. Comprising of 1 Mistry 2 helpers and 2 loaders.

Our estimate records about 300 Cold Re-rolling units in Wazirpur. Most of them take up job work from others. Some roll their own material in the peak seasons such as 'Dushehra' and 'Diwali'.

G. PRESSING UNITS

In the seventh stage, these sheets are sent to pressing units where final shape of an utensil is given to these sheets. First, circles are made on the sheet this is cut by a machine or manually by a skilled worker. This skilled worker usually undertake this job on contract. He charges piece rate for it.

These cut pieces of sheet called 'circles' are pressed in a press, which is either 'double action power press' or a 'hydraulic press'. The required shape is given by two workers - 1 'Mistry' and 1 helper - through this process. Later, the utensil is spun on the Spinning Lathe and given smoothness. This is done by a Mistry who presses the utensil with the help of a brass or wooden stick using his armpit and chest to obtain the required pressure, while the utensil spins on the machine. This is called the 'Beading' process.

Eight workers usually work in such a unit including the circle cutter and his helper.

There are approximately 200 such units in Wazirpur.

H. POLISHING UNIT

The utensils are now passed on to polishing units. Here, with the help of a cloth, brush and chemicals, they are polished. Women and children are preferred for this work. In Wazirpur, there are approximately 20 such units. Most of the work at this stage is taken by the villagers of nearby areas to their homes.

Estimates of work force

Above we have discussed in detail the production process and number of workers needed in each stage of production. We also have given a rough estimate of each kind of unit in Wazirpur.

Let us now try to calculate roughly the total number of workers employed in Wazirpur based on the above estimates. In doing so we shall take the maximum number of workers employed. For example if a unit employs 6 to 8 people, we shall assume it employs 8. This does not affect our conclusion. In fact, it only contributes positively to our conclusion.

There is one Hot rolling unit for making 'Flats' out of ingots, employing roughly 40 workers per shift. There are usually two shifts. Thus, the total number of workers employed in these units is 80.

Let us consider the cutter units. There are around 10 cutter units, each employing 8 workers per shift. If people work for two shifts a day then the total number of workers employed in the 10 units would be 160.

These cut Flats go to Hot rollers for

rolling. If each Hot rolling unit employs 4 workers per shift and if there are 200 hot roller units in Wazirpur operating two shifts a day, then the total number of workers employed in the 200 units would be 1600 workers.

These sheets are sent for acid-washing to acid washing units. The total number of such units are 60, employing 8 workers per shift. In double shifts the total number of workforce of all acid washing units comes to 960 workers.

These sheets are further re-rolled in cold rolling machines. There are 300 cold roller units. Each unit employs 5 workers per shift. If they have double shifts, the total number of workers would be 3,000.

The sheets are passed to the pressing units. There are approximately 200 presses in Wazirpur and each has 8 workers working in one shift. If we consider double shifts, the total number of workers would add up to 3200.

Finally, the polishing units. Most of the polishing work gets done by villagers. Only a small part of the total polishing job takes place in Wazirpur. There are nearly 20 polishing units with 3 to 4 workers per shift in each unit. The total taking into account double shifts therefore comes to 160 workers.

Adding up the estimates above we see that the total number of workers excluding the regular employees of the owner is 7960.

Each owner at the most keeps 3 to 4 regular employees, also known as 'the staff'. These include the foreman, the accountant, the electrician and a person incharge of maintenance. Most of the time he manages without this 'staff,' and with the help of 'Mistry' supervises and manages the jobs of all above -mentioned workers. But even if we take 4 regular staff members for each unit in Wazirpur, according to the estimates of total units given earlier, there should be

upto 6424 regular employees of the owners.

Finally, we have the loaders and transport workers who transport the material from one place to another within Wazirpur. The number of such workers is quite big, as the material is transported from one unit to another all the time. If we assume that there is one such worker for each unit, which is more or less the case, then there should be around 1606 of them in Wazirpur.

This makes the total number of workers employed by the steel utensil making Industry of Wazirpur to be 15,990. (Fifteen thousand nine hundred and ninety).

In the course of my survey, I found that the same worker would work for 12 hours a day and would be continuously employed till he or she is unable to work. However, if the worker takes leave for health reasons or to resolve some domestic problem, which might mean that he/she has to go to his/her village then his/her job is terminated. On recovery or on return he/she may have to wait to get another job.

In the course of my discussions with trade unionists, owners and workers, almost all of them said that there are 40 to 50 thousand workers in Wazirpur.²⁶ Again, as stated earlier, approximately 70% of the units in Wazirpur produce stainless steel. This would mean that the remaining units, which constitute approximately 30% of the total units, would be employing around 33,000 workers. Now this seems to be a bit unrealistic. Therefore, we may conclude that a significant proportion of the workers in Wazirpur are unemployed or are not fully employed for 12 hours.

All these are indicative of the fact that quite a number of workers in Wazirpur are fully unemployed and not just partially unemployed.

3.2.1. WAGES AND TERMS OF EMPLOYMENT

A. Earnings and Working Hours.

Different categories of workers are paid different wages, based on the level of their skill and the risk involved in their jobs.

- a) The unskilled labourers such as the loaders, earn anywhere between Rs. 300 to Rs.450 per month.
- b) The Helper who is someone learning a skill is paid slightly higher wages: Rs.400 to Rs.600 per month
- c) The skilled worker known as the 'Mistry' is paid a wage of Rs. 800 or more.

The first two categories of workers are paid much below the legal minimum wage rate. The minimum wage for unskilled worker is Rs.750 per month and skilled labourer, Rs.1050 per month as fixed by Delhi Administration. In contrast, a skilled worker like the 'Mistry' is many a times paid well beyond the minimum wage rate, sometimes upto Rs.1400 to Rs. 1500.

This wage situation is not reflected in the wage registers. On the monthly wage register the unskilled and skilled workers usually sign against Rs.750/- month skilled worker show them against Rs.1050/- month.

In most units, workers work for 12 hours of overtime. The payment for overtime is at the same rate as the regular hours, although legally it should be double the rate regular hours are paid for. These payments are made on a monthly basis.

B. Other Employment Conditions

- (1) There are no records or registers of employment and work done. The workers are given rough notebooks on which the days of work are recorded but whose pages are torn every month after making the payments.

- (2) The status of workers is temporary even for those who work for years in the same factory. Often workers change jobs very quickly. This is because every time a worker demands a rise in wages, or takes leave for visiting his family, he is terminated from the job. Because there is abundance of workers, it is very easy to replace worker with another worker. If, it is the 'mistry', i.e. the skilled worker who is terminated, the helper under him is always too willing to take up the mistry's place for a slight increase in his wage, wage which is invariably less than that paid to the Mistry. If it's a unskilled labourer, he can be replaced any time from

the pool of surplus labour waiting in Wazirpur to get employed. The terminated labourer, in spite of his experience and skill, does not get the wage he earned earlier in the new job he gets. This works as a perfect mechanism to keep the average wage low.

3. The level of skill requirement is not very high. It takes only six months to an year for the helper to learn the skills of a Mistry.
4. The workers learn the job while on the job, with the help of fellow workers.
5. There are no paid holidays, medical allowance, travel allowance, ESI benefits, overtime allowance, provident fund, pension etc, as stipulated in the labour welfare laws.

6. At the work site, there are no drinking water facilities, rest rooms, canteens, toilets, first aid facilities or creches.

7. There is no housing provided to the workers by either their employers or the government. Workers live in self-made 'Jhuggies' (shacks) built in park areas, private plots, disposal drains and on the sides of the main roads. These shacks do not have any basic amenities. Insanitary conditions prevail due to non-availability of basic civic amenities blocked drains and heaps of industrial wastes on the roads.

8. The women and children who work in these units are not only paid less for their extremely hazardous jobs, but are sometimes even kept bonded (especially children) in the factory premises and made to work continuously for hours.

3.2.2. THE ECONOMICS OF STEEL UNITS OF WAZIRPUR

The stainless steel utensils are produced on a contract basis. Traders buy the flats' from the ingot producers. They then go through the production process by getting the respective jobs done in the units of Wazirpur. The unit owner charges a certain rate for the job they do. It is to be noted that even the ingot producer who produces the ingot later gets it turned into flats' in a separate unit on job work basis. Later it is the flats which are sold to the traders. At times, the ingot producer keeps a portion of the flats himself and gets it transformed into utensils in the way as mentioned above.

For reasons mentioned above, I shall add the cost of turning ingots into flats including the profits of the flat producing units to the cost of ingot producers. In the process, I shall deal with the situation as if the ingot and flat producer is the same. This method is justified

because the flat, before being sold, is owned by the ingot producer. Further, it is the ingot producer who sells these flats. Let me therefore first start with the ingot or Flat producers.

The following is drawn from the balance sheet of a unit for a year.

1. Salary, wages and commission	Rs.1,036,000
2. Raw material	Rs.274,320,000
3. Rent	Rs.135,000
4. Excise duty	Rs.12,000
5. Power and Fuel	Rs.1,100,000
6. Insurance	Rs.45,000
7. Repairs and maintenance of plant and machinery	Rs.108,000
8. Audit fees and expenses	Rs.7,500
9. Travelling and conveyance	Rs.21,000
10. Publicity expenses	Rs.1,000
11. Postage	Rs,55,000
12. Miscellaneous	Rs.6,000

TOTAL	Rs.276,846,500

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Now, each furnace produces 7,200 tonnes of ingots. These ingots are made into flats in a separate unit on job work basis. This cost Rs.576,000. Therefore, total cost of production of flats Rs.282,606,500.

These flats are sold at Rs.40 per kg. After conversion, this would mean each tonne sells for Rs.40,000. So 7,200 tonnes are sold for Rs.288,000,000. The profit the furnace owner makes per year is therefore Rs.5,393,500 which comes to Rs.4,49,468.3 approximately per month.

Now, as mentioned earlier, the flats are cut up by the cutters. Roughly 16 tonnes of flats are cut each day and the cutters charge Rs.200/- per tonne. Therefore per month these units get an average revenue of R.96,000. The unit employs one skilled and five unskilled labourers who are paid Rs.1000 and Rs.600 per month each respectively. The rent paid for the unit is Rs.10,000 and the cost of the electricity consumption by the 3 Horse power motor that is used comes to Rs.7,000 per

month. If we add to this the depreciation at the rate of 7% per annum to the machine which costs Rs.1,000,000, we get a figure of Rs.584.00 (approx) per month. Therefore, the total cost comes to around Rs.21,583 per month. Let us add to this figure a miscellaneous charge of 20% of the above costs. If so then the total cost becomes around Rs.25,900 approximately. Thus the profit earned by the unit should be around Rs.70,100 per month.

Next in the line of production comes the hot rolling unit. One unit turns around 5 tonnes of sheet per day, for which they charge Rs.600/- per tonne. Thus their revenue per month should be Rs.90,000. The unit employs one skilled and eight unskilled labourers for Rs.1000 and Rs.750 per month for each worker respectively. The machine consumes 200 litres of oil worth Rs.800 and power worth Rs.1,700. Rent paid comes to Rs.10,000 per month. If we add a miscellaneous charge of 20% to the above costs, the total cost per month comes to Rs.38,760 per month. Therefore, the total profit

per month should be around Rs.51,240.

The hot rolled sheets are re-rolled by the cold rolling units to reduce the thickness and increase the length of the sheet. The units charge a rate of Rs.1500 per tonne and two tonnes of sheet are re-rolled each day. The monthly revenue of these units should therefore be Rs.90,000. On an average, such a unit employs one skilled and four unskilled labourers paying them a monthly wage rate of Rs.1000 and Rs.600 respectively. The electricity used by them costs around Rs.1500 per month. The cost of oil for the machine is worth around Rs.800. Rs.10,000 is paid as rent. A seven percent per annum depreciation charge on the machinery worth Rs.1,000,000 comes to around Rs.5,833 per month. If we add to this a miscellaneous charge of 20 percent, total cost comes to around Rs.25,839. Thus, each unit should on an average earn a profit of Rs.64,161.

The acid washing units wash around three tonnes of sheet everyday at a rate of Rs.750 per

tonne. This washing is done twice once after hot rolling of the sheet and once after the cold rolling. This therefore, amount to a total of six tonnes per day. Therefore their monthly revenue comes to around Rs.67,500. The units have been put up on the road and hence do not pay any rent, though they might have to pay something illegally to the local authorities. Let us assume that they pay Rs.5000 for this purpose. In addition, eight unskilled labourers are employed at a wage rate of Rs.800 per month. The cost of acid comes to Rs.5000 per month. Added to this is a charge of 20 percent for miscellaneous expenses. Thus, the total cost per month comes to Rs.3280 making the unit earn a profit of Rs.47,820. per month.

After the sheets are acid washed they are again cold rolled. Two tonnes of sheets are rolled each day at a rate of Rs.1250 per tonne bringing the unit a monthly revenue of Rs.75,000. Such a unit on an average pays a rent of 10,000 per month, Rs.4,000 per month as wages, Rs.2000 per month for power and Rs.800 for oil

depreciation costs at a rate of seven percent per annum for the Rs.1,000,000 machines comes to Rs.5833 per month. Add to this Rs.4526 (20% of the above cost) as miscellaneous expenses. The total cost then turns out to be Rs.27,159 per month. Thus the total profit earned by such units should be around Rs.47,841 per month.

The product then comes to the pressing units, where the required shape is given here circles are cut and sheets of 8" by 11" and 10" by 13" are pressed. On an average 400 Kgs of the former sheet and 1000 kgs of the latter sheet are pressed and cut every day at a rate of Rs.2 per kg and Rs.1.50 per kg respectively. Therefore the per month revenue (i.e. for 30 days) should be Rs.69,000 for pressing. The units employ two bedding men, one pressman and a helper at a monthly wage rate of Rs.700, Rs.1,300 and Rs.700 respectively. The diemaker-cum-foreman is paid Rs.2000. Rs.10,000 is paid as rent. The cost of running the press which runs on a 15 to 20 horse power motor comes to Rs.5,000 per month and the

cost of running the three horsepower motor comes to Rs.2000. At a rate of 7 percent per annum the depreciation charges of the beeding machine, the pressing machine and the die machine, worth Rs,5000, Rs.100,000 and Rs.125,000 respectively come to Rs.1,377 per month. We add to the above cost 20 percent miscellaneous expenses. This brings the total cost to Rs.28,471 and thus the total monthly profit should be Rs.40,521.

The circle cutting is given as a contract to a labour contractor inside the premise. On an average one tonne of circles are cut per day by one contractor at a rate of Rs.500 per tonne. In 30 days, he should therefore, earn Rs.15,000. He normally employs four labourers paying them a total of Rs.3000 per month. He rents a machine for Rs.300. Rs.500 is spent on sharpening scissors and Rs.500 on refreshments. The contractor therefore should earn a profit of Rs.11,000 per month. If the total revenue of the contractor (i.e. Rs.15,000) is removed from the profits of the pressing unit we get Rs.25,529 per

month as the profit of the press owner.

The product is finally polished. 200 Kgs are polished every day at a rate of Rs.7 per kg. bringing a total monthly revenue of Rs.42,000 to the unit. The owner gives over the job to a contractor many a times also a 'mistry' for Rs.5 per Kg. Therefore the owner gets around Rs.12,000 per month. The mistry gets a total revenue of Rs.30,000 per month. His expenses are as follows: Rs.8,500 per month for electricity, Rs.1,500 for rent, Rs.125 for brush, Rs.100 for other miscellaneous items and Rs.32,00 for wages for 8 employees at the rate of 400 each (these are mostly women and children) . Added to this is Rs.2685 as miscellaneous expenses (20 percent of the above cost). The contractor/ mistry therefore gets Rs.13,890 as profit per month.

The above estimates of profits (excluding those of the furnaces) are in the range of Rs.30,000 to Rs.60,000 per month. This is, of course dependent on the condition that the units

work for 30 days a month. If this indeed is the case then a very strong case can be made against the entrepreneurs of Wazirpur for neglecting the question of worker's health and safety.

However, the situation is not as simple as that. The work taken by the unit is on the basis of contracts. Along the production process, a unit neither buys the product from another unit coming before it nor sells it to a unit coming after it. The situation is as follows :

It is a trader who buys these 'flats' from the ingot producer and turns them into utensils by giving it to small producers in Wazirpur for the particular jobs they do at particular rates. Sometimes, an owner of a unit himself may buy the flats and make utensils out of it. But for this he should own a number of other units which make up the entire production process. Such owners are few in Wazirpur. It is the former i.e. the trader, who is mostly involved in the making of utensils prevalent. The implications of

this on the profits of small entrepreneurs are significant : Let us see how?

One furnace produces 7,200 tonnes of steel per year or 600 tonnes per month. This means 20 tonnes of steel are produced each day by one furnace. Now, if there are 20 such furnaces all over Delhi, the daily production of such steel is to 400 tonnes. To work on deal with these 400 tonnes (after taking wastage into consideration), 40 cutters, 80 hot rollers, 160 cold rollers, 80 acid tanks and 320 presses are required. Wazirpur has 20 cutters, 200 hot rollers, 300 cold rollers, 60 acid tanks and 200 presses. Given the fact that such units are not only located in Wazirpur, we may assert with some confidence that the units in Wazirpur have excess capacity. Mukul Sharma in his booklet Steel Bartan Udyog mentions a growing tendency among units in Wazirpur to close down. According to him, units often close down when they have labour problems. another reason for them to close down is the fact that all units do not get contracts to keep them occupied for thirty days a

month. Thus, their revenues fluctuate from month to month. Since the cost per month is constant or around the same any fluctuation resulting in loss of revenue increases the possibility of a unit being closed down.

In such a scenario, the owner of a small unit in Wazirpur is totally controlled by the traders who give them the contract. This leads to massive competition amongst the entrepreneurs. The short term perspective of these entrepreneurs can be explained in the light of this economic uncertainty. They avoid investment in their men and machinery. These are people who do not have registration of their factories and avoid paying any kind of tax to the government. The money that they earn mostly goes into conspicuous consumption and wasteful expenditure. The health and safety of their workers figures last in their priority list.

In view of this discussion, I would like to state that I am not very sure as to how much of

money these entrepreneurs can be forced to pay for the health and safety of their workers. A quantitative statement in this regard is difficult to make. This may be a good field for further research.

3.2.3. Working conditions and risk to worker's health:

Our observation and inspection of the units reveals that production processes are fraught with risks and hazards. This was not only confirmed by the workers themselves during discussions about their experiences and but also by the cases of accidents collected by the researcher.

The extremely inhuman conditions of work, the lack of any safety measures, the obsolete technology, the workers lack of knowledge of hazards and the absence of union activities make the risks to worker's health great. The risks are further intensified because of the

industrialists total control over the situation due to the availability of abundant labour, the indirect support of the state and the services of muscle men.

The average age of a steel worker is between 20 years to 35 years . This is so because both workers and owners believe that working in these steel utensil making units is so dangerous and tough that it is only the young workers who can cope with it. Once injured, even the young workes have no place in these units. They are promptly thrown out of job without any compensation.

The common feature of these units is that the space allotted for such a production is not enough. The big bulky machines are set up in a small room of 10 feet by 12 feet. Besides the machine, the room is also occupied with raw materials and extra rollers, all kept in the same space making the place highly congested and restricting the movement of workers. The lack of

proper lightening and ventilation make it suffocating and dingy. There are blocked drains outside the factory premises. Ofen sewage seep into the factory. The floors are broken and open electricity wiring was observed hanging loose from the walls in many factories. All this makes workers extremely susceptible to accidents and injuries as well as ill-health.

It is very easy to recognise a worker who make steel utensils by his burnt and discoloured hands and feet and deep injuries on his body. There are hardly any protective gears provided to them. Workers wear their own clothing and are sometimes seen even without foot wear.

A close look at the production process and possible hazards at each stage of the process can give us an idea of the intensity of the problem.

Stage I Re-melting units

Two workers with a long iron rod put the scrap into the annealing chamber to burn out the impurities. The environment is extremely hot near the chamber. There is smoke, dust and gasses. At this point, there is a great danger of burns. The only protective gear is cloth gloves. Next is the furnace. Here the hazards of heat, smoke, dust and gases are of much greater intensity than the annealing furnace. Four men work for 12 hours at the mouth of this furnace pushing the raw material inside, taking turns in pairs. They have rags tied to their legs and feet and cloth gloves in their hands. Similarly, the worker who takes out the ingots from the molds has similar protective devices. If these rags become too hot, they pour cold water on them to cool them.

Besides the heat, dust, fumes and danger of burns, the other main hazard is of injuries from the fall of heavy objects, obstruction of passage ways and floors, furnace chargers, cranes

and ladles and the loads suspended from them. Lifting and pulling causes muscular strains. Spaltering or streaming of molten metal or slag normally causes burns. Besides all these the workers are also exposed to chemical burns and eye injuries.

"Refractory such as hot top and crucible lining of the furnace has to be changed after every 3 to 6 'heat,' according to a World Bank Report. "If not, it" sometimes bursts, bringing out the hot melted material outside the furnace which can burn people around severely."²⁷ This is not changed for months in small units of the steel industry of Wazirpur exposing workers to extreme dangers.

After the ingots are brought out of the molds, they are ground for a smooth edge . Which generates a lot of dust. Dust, coal, metal fumes, carbon monoxide, noise and heat are well known health hazards. They can cause lead poisoning, metal fever pneumoconiosis, chronic bronchitis,

emphysema, Cancer and skin ailments apart from burns, injuries and carbon monoxide poisoning²⁸

After the ingots are brought out of their molds they are sent to smaller firms for making flats out of them. The ingots are Hot rolled and passed through conveyor belts from which it is pulled out by the worker with the help of a long forcep. At this stage the flats are red-hot. I have watched this process, standing about 10 feet away from the factory. The heat was unbearable for me to bear for 10 minutes continuously. The workers work continuously on it for hours with just rags tied to their legs and feet.

Stage 2: Cutter unit

Later the are sent to be cut into square pieces on a cutter machines. The risk of physical injury to workers comes from the high speed of the cutter machine. Any in-attention could mean the loss of a limb.

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Stage 3 : Hot Rolling Unit

The square pieces are again hot rolled for making sheets. The pieces are first heated in an oil fired furnace. Two workers with the help of a stick push and pull these square pieces in and out of the furnace. The temperature is extremely high, the atmosphere hot. Burns can be sustained from the extreme heat. The red hot piece goes to the rolling machine where it is pushed in and out with a six inches long forceps. The protective gear consists of cloth gloves in the hands of the worker. A few buckets of cold water were kept next to the machine into which the workers kept dipping their hands from time to time to cool them. This method may give them immediate relief but in the long run the sensations in their hands get numbed.

Stage 4 : Acid Washing

This is the stage of acid washing, when

rolled sheets are dipped in acid tanks for cleaning. Later, it is washed by a spray of water. Till very recently, this job was done by women and children with a piece of cloth. In many units, the practice still continues. The extremely hazardous carbon monoxide, carbon dioxide, and sulphur dioxide at the former stage and dust at the later are inhaled by workers. In addition, sharp edges of the sheets cut the hands of the workers handling them. They use plastic boots and plastic gloves for protection but they cut easily by the sharp edges.

Stage 5 : Cold Rolling Unit

The sheets are further pressed in cold rolling units. This stage is considered the most dangerous of the steel utensil making processes, as the maximum number of accidents and deaths have occurred at this stage. The reason for this that when the hard cold sheets are pressed under the rollers pieces of steel break and fly all over the place. They hit the worker with so high

velocity that it causes immediate death or an injury so great that the injured part of the body is usually amputated. If it remains inside the body, it is removed only through surgery.

The narrow space of the room, inadequate lighting uncovered machinery, damp and dirty floor and lack of any protective gears all add tremendously to the frequent occurrence of accidents.

As a safety measure, I have once seen Mistry wearing a bulky sheet of steel hanging from his neck and covering his body. Though this is oprotective measure it is a nuisance to his work that most of the time he keeps it aside while working. The rest of the workers do not have this gear. Besides, they are the ones who are the least aware of what is going on and get injured most frequently. These workers told me that the accidents occur more if the quality of metal is bad that is, if it had a lot of impurities.

Stage 6 : Pressing Unit

These sheets go to pressing units where they are transformed into steel utensils. Here we have huge power presses, fixed on the floor in an extremely unstable manner. It is a fast moving machine. The worker working with this machine should also move fast and if he does not keep pace with the speed of the machine there is a danger of his hand coming under the machine.

After this to smoothen the utensils they are moved fast on a lathe by pressing the utensil with a wooden bar. The worker does this by using his chest and underarm while the utensil rolls on the machine at high speed. Besides the risk of injury and chest pain caused by the constant pressure on the wooden, there is also the danger from the fine dust that comes out from the utensil. This hazardous dust is inhaled by the workers. The continuous fast and monotonous work on these machines for twelve long hours without

sufficient rest makes the workers highly susceptible to accidents.

Stage 7 : Polishing Unit :

In the end of the utensil goes for polishing. Here the risk to workers health is from dust and chemicals. ~~And it~~ it affects the skin, eyes respiratory tract of these workers.

Below is the list of accidents and injuries during 1988-1989, from the records of the IFTU Union.

No. of Accidents in Steel Units of Vajeerpur
Industrial Area. From the Records of the Union

<u>No.</u>	<u>Name of Injured</u>	<u>Month of Accident</u>	<u>Type of Accident</u>	<u>Unit No.</u>
1.	NIMBULAL	JAN.1988	RIGHT HAND AMPUTATED ON BEING HIS BY THE STEEL LEAF	A-103/6
2.	JHANGRU YADAV	JAN.1988	RIGHT HAND AMPUTATED BY THE SAME	A 102/5
3.	CHETRAM	JAN.1988	HIT ON THE STOMACH DIED IMMEDIATELY	A 79
4.	SANKAR NAGAR	JAN.1988	HAND BROKEN	B-28/1
5.	DAMMAR BAHADUR	JAN.1988	ON BEING HIT ON THE EYE ONE EYE LOST	A-76
6.	SHANKAR BAHADUR	JAN.1988	LEG HIT BY THE LEAF	c-36/2
7.	LAKSHAN SHAH	JAN.1988	LEG BURNT BY ACID	C-55//1
8.	UPENDRAGIRI	JAN.1988	DIED	A-96
9.	SHEETAL PRASAD	JAN.1988	RIGHT HAND LOST	A-96/2
10.	RAMKUMAR	JAN.1988	RIGH FOOT LOST	A-96/2
11.	JASVANT SINGH	FEB.1988	LEFT FOOT CUT	A-103
12.	PAPPU	MARCH 1988	HIT ON THECHES DIED	A-115
13.	FURANG NEPALI	MRCH 1988	HIT ON RHW NWE DIED ON THE SPOT	A-132
14.	LALA BAHADUR	MARCH 1988	STOMACH HIT BY THE STEEL LEAVE	C-39/2

15.	AVADH KISHOR	MARCH 1988	STOMACH HIT BY THE STEEL LEAVE	B-28/1
16.	RAJ KISHORE	" "	" "	B-28/1
17.	AMAR SINGH MISTRY	" "	LEFT HAND LPG CUT BY THE MACHINE	B_28/1
18.	HARISH	" "	FINGERS UP BY THE DEAF	A-25
19.	ARUN	APRIL 1988	HOT ROLLFELLOW HIM. DIED ON THE SPOT	A-138.
20.	SHANKAR BAHADUR	APRIL 1988	RIGHT HAND AMPUTATED BEING HIT BY STEEL LEAVE	B-28/8
21.	PRABHU YADAV	APRIL 1988	RIGHT HAND INSURED	A-25
22.	MANOJ	MAY 1988	LEFT HAND INJURED	A-25
23.	GOPI YADAV	MAY 1985	INJURED STOMACH BY THE LEAF	B-28/8
24.	SANGRAM SINGH	MAY 1988	" "	A-25
25.	GOPAL SINGH	MAY 1988	LEFT HAND INJURED	632/1
26.	RUDAL	MAY 1988	INJURY ON THE THIGH BY THE LEAF	B-32
27.	GOPAL PRASAD SHARMA	JUNE-1985	LEFT FOOT INJURED BY THE LEAF	C-39/2
28.	OM PRAKASH PANDEY	JUNE 1988	INJURED HIS FINGERS ON THE POWER PRESS	Shade 99
29.	SATAM KUMAR	JULY 1988	RIGHT EYE INJURED BY THE LEAF	A-28/1
30.	JAGDISH PRASAD	JULY 1988	STOMACH INJURY BY THE LEAF	A-78
31.	BAIJNATH SHAH	JULY 1988	LEFT EYE INJURED BY BY THE LEAF	A-50
32.	NARENDRA KUMAR	AUGUST 1988	HIT ON THE GRINDER	Shade 29

33.	SHIV PUJAN	AUGUST 1988	HIT ON THE NECK	B-20
34.	OM PRAKASH	AUGUST 1988	LEFT HAND AMPUTATED	B-29
35.	MEGHA	"	FINGER CUT	Side 95
36.	BRAHAM DEV	SEPT.1988	INJURED SERIOUSLY ON THE FOOT LEFT HAND FINGERS CUT	B-32
37.	NIRMAL KUMAR	" "	LEFT HAND FINGERS CUT	Shade-14
38.	SATYA NARAYAN YADAV	SEPT.1988	LEFT THOUGHT THIGH SERIOUSLY INJURED BY THE LEAF	A-132
39.	RAJESH RAJ	SEPT.1988	" "	A-132
40.	NOOR BAHADUR NEPALI	SEPT.1988	LEFT HAND INJURED	A-75
41.	JEEVAN	Sept.1988	RIGHT EYE INJURED BY THE LEAF	SHADE-90
42.	BIRENDRA LAL	OCT.1988	DIED ON BEING HIT BY THE LEAF	C-55/1
43.	RAM BAHADUR	OCT.1988	DIED ON BEING HIT BY THE LEAF	B-28/3
44.	ARUN KUMAR	OCT.1988	"	B-68/4
45.	KESH BAHADUR	OCT.1988	ARM INJURED	B-67
46.	RAM CHANDRA.	OCT.188	RIGHT ARM INJURED	C-37/2
47.	SHANKAR MAGAR	OCT.1988	HAND INJURED	Shade-90
48.	RAM PRASAD YADAV	OCT.1988	LEFT LEG INJURED	A 101/3
49.	SHANKAR BAHADUR	OCT.1988	HAND INJURED	Shade-90
50.	PARAS	OCT.1988	" °	Shade-90
51.	IKMAN	OCT.1988	THIGH INJURED	A-85

52.	SHARAM	OCT.1988	STOMACH INJURED BY THE LEAF	A-67
53.	RAM BAHADOOR	OCT.1988	STOMACH INJURED	A-66/67
54.	RAJDEV CHOUDHARY	OCT.1988	RIGHT LEG SERIOUSLY INJURED BY THE LEAF	A-7
55.	LAKSHMAN	OCT.1988	RIGHT HAND INJURED	Shade-45
56.	RAMKUMAR	NOV.1988	ONE LEG INJURED	A-27
57.	MOHAN SINGH	NOV.1988	LEFT HAND INJURED	Shade-45
58.±	RAM VILAS MISTRY	NOV.1988	LEFT HAND INJURED	Shade-45
59.	CHATTU CHOWDHARY	NOV.1988	BONE BROKEN OF OF LEFT LEG	SHADE-71
60.	RAM SAGAR	NOV.1988	RIGHT HAND INJURED	A-103/9
61.	KHALIL	NOV.1988	RIGHT HAND INJURED	C_9/3
62.	SAGAR PRASAD	NOV.1988	LEFT LEG INJURED	B 46/9
63.	SHUBH NARAYAN	DEC.1988	LEFT EYE INJURED	A 63/1
64.	BIRENDRA	DEC.1988	RIGHT HAND INJURED	A-63/1
65.	VIJAY KUMAR	JAN.1989	RIGHT EYE INJURED	A-74
66.	NIRANJAN	JAN.1989	LEFT HAND INJURED	A-74
67.	NATHU	JAN.1989	PENICE INJURED BY LEAF	A-74
68.	BRAHAMDEV	JAN.1989	EYE INJURD BY THE LEAF	A-127
69.	RAMSAHAY	FEB.1989	FOOT INJURED BY THE LEAFT	A-10
70.	KISHAN BAHADUR	FEB.1989	RIGHT HAND INJURED	A-93/10

71.	DAMAR BAHADUR	FEB.1989	RIGHR EYE INJURED	B-76
72.	RAJKUMARQ	FEB.1989	RIGHT HAND INJURED	B-20
73.	JOGINDRA	FEB.1989	RIGHT HAND FINGERS CAME UNDER THE MACHINE	A_143
74.	MARKADYA JHA	FEB.1989	FINGER CUT BY THE ROLLER MACHINE	A-91
75.	KRISHNA NANDAN	FEB.1989	RIGHT HAND INJURED	A-74
76.	NAVAL RAI	FEB.1989	FACE INJURED BY THE LEAF	A-123
77.	SHIVKARAN	FEB.1989	RIGHT LEG INJURED	A-103.
78.	DINESH PAL	FEB.1989	LEFT HAND FINGERS CUT	A-102/5
79/.	CHOTE LAL	FEB.1989	RIGHT HAND INJURED	A_95
80.	ONKARNATH	FEB.1989	FACE INJURED	C-17
81.	AVADH RAJ DUBEY	FEB.1989	RIGHT HAND INJURED	C-17
82.	KISHAN RAJ	FEB.1989	RIGHT LEG INJURED	B-20
83.	MARJINDER SINGH	FEB.1989	RIGHT HAND FINGERS CUT BY THE CUTTER MACHINE	A-143

If we analyse these record, we find 8 cases of death, 13 cases of amputation, 6 cases of eye injurie. 1 case burn case and 55 cases of severe injuries and wounds . All these cases were recorded in just one year. This should give us an idea about the hazard and health problems the workers faced in Wazirpur . Most of the deaths and injuries recorded above took place in cold rolling units where pieces of steel break out of the steel sheet and hit the workers. In addition in the presses workers have not only been wounded but have also suffered amputations. A death took place in a Hot rolling unit due to the fall of a hot roller on the worker.

These are the visible , obvious cases, which the worker activists of the union - most of them are illiterate or semi - illiterate - could record without any hesitation, as work related health hazards. However, there must be many cases of workers suffering from occupational health problems which are not so easy to observe and therefore have not been recorded by the union

activists. I found two such cases in the course of my discussion with the workers. Below is the case history of these two workers.

1. Jagarnath. (Kurmi). His father was a landless peasant. He came to Wazirpur 12 years ago with the help of a fellow villager who was already employed in a steel unit. Joined A-54 Hot Rolling Unit No. (The owner of the unit is known as 'Tuiya') Jagarnath has worked there for 10 years. His father, mother, wife and two children i.e. a six month old boy and a 2 year old boy live in the village.

Towards the tenth year of his job he started to experience weakness, dizziness and black outs. He asked his 'Malik' (owner) to give him leave so that he could go home, and improve his health. The 'Malik' told him to go on your own risk i.e. the risk of losing his job. Jagarnath returned to his village and stayed there for two years. During this period, he sought the help of all kinds of health pract^{is}iners,

Hakims, Vaidis and allopathic doctors. He felt no improvement. He went back to Wazirpur. Meanwhile, owner had sold off the factory and had opened up a petrol pump. Jagarnath felt too weak to work in a steel unit. At present, he has a stall and where he sells eggs to workers.

In the ten years Jagarnath worked in a steel unit, he had done very well. From an unskilled worker earning Rs. 400 per month he had become one of the owner's favourite 'misry', who was taking home a pay of Rs.1500 per month, much above the basic minimum for a skilled worker.

Today, Jagarnath, barely manage Rs. 600 per month. He is unable to send money back home to his parents, wife, and children as the cost of living in Wazirpur has increased tremendously and he requires this money for his own survival.

Jagarnath does not know that his health problems could have arisen due to his work with

the Hot rolling machine. The fact that he could ask for compensation from his Malik is beyond his imagination. Even if he is convinced or made to understand the fact, where is the factory in which he worked for ten years, the factory that has left him with a deadly disease, a disease which has incapacitated him for the rest of his life he has to live. For him, these health problems are like any other general health problems caused by his poverty, for which no one is responsible.

2. Santosh Kaur

Her husband Jasbir worked in a steel unit seven years ago. He died of a heart *attack* and left her with the responsibility of taking care of three children -two boys, aged 2 and 6, and one daughter who at a 'marriageable age'. Santosh became the bread earner of the family and took up job in a polishing unit. Although her salary was meager for the job she had to do continuously for 12 hours, it took care of her and her children. She even managed to get her daughter

married. But then suddenly, a year back she developed breathing problem and chest pain. This slowed down her work. The malik asked her to leave because she had become a liability to him now. She begged him and he promised her that he will take her back if her health improves. Meanwhile, she was asked to send her elder son who was eleven years to replace her. Since then her elder son is working. She is trying to get her breathing back to normal. However, according to her, it is only deteriorating day by day. The chest pain has also not gone away. She says no medicine seems to have any effect on her condition. Santosh also cannot think of her problem as related to her work. And like Jagarnath, she can't imagine getting compensation from her Malik. She is hopeful that one day she will find the right doctor who will cure her of her disease.

These two cases indicate the fact that there is a great deal of confusion among workers about occupational diseases. The common

ailments such as coughs, cold, malaria, T.B., cholera, gastroenteritis and work related disease are seen together as arising out of poverty. Although many of them said that the irritation of eye and skin, breathing problems, chronic bronchitis and cancer are more prevalent amongst the workers, who worked in steel units than their counterparts, in the village, it could have a relation. The workers are ignorant of the labour laws relating to health and safety and the right of workers to demand better conditions of work. Therefore they accept injury, ill health and disease as part of the job they are doing.

On being injured, the worker either hides his injury and continues to work as long as he can. Or, he gets it privately treated by 'quacks' or private doctors. If the injury is noticeable, the worker goes to the owner who gets it treated through a doctor of his choice. It is rarely the case that any accident is notified to someone else besides his fellow workers, his employer, or a doctor.

This makes us ask the question. If work in the steel units is so dangerous and, there is no safety, compensation or relief why do workers continue working in these units?

To answer this question we need to know:

- (a) Where they come from? and
- (b) Why they accept such an inhuman existence?

SOCIAL PRESSURES AND THE STEEL WORKER

Workers in our study sample are mostly first generation immigrant workers, who have immigrated from rural areas of Bihar, Uttar Pradesh, Haryana, Madhya Pradesh and Nepal. Most of them still have strong links with their place of origin. Some own a small piece of land, some medium sized piece of land and some have no land. The one's with no land are totally dependent upon agricultural wage work. Those who have a small piece of land also work on other people's land in their extra time for extra money which they require for investment on their own land. The holders of medium sized land also require cash input to ensure minimum output in today's commercialised agriculture. Therefore, each worker in Wazirpur had different reasons and compulsions for coming here .

Ram Pukar a low caste agricultural laborer, says higher income and greater social and moral freedom in the city were his reasons for

coming to Wazirpur. Another worker, Om Prakash Tiwari, who owns 40 acres of land in his village, came because he felt he can save more and invest this savings in agriculture. Anyway, his brothers are there to take care of he land.

Uaually migration to the city is made feasible because another member of the same village who has a job and a place to stay in the city helps the young migrant, usually a boy between 14 to 19 years age, find a job. The help of a labor contractor might also be sought. The first job that a migrant usually gets is that of an unskilled laborer such as a helper on loader. The wage he receives at this stage is extremely low. With such a low earning the young migrant is not able to send any money home. It takes around 4 to 5 years for the person to get the job of a semi skilled worker. He now gets a wage hike. This helps him make a visit home every year as well as send some money home. During one of the vists he gets married and starts a family.

When a worker leaves for his village he has to give up his job. On coming back he has to find a new job all over again, which means that he may remain unemployed till he gets a job. The new job may fetch him a higher wage than before. This is because the new job might be more hazardous or require a higher level of skill which the worker has already acquired. At times he even lies about his skill. If the situation is bad, the worker may get a job that requires less skill and fetches him a lower wage in comparison to the earlier one. Thus, on the whole the worker has to frequently face long periods of insecurity as far as his job is concerned.

According to most workers, very few workers of Wazirpur live with their families. In the course of my discussion with two hundred workers, I hardly met ten workers who had their families living with them. According to Om Prakash, a worker in Wazirpur, the wage that he earns is too 'low' for his family to survive in the city according to their 'standard of living'.

On being asked, "what is this standard of living?" He said "this place is too congested, dirty and unsafe for my wife and children, Secondly, many of the things which my family gets free in the village such as fuel, water, vegetables, transport etc, will be necessary expenditure if they come and live with me in Wazirpur I will have to pay for these things from my own pocket." He himself does not mind living amidst filth, unsafe and congested environment and prefers to send some money home to compliment the family income in the village. He wants his family to have more comfortable life.

Workers like Om Prakash, who are separated from their families hope to earn and save enough so that they can move back to, the village one day with improved social status and more power. Om Prakash can think so because he has 40 acres of land and a parental house in the village. There are also many workers who do not own land or have a parental home in the village.

These workers have no option but to bring their family over to live in the slums of Wazirpur. Though a worker of this kind may not face as much uncertainty as the kind of worker mentioned earlier the fact that his entire family lives in Wazirpur makes him economically worse off.

Another worker, Sohan Lal who is a 'mistry' gets Rs.1500 per month. He is the favorite of the 'malik' (owner) because he manages the other workers and takes responsibility of meeting production targets. He also gets some extra money from the owner whenever he is in a good mood. For him there is no point in leaving his family back in the village. He has his family living with him. One reason could be because he can afford to keep them in Wazirpur.

Om Prakash Tiwari feels that Wazirpur is an unsafe place for women and children. This is because lonely workers indulge in alcoholism, prostitution, drugs and gangsterism. Sohan Lal, however feels that Om Prakash Tiwari's reasons

are not good enough for living away from one's family. In fact loneliness only worsens the situation. Any way, and these days even villages are not safe from these ills of society.

Given the constraints of time and my gender, it was difficult for me to determine how far the lonely workers were a problem and to identify the category they belonged to.

A worker in Wazirpur works for twelve hours continuously. After that he goes back to his jhuggi and cooks his meal for himself. There is no one to talk to except the same workers with whom he worked the whole day. In such a situation, it is possible that many of them take recourse to alcohol and prostitutes. To get rid of loneliness and boredom, to numb the pain in their bodies and to replenish themselves. It is the operators of these services who reap the benefits of the worker's social circumstances. However, these operators are not the sole beneficiaries. The role of the government, which gives them

the license to open liquer shops in such areas, and the role of police, which helps them run these shops, only brings out the connivance of the officialdom and reveals an unholy nexus that predate on lonely workers.

Workers complained that when an accident accured the local police usually intervened and threatened them to keep their mouth shut about the incidence. Infact they help the owner take the injured worker to a private practitioner of his choice.

Given the fact that the working hours stretch upto twelve hours a day, the workers hardly get any time to interact with other workers. Where they live, their interactions are confined to mostly workers from their own village and caste. Workers also cannot establish enduring relationships because they are constantly thrown out of their jobs whenever they assert their right to make demands pertaining to their rights. All these factors are

big hindrance to their unionization and for any collective action on their part.

Ram Vilas was a mistry in a Hot rolling unit and earned Rs.1200 per month. When a worker in his unit got injured by the machine, Ram Vilas took him to the owner and asked him to get the worker treated. The worker was given treatment but Ram Vilas was thrown out of his job. Since then no other steel unit owner in Wazirpur has shown any willingness to give him job. This situation reflects the 'unwritten' collaboration and unity of the owners of steel units. Today, Ram Vilas pulls a rickshaw and barely manages Rs.600 per month.

There are many trade unions in Wazirpur Industrial areas. Besides a few central trade unions mostly affiliated to the left parties, a large number of them are local trade unions. These local trade unions are run by the local congress leader or contractor or by the head of a religious group or caste group. Leadership of these unions

achieved through money and muscle power. Many of the union leaders work as middlemen between laborers and management. They make money at the time of accidents and injuries. There has never been a collective movement launched by all these unions on the question of health and safety. They work separately in their own sphere of influence. Cases are fought, separately for each industrial worker who gets injured.

A few years back the IFTU affiliated unions had tried to launch a collective movement of all workers on the question of safety and health in steel units of Wazirpur. This movement weakened in a few months due to the non cooperation from many other unions.

Most of the workers, I interviewed were illiterate. Though many of them went to school till class sixth, the workers were ignorant about their rights and the legislations relating to them as workers. Infact Shamim a steel unit worker, said, "What is the point in knowing about these

rights or the legislation? The law only helps those who have money. The government officials come, they visit the owner in his office and go away. An official neither has talked to the worker nor has tried to find out his side of the story.

Interestingly, in Wizerpur the workers do not aspire to make their working conditions better off. Rather, they tend to take it for granted that the situation will not improve. Many of the workers told me that if they could save up enough money, they would like return to their village and get back to farming or open up a shop. In reality however such dreams seldom come true. Bhagat, for instance dreamt of returning to his village one day with lots of money. But today he has shelved the idea he is an expert circle cutter. He takes jobs on contract and charges piece rate for it. To manage his work he employs three helpers. In addition to being a circle cutter, Bhagat works as a labour contractor who brings new workers from his village to work in the steel units in Wazirpur.

This then is the social scenario of workers working in Wazirpur stainless steel units. It is a scenario of poverty, uncertainty and segregation. It is a situation where unionization is extremely difficult, and one which breeds a sense of fatalism. The day to day struggle makes it beyond the workers means to think of regular medical check ups or to demand for their safety in the factories. They have to think of their survival and their limits. This consciousness imagination and activism. It is a situation that finally benefits the owners of steel units.

Some of these trends vividly manifest in the two cases presented below. 1. Ram Pukar Rao, 31 years who hails from Silimagh in rural Bihar, belongs to a family of agricultural labourers. Life has been tough and Ram and his three brothers have seen their father working hard in someone else's land for a paltry sum. The problems the family faced was further compounded by the fact that they belonged to a low cast. The fact that Ram belonged

to a low caste exposed him to overt social discrimination in the village..

Ram took a job in the city. So did his brothers. All are employed in the unorganized sector in the city. In a way, it was response to the difficult social and economic situation they found themselves in the village.

Ram lives in Wazirpur with his wife and his eldest daughter. The younger one is with the paternal grand parents in the village. Ram's wife is seriously ill. She had come from the village six months ago and is undergoing medical treatment. From the time he arrived in the city from the village, Ram has been working in one or another of the many steel utensils making units in wazirpur. Every time he visited his parent in the village, he lost his job and started afresh in a new unit. As a result, in the land ten years, Ram has changed his job at least six times.

The work that Ram did was taxing. It

involved long hours of hard work. The near absence of any leisure time limited Ram's interaction to his immediate family and to members of his caste and village. he was neither a member of any union nor did he participate in any trade union activity.

In his last job, he was injured when his fingers came under the machine. The owner immediately filled up an ESI form on his name and took him to the ESI hospital where he was given seven stitches. (Blank ESI forms pre -signed by the ESI officials are kept with each steel owner in Wazirpur). His job was terminated later and since than he is unemployed.

2) Vijay Kumar 24 years

Vijay Kumar hails from Sitamarhi in rural Bihar where his nature father, wife and one child still there. He came to Wazirpur two years back. Since than he has changed three jobs. Like Ram Pukar Rao, Vijay Kumar also comes from an

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agricultural labourer background. And the same reason which brought Ram Pukar, brought Vijay to Wazirpur: a hope for a better paid regular job. Vijay Kumar was lucky, for within two years he became a 'Mistry' and started earning Rs.1200 per month. But the good fortune did not last for long. At a young age of 24, he sustained an eye injury from a flying piece of steel and consequently lost his right eye for ever. The owner gave him his salary for two months while he was undergoing treatment. Later his job was terminated but an ESI card was filled on his name on the basis of which he receives two hundred and fifty rupees every month.

Vijay Kumar is under the impression that ESI is paying him this Rs.250 every month. At the same time, he has neither asked for the compensation nor has he been examined by any medical board. He also does not sign anywhere for receiving this payment.

Socio Economic background of the Entrepreneur in



Wazirpur

To get information from the entrepreneurs was an extremely difficult task. They were extremely pricy and sensitive in divulging information about their production units. An important reason for this could be the fact that these units are illegal. Most of the units are unregistered and proper accounts are not maintained. In addition there is massive tax evasion. The nexus between the entrepreneurs, the Department of Industries, the labour Inspectorate and, the politicians was very apparent. Many talked about it. A keen observer can "see" the nexus in operation. Inspite of it all, it is difficult to establish the existence of the nexus concretely.

An interesting impression that I got both from my discussions with a number of entrepreneurs and from the observations I made of the units is that the entrepreneurs are not

really interested in investing money any more than what is bearly required on their men and machines. This is because they do not feel secure about the future of their business . They feel that they would not be able to remain in business if politicians not supportive of their business came to power and /or policies, such as the licensing policy and the protective policies toward the small entrepreneurs changed drastically. Thus it seems that in general, the entrepreneurs have one short term interest - make as much profit as possible today even at the expense of workers health. A long term perspective in which the welfare of the workers is taken care of and in which profit is made over a longer period of time does not occur to the entrepreneur as sound practice.

I came across a number of correspondences with the government officials at the office of the Association of Entrepreneurs. In these, they have demanded for the registration of their units and for the provision of all those

facilities which an industrial area as big and as important as Wazirpur should get. In fact, the construction of a 'combined effluent treatment plant' at Wazirpur has been sanctioned by the government. The Central Pollution Control Board has designed the scheme and Delhi water supply and sewage disposal undertaking is going to build effluent treatment plant. The project would receive a subsidy amounting to 50% of the cost from the Delhi Administration. The remaining 50% estimated at Rs.75 million, will be obtained from the industrial units of the area. A units contribution will be in proportion to the pollution generated by it. The industrialists have already made their first instalment amounting to Rs.25 lacs, the second instalment is under collection.

This, according to the secretary of the Association, is a way of getting their units established in the area. He said "We don't care how much pollution will be controlled by the plant. Our interest is getting rid of government

hassles. Once we have paid the money for the water treatment plant it gives us the legal right to stay and continue the business, even if there is no official registration of our units."

This shows a contradiction in the entrepreneurs attitude. The fact, that they want to continue with their business indicates that it is a profitable one. But when it comes to the question of workers health and safety and of providing them with decent wages, they become unsure about the future prospects of the business. The nexus between the entrepreneurs and the government and their mutual apathy towards the workers is quite evident.

The role of government ^{and} legislation vis a vis the health and safety of the workers, is our next area of concern.

The role of government and legislation

Most of the steel utensil making units

are illegal. When the Development Commissioner was interviewed by Mukul Sharma in 1988 he said, "The Wazirpur Industrial area was developed for cloth manufacturing but in last 10-12 years, hundreds of steel utensil making unit have come up without taking prior permission from the Industrial office, it is because this has turned out to be a more profitable business with huge market for it's products". He also said that, "in 1984 these industries were announced dangerous and unhealthy for the working people in it and it was made compulsory for any new unit to take a permission from Ministry of Environment, before starting a unit " In spite of this, thousands of units are in operation running and new one's are being set up constantly. The Department of Industries does not stop them and Labour departments say it is not their job to stop illegal units from working..

The following are some of the important legislations to safeguard worker's health.

- A. Factories Act, 1948.
- B. The Workmen's Compensation Act 1923.
- C. Industrial Disputes Act, 1947.
- D. The Employees' State Insurance Act, 1948.
- E. The Maternity Benefit Act, 1961.
- F. The Payment of Wages Act, 1961
- G. The Minimum Wages Act, 1986.
- H. Provident Fund and Family Pension Act.
- I. The Contract Labour (Regulation and Abolition) Act, 1970.
- J. The Inter-state Migrant Workmen (Regulation of employment and conditions of service) Act, 1979.
- K. The Environmental Protection Act, 1986.
- L. Air Pollution Prevention Control Act, 1981.
- M. Water Pollution Act, 1974 (Prevention and control)

In spite of all these laws, the workers condition has not improved. The reality is that the steel worker gets a monthly income much below the prescribed minimum wage by the Delhi

Administration. Secondly, there is no proper distinction made between skilled, unskilled and semiskilled workers' wages. Thirdly there is no job security for the worker. He/she can be thrown out of job without any prior notice or compensation. And lastly workers constantly suffer from occupational diseases and accidents. These are reported but not recorded. In such a scenario, the role of labour office is quite clear.

Information gathered from Labour Commissioner's office.

According to the labour Commissioner, there are regular checks made for the enforcement of labour laws. In 1987, 69 units were surveyed in Wazirpur, G.T. Karnal Road and Rajasthan Road to check if the labour laws were followed. Another survey was taken up in 1985 of 63 units. In these units, 23 were found flouting the Factories Act and 47 were found flouting Minimum Wages Act. Out of these units only 23 units were prosecuted by

the Labour Department. This is the picture we get from the survey conducted by Labour Department of just 60 to 70 industrial units in large industrial area as that of Wazirpur, G.T.Karnal Road and Rajasthan Road.

Some of the reasons given by the enforcing agencies to explain this state of affairs are:

1. Lack of jeeps to carry out inspections and ensure enforcement.
2. Lack of staff - only four factory inspectors for the Delhi region, which has more than 6000 registered factories, and
3. Only one medical officer and no radiologist or other qualified supporting staff. In this situation they claim that the only matters they can look into are the one's which are brought to their notice.

The worker in a steel utensil making units has no record of his employment and can be thrown out of job any time. Without any record of

employment, he cannot go to the Labour Department and lodge a complaint. If unions take the issue to the labour department it is usually not heard. Even if these complaints are heard. At the most the labour department can do is prosecute the offender but the entire procedure of prosecution is long and at the end the offender may be merely asked to pay some fine if proved guilty. The long time the prosecution takes enables the employer to manipulate the record to suit the provisions of law or to "manage" the workers suitably. In other words, practically all the labour laws there are enough loopholes for the industrialists to get away without paying anything.

The health and safety aspects of work come under the two specific acts : 'Workmen's Compensation Act' or The Employee's State Insurance Act. Since the steel utensil making units do not come under the Factories Act, i.e. since they are illegal these laws are not applicable to them.

In 1987, Factories Act, 1948 was amended to include those industrial units which involve dangerous processes of work. In 1989, a new policy for Delhi based on the amended law was prepared. Till date the policy has not been implemented.

Right now, these units come under the Shop And Establishments Act. In this Act there are no provisions for health and safety as there are in Factories Act. There is also no control of pollution emanating out of these steel units. In fact, for the Labour Department these units do not exist, as they are "illegal" or "unauthorized". This has led to increasing levels of pollution and number of accidents in the area.

Now let us look at the scope of the Factories Act, Employees State Insurance Act and Workmen's Compensation Act with regard to the control of accidents and diseases in the area.

Factories Act 1948 (Amended in 1984)

It ensures the health and safety of workers by making owners liable to provide certain basic facilities for health and safety. This law is extremely weak in protecting the interests of the workers as it does not give them or their unions any power to take any active part in the process. It is only through the Labour Inspectorate that workers can register their complaints. The full autonomy to the inspector allows him to take side, and he normally takes the side which benefits him most. This is usually the side of the owner who can pay them to keep their mouth shut.

Workmen's Compensation Act 1923

It makes compensation a legal obligation to the workers for occupational diseases and accidents. There are very few workers in the unorganised sector who can claim compensation for occupationally caused disease or injury as it becomes extremely difficult for them to show their job records or to prove the causes of disease or

accident. Secondly the whole process of legal litigation takes many years. During this period if the worker has no other source of support (which is so in most cases of the unorganised sector workers) it becomes very difficult for such workers to carry on the litigation.

Third, if the worker had removed the safety equipment on his own, then he has himself to blame for his injury. In Wazirpur industrial area, the safety equipments provided to the workers are so old, rough and inconvenient they are hardly used by the workers. (for example, the steel plate hanging from the neck of the workers in cold rolling units). Fourth, according to the law only those workers who have been absent from work continuously for three days due to work related injury or disease can take recourse to law. In steel units there are many injuries which do not fit into this time frame. For those which incapacitate the worker for three days or more during which he absents himself from work, he is quickly removed from the job. Therefore, inspite

of injury or illhealth, the worker continues to work or takes whatever compensation the owner is ready to give and leaves for home. This is because if he takes recourse to law, he will not get a job in any other industrial unit of Wazirpur. All owners unanimously boycott such workers.

The above are the reasons why we hardly find any worker injured or disabled by the nature of his work resorting to the Act for compensation. Most workers "agree" to accept a few thousand rupees from their for the injury or the disability.

The laws do not make the owner liable to provide a compensatory job to the worker. The only punishment there is meted out to him by the law is the compensation. They would prefer paying the compensation than improving the conditions of work. It works out to be cheaper.

According to the officials there is

hardly any machinery to implement the Workmens Copensation Act. The labour office I went to had no registration of any complaint from the workers of steel utensil units in Wazirpur.

Employees State Insurance Act

The same limitations were observed with the ESI provisions. These provisions apply to workers only if they have paid their part to ESI for a period not less than thirteen months. The ESI officials and enterpreneurs have "understanding" with each other on the basis of which the owners get ESI forms filled by the workers but kept the forms with themselves. Only when a worker's case gets out of hand and cannot be tackled by a private practitioner, the card is issued to him back-dated so that he can get the treatment .

The ESI dispensaries are badly equipped. For instance, a seriously injured worker can not be treated in ESI, as there are no facilities for

operation. He is usually sent from one hospital to another.

Lastly, and most importantly, the limitation of ESI is that it has no power to control the injuries and health effects of work at the work place itself. It therefore 'treats' the symptoms not the cause.

Government Machinery

The statistics available with the Labour Department indicate five cases of accidents in year, 1988.

- (1) Janata steel products In Wazirpur Industrial area (A-27) on 28-8-87, a labourer, Vishwanathan working with Double power press-machine had his right hand cut . The unit was unregistered. Labour Commissioner was informed in 1988. No action has been taken as yet.

- (2) Wazirpur Industrial area. In Agarwal Enterprise (B 28/1) On 23.3.88 . A worker was seriously injured by a piece of steel pierced in his stomach. Unit was unregistered. The worker had ESI card on his name, therefore labour department did not take any action.
3. Wazirpur Industrial area. Steel rolling mill and Sons (A-41) On 15.4.88. On being hit by a leaf of steel a worker, Krishnan, died on the spot. Unit was unregistered. The Labour Commissioner's office prosecuted the unit. No one knows the present state of the case.
4. Wazirpur Industrial area Steel ball bearing private limited . On 9.4.88 In an accident a worker Nagendra Chowdhary died. unit was registered. Labour office presecuted . the unit on 11.10.88. The owner paid a fine of Rs. 500 .

5. Rajasthan Industrial complex. Bausal metal Industries Pvt.Ltd. On 22.10.88. A worker Nafe singh died of burns and three other workers, Munni Lal, Jawahar Lal and Lal Mohan, were injured Unit was registered and was prosecuted by the labour department .

Besides these, the Labour Department said that they have two more complaints from Wazirpur Industrial area . These were of Maiser's Goyal Steel Industries (B 68/4) and of M/S Gyanchand (C-55/1). Both units are unregistered. No action was taken as there is no concrete information regarding the case.

In contrast to information available with the Labour Department an IFTU union conducted partial survey amongst units where they were influential, for the period 1987-89, showed that during this period 8 workers were killed and 75 injured.

Industries Department

According to the Department of Industries, there are 94 schemes planned for the industrial development of Delhi under Seventh Five Year Plan. Out of these, the two main schemes are planned to update technology and modernise the industries and secondly to control pollution of these industries.

In Wazirpur Industrial Area the steel utensil making industry is using an extremely backward technology. The pollution created by the process is tremendous both inside the factory premises and outside it. In spite of that the department has no concrete plan to update technology in this industry.

The Local Police Station

When a worker dies in an accident the local police station records an F.I.R. on his name

and it's technical officers check the machine and the cause of death. If the owner is found guilty, under the Indian penal code section 287 and 304 (A) a case is filed against him.

All this is really on paper. In reality the situation is different. The Police Superintendent with whom I talked stated that in the last few years, there was never a need to file any such litigation, as the factory owner, the affected worker, or his family members usually come to some mutual agreement.

There were records of only seven deaths. In all these cases an F.I.R. was filed and now they are untracable cases. The police believes that some agreement has taken place between the owners and the workers. They also believe that most of the accidents take place due to the negligence on the part of the workers and they unnecessarily create a nuisance. The workers however, told me that it is the police who put

pressure on them to accept the compensation given by the owners.

Cases registered with the local police station, which have been announced untraced by them.

S.No.	Date	Unit
1.	15.4.88	
2.	12.6.88	A.80/2
3.	9.7.88	C.55/1
4.	6.10.88	C.55/1
5.	8.10.88	B-68/4

The Local Doctor

Ashok Vihar Phase II, C-2 Pragati Market has a nursing home called D.R.Nursing Home and it's owner Dr.P.N. Gupta is a favourite doctor of steel utensil making owners.

This is a modern nursing home with most

modern technology available. For immediate treatment workers are usually brought to Dr.P.N.Gupta. Since accidents are a common feature of steel making and sometimes an immediate operation is necessary Dr.P.N.Gupta usually devotes his time in treating steel workers. In a discussion, Dr.Gupta agreed that he does not give any receipt or details of the case to the workers, as there are certain legal formalities to be fulfilled before giving treatment to industrial workers. However, he takes the signature of the worker and his family before starting any treatment to safeguard himself from any legal complications arising later.

In the end, we find a dismal scenario in Wazirpur. The labour laws and the government machinery have been unable to protect the workers of Wazirpur. They are a total failure. The police department and the private nursing homes have been colluding with the owners and in the process reaping benefits at the cost of the workers. All these has been done at the expense of

the workers health and safety and their socio-economic well-being.

CHAPTER III

NOTES

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CHAPTER 4

DISCUSSION

We had proposed in the introduction of this dissertation that problems of health and safety of the workers are related to the social relations of production. Productive activity is a necessary precondition for subsistence and, therefore, health.

The case study² in last chapter shows that a worker who is working in the steel utensil making unit of Wazirpur lives on pitifully low level of subsistence and earns a wage that is lower than the wage earned by other sections of the working people. The effect of this low wage on his nutrition, housing, clothing, medical care and family is important to understand. Quite³ evidently⁴ the effect is negative. The low monthly wages is insufficient to satisfy even his basic needs. The insecurity caused by a low monthly

wage is further accentuated by the irregularity of the job situation.

The steel worker of Wazirpur is forced to live in congested, filthy and unsafe environment. He can barely manage two meals in a day and is unable to provide basic necessities to his family. This forces him to keep them in the village. He cannot afford the medical care in the city. Thus, when he falls ill he returns to his village to recover or to die. In other words, out of necessity he is forced to maintain his links with the village.

The expectation level of such workers are that of a peasant. Being a first-generation worker, and hence not completely detached from his village origins, he never fully becomes a part of the market economy that buys his labour power for pittance and damages his physical being.

The issues of subsistence and health merge in the unorganised sector. This is true for

almost the whole of the sector. It is the brutal truth for 7 lakh workers in Delhi, ¹, who work in the sector.

In the light of the above information, it becomes evident that the talk of health without a consideration of the socio-economic and political parameters would be a futile exercise.

We had identified some of these parameters in the introductory chapter. Based on this case study many conclusions vis a vis the growth of small scale unorganised sector can be drawn. However, we will restrict ourselves to only those parameters which are important to understand the well-being of workers in general and their health and safety in particular.

Some of the economic and political aspects which affect the workers well-being in Wazirpur are as follows.

If we look at the nature of

the industrialisation process in post independent India and relate it to the specificity of Wazirpur, it will provide some critical insights.

A strong and dominant unorganised sector has emerged which accounts for 50% in value added and 80% of employment in the manufacturing sector.² The growth of this sector has an inherent dynamics of its own in view of the successive industrial policies and logic of capitalist development in our "mixed economy". The growth of the unorganised sector in the last two decades reflects the experience of industrialization i.e. labour is better managed in smaller in the unorganised sector units. We also see a shift in the ideological basis of the industrial policies of the government and the consequent mushrooming of small scale Unorganised sector.

This reflects on the role of the state. If we are to consider the proposition that the government (= state) is the representative unit of the ruling elites, such as big farmers and big

industrialists, then it is immediately confirmed through this case study. The non-implementation of labour laws and lack of even minimum protection to the worker in this sector, show that the state has abandoned its responsibility to the workers completely. It is not a state that protects the worker, and his rights. If at all he gets something it is through his own bargaining power. This study gives credence to our hypothesis that the state depends on the capitalists, serves their will, and protects profit maximisation. It is only when it is wary of an upsurge or a possibility of losing elections that it intervenes.

The term 'capitalist profit maximisation' is very broad. First, capitalist firms may be found in the organised or unorganised sector. Second, profits may be made by increasing prices or reducing costs, or both. The hypothesis that profits in the unorganised sector are made by reducing costs is empirically verified from our study.³ This is essentially because the

small entrepreneur is extremely dependent on the big capitalists or traders who either give them contracts or provide them with raw material. The small entrepreneurs are constantly competing with each other for the favour of these traders or big capitalists. The big capitalists or traders by virtue of their economic power virtually control the market of stainless steel and the owners of the small steel utensil making units. We have already elaborated this in chapter III under the section 'Economics of Operation'. To a considerable extent, the small scale steel industry of Wazirpur is more competitive than the organised sector. This extreme competitiveness forces small entrepreneurs to devise all kinds of methods to decrease the cost of production.

Before going further, I shall like to deal a bit on a question raised in Chapter 3. The motive to maximize profits is a crucial factor in the dynamics of a capitalist economy. However, one cannot talk about profit maximisation without the concept of time. We have seen that the

entrepreneurs in Wazirpur have a 'myopic' view. This has to do with their social background as first generation entrepreneurs and the fact that they produce in a situation of acute uncertainty. Another factor for their myopic vision is the illegal nature of their economic activity, because of which they are unable to show the earnings and to make long term productive investments. In fact, it leads to conspicuous consumption rather than an expansion of productive activity.

I make this point to differentiate this situation from situations in countries like Japan and Germany, where the capitalists are most amenable to the concept of taking care of the health and safety of workers for their own benefit. This is because the capitalist who plans with a long term perspective in mind, would not like to lose workers who become more productive with time due to on the job training.

In this context, let us look at the methods of reducing costs by a Wazirpur

entrepreneur which have adverse effects on the health and safety of workers.

Cost reduction in the units have resulted in hazardous working conditions, protective gear is not provided. Unhygienic conditions prevail. Due compensation are not given. At the work site, there is no drinking water, rest rooms, canteens, toilets, first - aid facilities or creches. It is not worthwhile for the Wazirpur entrepreneur to take care of his men and machines. The cost of production is lowered in various ways:

In Wazirpur, often costs are reduced by compromising on the quality of steel produced. The low quality of steel splits under pressure in the process of cold rolling. This has resulted in many injuries and deaths in Wazirpur. Again the reduction of overhead costs has resulted in the poor maintenance of machines in the reduction units. Open electric wires and connections, lose machine parts, broken floors, dark and dingy

rooms, open drains over flowing with waste, toxic industrial pollution, rusted iron scrap lying all over the premises has contributed to creating an unhygienic and hazardous working environment.

The greatest check on costs, however, has been made possible by the entrepreneurs ability to check wage raises. Massive unemployment and abundant surplus labour helps such a situation to prevail. It is very easy to replace one worker with another worker. According to my own calculations, in Wazirpur, only 50 per cent of the workforce is employed at a time, the rest 50 percent forms a pool of surplus labour. Employment for anyone in this pool is possible only if someone who is employed loses his job.⁴ Another way the entrepreneur cuts costs is by evading or refusing to pay compensation.

In addition to the above economic and political factors a number of social factors also influence the health of the workers.

Workers in Wazirpur have not been interested in or have not been able to organise themselves. Thus, they lack collective bargaining power a social instrument needed to increase wages in a system like ours. Many factors may have contributed to this inability of the workers to organise themselves. Primary amongst them are the following:

- a) Almost all the workers interviewed were first generation workers, who have intimate social and economic connections with their village. As a result "feudal sentiments" are still very strong. By no means has their work in Wazirpur helped in eliminating these sentiments. The owner is still seen as the provider of 'namak' (salt).
- b) Right from the time the worker is brought to Wazirpur by a fellow villager or a cast (jat) member, his circle of friends or associates is confined to members of his own village or cast. This circle is very small one.

c) Time is another factor. He works for twelve hours, under strenuous conditions, in the factory. In this situation, also the number of workers he can associate with is small given the nature of the unit. unionising in such a situation becomes a difficult process.

For the tired worker, pressurized by various economic and social problems, disillusioned by the reality of the working conditions, ~~and~~ alcohol, drugs, prostitutes and religion become "channels" of escape. This tendency is in fact capitalised by the entrepreneurs. They encourage and promote these traits through their paid touts to hamper the process of unionisation.

Most of the big established trade unions are in the business of unionization to create vote bank for the respective parties they are affiliated to. The naivety of the worker makes it easy for the union leaders to raise their expectations when needed and leave them when not. Often the leaders are out for their share of the

cake, even if it means joining hands with owners behind closed doors. The workers find it hard to differentiate these 'netas' (leaders) from the local politicians and owners. Even amidst this condition, some workers have organised themselves into small unions. These small unions find it difficult to come together apparently for ideological reasons. The failure of the strike organised by IFTU on the issue of worker's health and safety in 1988 is an example. The 'caste' affiliation of the union is also a factor. Finally, the unions have also failed to make a mark due to the lack of human and financial resources.

For the workers the possibility of getting any relief from their health problems is directly related to their organisational strength which is quite weak in the unorganised sector.

Their experiences in the village with the health services and the perceptions they have about health mutually contributes to the degree

of their apathy towards their health. Wazirpur offers them no positive experience to change their earlier notions about illnesses. In cases of serious illnesses, they do go to the allopathies doctor. In fact I saw in many workers houses, I have seen fellow villagers who had come to stay and to undergo treatment. What is important is, that for them curative therapy is the ultimate in health care. The notions of "prevention" were considered almost irrelevant and subsistence remained the basic health need.

Their inability to unionise unemployment and feudal hangover makes it easy for the owner, with the support of the police and the local politicians to dictate very harsh terms. As a result a worker demanding a higher wage can be easily thrown out. An injured worker has to accept compensation on the terms of the owner, whatever that compensation might amount to.

The fact that the stainless steel units in Wazirpur are 'illegal' or 'unauthorised' also

mean that they do not officially exist. This fact makes it easy for the Department of Industries and the Labour Inspectorate, to shed their responsibilities.

As indicated in the last chapters the stainless steel units do not come under the Factories Act. As a result the Employee's State Insurance Act or the Workmen's Compensation Act do not apply. The new policies in Delhi, based on the Amended Factories Act of 1987⁷ are yet to be applied. The Shop and Establishment Act, under which these units fall, do not have adequate provisions for the health and safety of the workers.

The process of litigation is a long drawn process. Without any savings and out of work, the worker cannot last out this process. This, along with the lack of militancy on the part of the unions and pressure from police officials make the worker compromise and accept whatever compensation that is provided by the owner.

In this scenario, it becomes pertinent to go into the question of the role of government. We have mentioned earlier that given the constraint of the government it would be unrealistic to expect the government to take up the problems of the workers, on its own. The government has to be forced to do so. A time when this can be done is during the time of local or central elections. However, a continuous pressure cannot be built through this process. Moreover, it may be that factors like caste predominate during elections. Thus, I feel that a continuous pressure on the government can be built only through the organisation of strong trade unions, not as imposed from above, but as formed from the grassroot level. We have already mentioned that this process is difficult.

On the one hand, worker is constrained by various socio-economic factors. On the other we find the government machinery, the police and the political forces contributing to the Worsening

of his situation. This leaves no options for the workers. They either become fatalistic or join the unions with the hope of finding a way out.

In brief the main insights of the research are as follows:

--- The issues of health are inseparable from those of subsistence for the workers of the unorganised sector in steel.

--- Subsistence is dependent on conditions of production which are very insecure. They are not only damaging for the health of the workers but also deny him any social security.

--- The very insecure conditions of production are linked with the vulnerability of the small entrepreneur, who in turn is equally insecure due to the control of big

capitalists and traders on the prices of the product.

--- The above fact results in cost minimization strategies of the small entrepreneur which have direct implications for the health of the workers. Some of these strategies are:

- i) a total neglect of machines and working conditions .
- ii) use of obsolete technology.
- iii) Forms of organisation around technology which are extremely hazardous and make workers vulnerable to accidents and injuries.
- iv) Reducing the labour cost by putting a check on his wages.
- v) Also by not paying compensation to them for health damages.

The state does not look after the interests and rights of the workers in this sector.

1. Most of the important laws, do not apply to small scale units, therefore they can not protect the rights of these workers.
2. Even if some of the laws have certain provisions, there are loopholes. For instance, long and tedious litigation processes which an economically and socially vulnerable worker can not withstand.
3. The administrative machinery to implement these laws is inadequate, inefficient and is not accountable to anyone. It sides the owners who are in fact protected rather than punished for their callousness towards workers.

From these points we can conclude that not only state does not take care of the rights of the workers but is in collusion with the entrepreneurs and helps them exploit the workers.

--- The economic vulnerability of the workers along with their deep rooted social stratification hinders any collective action by the workers.

--- It is the organisations of the workers and their collective bargaining strength which can help achieve better subsistence and better health.

CHAPTER 4

Notes;

1. Based on the discussions with the Development Commissioner, Department of Industries.
2. Gill S.S. (1991) "Labour process and characterisation of Small Industry Sector" Economic and Political Weekly, Vol. XXVI, No. 21, p. 1336.
3. Bannerji, Nirmala (1982) "Survival of the Poor" in Helen Safa-I (1982) (ed.) Towards A Political Economy of Urbanisation in Third World Countries. Delhi Oxford University Press.
4. The calculations were made to know the number of workers in stainless steel units of Wazirpur see page.
5. Development Commission (1988) "POLICY RESOLUTION FOR DELHI 1982" in Small Scale Industries Annual Report 1988, Small Industries Development Organisation Publication.

APPENDIX

Table 1 (a)

Estimates of Employment in the Unorganized
and Organized Sectors for Selected Years

(Figurs in lakhs)

	1950-51	1960-61	1970-71	1972-73	1978-79	1980-82
Unorganized Sector	1340.66	1534.50	1628.70	1842.16	1739.76	1995.4
Organized Sector	91.55	120.90	175.00	188.24	218.24	228.8
Total	1432.21	1655.40	1803.40	2030.40	1958.00	2223.8

Source: Estimates of sector-wise employment for 1950-51 figurs from National Income Committee Final Report (henceforth referred to as NTC 1954) Table No.5, p.23.

Estimates of total employment by 1971 Census definition of workers for 1960-61 and 1970-71 from C50 1980, Table 15, p.60.

1972-73 and 1978-79 figures of total employment from Sarvekshana January 1980, Vol.III, No.3, Table 1, p.77.

1980-81 Estimates of total Employment of Main Workers, C50 1984 Table no.8, p.25 Estimates of Employment in Organised Sector from 1960-61 1972-73 from the Reserve Bank of India (RBI) Bulletin February 1974, Ann I, p.136. For latter years from Government of India, Economic Survey 1985, Table 3.1, p.137.

Table 1 (b)

Net Value Added by Organized (1) and Unorganized (2) Sectors (at Current Prices)
(Rs.in Crores)

Sl. Industry	1950-51		1960-61		1965-66		1970-71		1975-76		1980-81	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1. Agriculture, Forestry and Fishery	70 (0.8)	4180 (48.1)	253 (2.0)	6578 (49.3)	464 (2.2)	9509 (45.7)	629 (1.8)	16351 (47.4)	1050 (1.7)	25917 (41.6)	1891 (1.8)	39572 (37.4)
2. Mining, Manufacturing	610 (7.0)	870 (10.0)	1266 (9.5)	792 (6.0)	2161 (10.4)	1218 (5.9)	3490 (10.1)	1775 (5.1)	7194 (11.6)	3622 (5.8)	13936 (13.2)	6497 (6.1)
3. Transport and Communications	220 (2.5)		472 (3.5)	104 (0.8)	791 (3.8)	151 (0.7)	1035 (3.0)	538 (1.5)	1821 (2.9)	1236 (2.0)	2711 (2.6)	2420 (2.3)
4. Trade and Commerce	50 (0.6)	1350 (15.5)	274 (2.1)	1180 (8.8)	563 (2.7)	2014 (9.7)	930 (2.7)	3595 (10.4)	2562 (4.1)	8040 (12.9)	4797 (4.5)	14706 (13.9)
5. Construction and real Estate	-	390 (4.5)	325 (2.4)	692 (5.2)	615 (3.0)	1019 (4.9)	765 (2.2)	2127 (6.2)	1267 (2.0)	3377 (5.4)	2794 (2.6)	5405 (5.1)
6. Services	430 (5.0)	520 (6.0)	819 (6.1)	580 (4.3)	1476 (7.1)	820 (3.9)	2635 (7.7)	649 (1.9)	5190 (8.3)	1046 (1.7)	9364 (8.8)	1784 (1.7)
Total	1380 (15.9)	7310 (84.1)	3409 (25.6)	9926 (74.4)	6070 (29.2)	14731 (70.3)	9494 (27.5)	25035 (72.5)	19084 (30.6)	43238 (69.4)	35493 (33.5)	70384 (66.5)
Total of two Sectors	8690 (100.0)		13335 (100.0)		20801 (100.0)		34519 (100.0)		62322 (100.0)		105877 (100.0)	

Note: Figures in brackets are percentages to total of Organised (1) and Unorganised (2) Sectors

Source: 1950-51 figures from NIC Table No.A 3.1 p.147-148.
1960-61 to 1975-76 figures from CSO 1981 App.A2 p.152-153 and Statement 32 p.136-137.
1980-81 figures from CSO 1985 Sttement 53 p.138-139.

Table 2
 Index of Industrial Production
 Base Year 1960 = 100

Industry	Weight	1951	1955	1965	1971
Mining	9.72	66.6	74.6	131.7	153.4
Manufacturing	84.91	54.6	73.8	153.8	178.9
Food Processing	12.09	66.9	75.9	122.2	157.6
Textile	27.06	79.7	94.1	114.8	106
Chemical	7.26	42.4	60.1	153.9	252.7
Petroleum & Coal	1.36	11	56.1	158.7	316.9
Basic Metals	7.38	46.5	17.66	180.1	208.6
Machinery	33.38	22.2	35.5	316	373.2
Transport Equipment	7.7	19.6	99.2	206.3	122.1

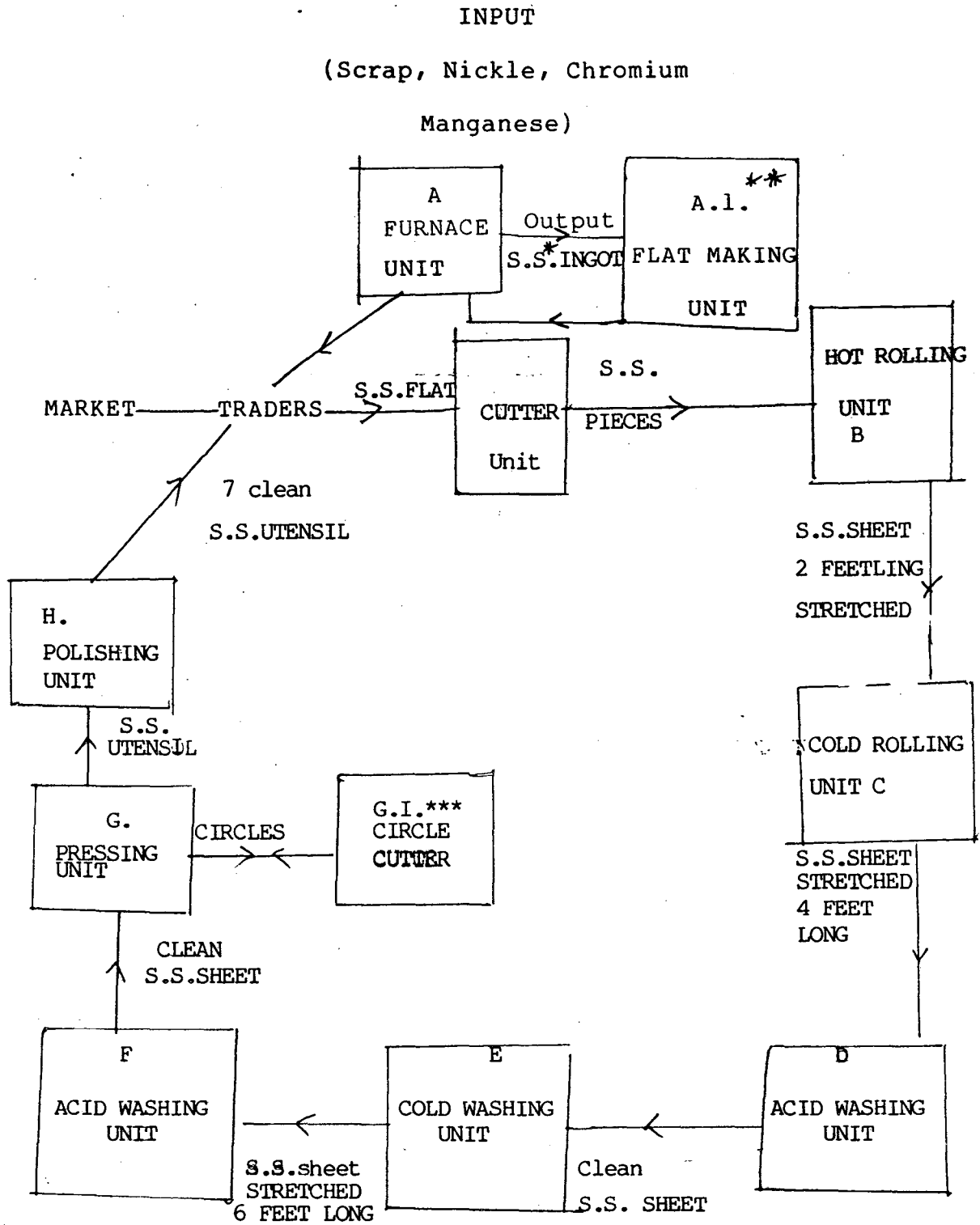
Source : Reserve Bank of India, Report on Currency & Finance (annual)

TABLE 3
Trends in Factory Inspection

	No.of Factories	No. of factories	Factories inspected as a percentage of Factories on register
1950	32465	27016	83.2
1961	38478	283430	73.65
1971	88089	63018	71.54
1980	141028	85336	60.51

Source: National Labour Year Books.

FLOW CHART OF PRODUCTION PROCESS.



* S.S. in Short for Stainless steel.

** Sub Contractor to Furnace owner

*** Sub contractor to Processing Unit.

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