# **MAINTENANCE MARKET IN DELHI**

# A Survey Conducted for Apna Nirman Mazdoor Cooperative Society

by

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### Preface

The study of 'Maintenance Market in Construction Industry in Delhi' was conducted in collaboration with and for the Construction Workers Co-operative, Nirman, New Delhi. It was intended to understand the requirements of maintenance work in Delhi's Buildings, how these are met currently, the level of consumer satisfaction with regard to the same and to see if the co-operative can enter this market successfully.

Researchers met selected experts in the field of construction industry. They identified eleven sectors, namely, government buildings, multi-storied buildings, shopping centres, housing societies, hospitals, schools, cinema halls, corporate houses, railways, hotels and private residential places for exploration into the nature of the maintenance market.

The report concluded that there exists an unexplored maintenance market in Delhi, which could be availed by the Construction Worker's Co-operative Society. Plumbing, masonry, carpentry and painting were the trades in great demand in all sectors of enquiry. The dissatisfaction of the owners of buildings on account of the poor quality of work done and the non-availability of skilled workers are points the Workers Co-operative should take note of. It was found that Government departments were more open to giving work to a Construction Worker's Co-operative. But, to receive contract from these departments, the Society should fulfil certain criteria like, registering with the respective departments, should prove the skill to undertake the work and should have a sound financial position. It was also found that very large number of house owners and individual users also provided a highly potential maintenance market for the Co-operative society, mainly on account of the small outlay involved and their reluctance to give away the work to contractors. However, Co-operative Group Housing Societies, mutli-storied buildings, corporate houses, hotels and cinema halls have their own maintenance workers. Study further pointed out that while masons constitute more than 53% of the members of the Worker's Co-operative Society, the electricians constitute only 3% and the plumbers 1.6%. It suggested that to overcome this unevenness, the Society could hire workers from outside to get maintenance work in these trades.

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# Definition of Terms and Categories

Trades	:	Different types/kinds of work in terms of trades.
		(e.g. electric, masonry, plumbing etc.)
Criteria for giving		
Work of contractor	:	<ul> <li>Qualifications on the part of the contractors as well as conditions the management or house owners set for the contractors a system of shortlisting of contractors</li> <li>Some of the contractors working in the government buildings are selected from a list of regular contractors, on the basis of their performance, experience, financial position etc.</li> </ul>
Management	:	the authority of a government department? the president or chairman of a common body that is responsible for the maintenance work of the buildings of its constituent members. the builder of a multi-storied building, who after allotting different flats to buyers, keeps the responsibility of looking after maintenance work of common areas.
House owner	:	the individual flat user/owner. the individual resident.
Contractor	:	the person who takes up maintenance work on contract through tender or personal contact.
Skilled worker	:	the worker who has special knowledge in a particular trade.

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## I. Introduction

The construction industry is the second largest segment of the unorganised sector in India, next to agriculture in terms of investment and employment. During the period 1951-85, investment in construction worked out to 43.2% of India's total development investment. During the seventh five year plan, investment in construction was estimated at about 52% of the total public sector outlay i.e. Rs. 93,600 crores.

Employment in this industry is also sizeable, estimated to be over 20 million, though the exact or even approximate number of persons has not been counted. Census figures of 1981 only 37.20 lakhs or 1.7% of the economically active population to be in construction work. Similarly 1991 census figures only 55.43 lakhs or 1.9% of the economically active population to be in this occupation. But this is clearly an underestimation when viewed in the context of the growing investment being made in the industry, which is estimated to generate over 20 million employment opportunities, construction being a labour intensive industry.

During the last 35-40 years, tremendous changes have taken place in the construction industry in India as a whole. From a time when construction activity was confined to a few major towns and executed by some individual contractors, it has grown in consecutive five year plans, not merely in the field of industrial plants and technological structures but also in such sophisticated fields as power houses and dams and the required infrastructure for economic growth. Also, in the field of housing several public enterprises have constructed full-fledged townships for their employees. Now every major town is being developed in a systematic manner by a housing board/and or a development authority and by private colonisers. The construction industry has thus grown into a well-planned regular industry with an increasing role of public sector construction companies, growth of institutional finance from public funds, emergence of large scale construction companies in the private sector, growth of housing boards, development authorities, and group housing societies.

The only aspect of this industry which has remained conventional and primitive, inspite of the increasing role of planned development, is the condition of labour. The construction workers have no security of wages, no weekly off days and no casual or medical leave. They are highly vulnerable to accidents but rarely do they get accident compensation. They do not have social security such as gratuity or provident fund, neither do they have any prospects for upward mobility in terms of skill-training and wage payments. Most unskilled workers who enter this industry continue life-long as unskilled workers. This is the inhuman and humiliating condition in which the construction labour finds itself.

For any attempt to improve this miserable condition of labour, which will also lead to better productivity, it is absolutely essential to understand the primary reason for the existing condition of labour viz, the unstable employer-employee relationship in the construction industry. The production process operates through a long chain of contractors and sub-contractors which is constantly breaking and reforming. Thus, the owners of a building construction project hand over the work to public or private sector construction companies, who in turn sub-contract various jobs to separate sub-contractors or petty contractors. The actual work on a building is therefore done by workers employed on-the-job by subcontractors, who get them through labour contractors or 'jamadars'. These workers move from site to site with their labour contractors. Thus, even while seemingly working for one employer, the links keep changing and the employer-employee relationship is highly unstable.

As a consequence of the 'shifting' nature of this industry, workers have never been able to collectively bargain for just wage levels and social security. Their unorganised state has enabled employers, including government and corporate sectors, to flout even the minimum wage fixations and virtually obtain their labour as bonded labourer. The famous judgement of the Supreme Court in the Asiad village case showed that even in the capital of the country, such massive exploitation was witnessed and pardoned under the very nose of the law-enforcing authorities. All existing labour and welfare laws are based on the assumption of a stable employeremployee relationship which represents the organised sector. In the construction industry which is essentially an unorganised sector, where this assumption does not hold good, most of the labour laws cannot be implemented at all.

Under these circumstances, various attempts have been made at unionizing construction workers at various levels, since the thirties and forties, when the industry witnessed unionisation for the first time in the wake of the national movement.

In Tamil Nadu, in the early phase, mason's guild and carpenters guild were formed by skilled workers with a nationalist approach. These guilds had a number of activities such as monthly meetings, compulsory stoppage of work on a particular day of the month, resolution of disputes, running a "fund" through members contribution both for consumption loans and for spending on common goods, etc. The guilds also fixed wages and enforced these by adhering to the idea that workers will not offer themselves for a lower wage, nor substitute for the others. The guilds survived only for a decade. Attempts in later years to revive these guilds did not succeed for two major reasons. One was the lack of sustained effort by these guilds to ensure their survival and the other was the unregulated nature of the industry, and therefore the competition to get employment.

The beginning of 1979 was characterised by certain events, which led to the organisation of the construction workers with a marked departure from earlier the attempts. A severe cement shortage and soaring prices of building materials, as a consequence of black marketing, saw construction activities coming to a halt in many parts of Tamil Nadu.

It was in this background that the construction workers came to form an organisation of construction workers known as the Tamizhaga Kattida Thozhilalar Makkal Sangam (TKTMS) in 1983. The Sangam undertook the responsibility of mobilizing construction workers in several parts of Madras city to impress upon the state their plight through demonstrations. Following these demonstrations, the activists involved with construction workers met in order to form a trade union. The demands put forward by them were:

1. Institution of a commission to fix minimum wages;

- 2. Provision of medical benefits through the employees state insurance corporation
- 3. Rs.10,000 from the Chief Ministers' Relief Fund for the families of construction workers who met with accidents / death;
- 4. Crèche facilities.
- 5. Enactment of separate laws for construction workers;
- 6. 25% reservation of houses constructed by Tamil Nadu slum clearance Board for construction workers; and
- 7. Free supply of implementation etc.

This effort was continued out for almost 3 years till 1982. In 1981, the TKTMS brought together construction labour and lawyers and made an initial effort to draft a bill to protect construction labour. A model bill to ensure benefits such as group insurance, employees state insurance, resolving of industrial disputes, minimum wages, workmen compensation, maternity benefit etc. was attempted. The bill suggested the provision of a welfare Fund which could be exclusively used for the welfare of construction workers.

The model bill was widely circulated to the state and central governments, members of parliament and legislative Assemblies. It was also filed as a private members bill in both the Lok Sabha and Rajya Sabha. While it never came up for discussion in Lok Sabha, in the Rajya Sabha it was debated upon in 1985. The Union Minister for Rural Development after long discussions submitted that the union government was in the process of framing a legislation to protect construction labour.

The TMKTS had a clear two pronged strategy. First, to focus attention on day-to-day issues of non-payment of wages to workers, accident relief, etc. Second, it struggled for securing some basic concessions from the State government in regulating the industry and meeting workers needs. This included the demand for a comprehensive legislation for construction workers, implementation of employees state insurance (ESI), provision of housing and creches, relief during the rainy season, enhanced compensation for accident victims, price control of construction material, etc.

Consequently, the Government of India Ministry of Labour formed a tripartite working committee to study the applicability and the working of existing social security laws and to formulate alternate social security schemes (see Girja et. al, 1989, Subbu 1993, Geetha 1993). In addition to the national trade unions, the TMKTS was also given representation in this committee. The TMKTS organised a National Seminar in 1985, both to evolve a common strategy among the organisations of construction labour and to ensure that the Government of India, unlike the government of Tamil Nadu, did not enact a legislation that was inappropriate to the needs of the construction labour. Several construction labour unions from all over the country, labour unionists, activists and others participated in this seminar.

Subsequent to the National seminar on construction labour, the National Campaign Committee for Central Legislation on Construction Labour (NCC-CL) a common forum of all trade unions of construction workers in India was formed in November 1985. Recognising the unstable employer-employee relationship as the fundamental reason for the problems of labour within the construction industry, the NCC-CL has been advocating to ensure social security and labour welfare to construction workers.

Based on this fundamental understanding, the NCC-CL bill asserts that construction workers can only be assured social security and labour welfare by substituting the existing instability by forming a tripartite construction labour board, consisting of workers, employers and government representatives. It is proposed that this board would register all construction workers and contractors and would regulate the employment of workers by allocating work by rotation. It would provide a minimum guaranteed wage per month as well as determine and provide appropriate conditions of service, thus alleviating the misery of workers which stems from insecurity of employment and rampant exploitation. Further the Board will collect a cess for its administrative expenses and a welfare levy from employers to fund social security and labour welfare schemes. It would also resolve relevant industrial disputes and provide for a systematic upgradation of skills amongst workers to ensure job of work to the consumers. However, despite all the efforts of the NCC-CL, both builders and government had been expressing a lot of fears and doubts about the practical feasibility of the NCC-CL bill and scheme. Dialogues and discussions, apart from the help from the media in the form of a film on construction workers, have not been successful beyond a point. One method, which has not been tried so far, is a practical experiment of working out the bill and scheme in a limited geographical area with a limited number of workers. An attempt was made to do just this by setting up construction workers' cooperatives. Such cooperatives it was assumed would provide a testing ground for finding out the feasibility of the NCC-CL proposal.

This was the background which led to setting up of the Apna Nirman Mazdoor Cooperative Society, situated at Rohini/Pitampura. The objectives of the APNMCS are:

- **To provide a bridge between the construction workers and consumers.**
- To standardize job work practices, wage rates and quality of output.
- To regulate employment and employment opportunities among its workers' pool.
- To provide social security through collective contributions and welfare fund investment schemes.
- To integrate skill training and work discipline with co-operative working.
- To implement comprehensive legislation which is being pursued by NCC-CL.

## Methodology

Since no previous studies exist on the subject, we prepared a study proposal which will explore the nature and characteristics of the maintenance market, in Delhi. Prior to the field work and the formulation of the methodology of study, we discussed the problem with a few experts in the construction industry, in order to have a better idea about various factors to be considered while studying the sector. They were also told us about specifities of construction and maintenance markets.

It was proposed that the study should focus on the maintenance market, since, compared to construction work, maintenance work involves less initial capital investment - financial, technilogical and workforce. Moreover, there is little information about how the maintenance market is structured and how it operates. Therefore, it was decided to limit the scope of the study to the maintenance market only.

#### **Sectors of Buildings**

As suggested by the experts as well as based on our own observations, we have identified **11 main sectors** of buildings for our study. Wherever applicable, we identified various sub-sectors within the main sectors. The list of the main 11 selectors, and their subsectors is given below.

- 1. Government Buildings: CPWD/ MCD / DDA / P&T
- 2. Multi-storied Buildings: Commercial & Office Complexes
- 3. Shopping Centres: Big\Medium\Small
- 4. Housing Societies: Group Housing Societies / DDA / CPWD/ Private Complexes
- 5. Hospitals: Govt. / Private
- 6. Schools: Govt. / Private
- 7. Cinema Halls
- 8. Corporate Houses
- 9. Railways

- 10. Hotels: Big / Medium
- 11. Private Residential Places

#### **Categories of People**

We identified four different categories of people associated with the maintenance work, namely, the management, individual users of house owners, contractors and workers. The purpose was to know their perception about the nature and characteristics of the maintenance market and their attitudes towards it.

#### **Geographical Location**

The sample for the present study was selected strictly from the State of Delhi. As, it is not possible to visit/study each individual building in Delhi that came under the 11 sectors, we decided on a representative sample, considering the factors of sectors, categories of people and the geographical location. Thus, we took 126 units comprising four categories of people (management, contractor, individual users / house owners, and workers) in the eleven sectors from the east, west, north and south of Delhi.

#### **Tools and Analysis**

The study is made on the basis of four pre-structured questionnaires and interview schedules for four different categories of people. These were prepared in consultation with the experts. While we prepared the questionnaires, we considered two important aspects. First, the nature and characteristics of the maintenance market and secondly, the attitude of the four categories of people towards various aspects of the maintenance market. We have given the questionnaires as annexures. These aspects were considered while analysing the data collected and preparing the report. The analysis was done both sector-wise and category-wise. In the report on the sectorwise analysis, we shall be giving a sectoral picture. That is, we shall be treating our findings sectorwise. In each sector, we shall be examining the various categories separately, and then establishing their correlations. This will give us a composite picture of each sector, separately.

On the other hand, in category-wise analysis, we shall be presenting our findings category-wise. Here we shall be examining the data for each category of people separately and then establish their correlations. This will give us an overall picture of how each category of people perceives the maintenance market their attitudes and preferences.

In some sectors, all the categories do not exist. So, we shall be considering available categories in such sectors.

### The Government Sector

In the government sector we visited four office complexes representing four major departments, namely CPWD, MCD, DDA and P&T. These offices were selected from the four different geographical locations - east, west, north and south. In each office complex we have interviewed one management, one contractor and one worker.

#### MANAGEMENT

The most common categories of maintenance work in government departments include plumbing and masonry. Electrical, carpentry and painting are also available. Out of the four offices we visited, in three maintenance work is done daily. Only in one office is it done whenever required. In the MCD office it is also done on a monthly and yearly basis. In the government sector, trades that are in great demand are electric, plumbing and masonry, carpentry and painting.

Each of the government departments we visited spends more than Rs. 100,000.00 on maintenance work of these kinds in a year.

The various government departments get their maintenance work done by two ways: (1) with their own permanent workers and (2) by giving work to contractors. Except the Department of P&T, no other government office has any specific choice in the trades to be given to contractors. The P&T office gives only plumbing (and also fire-fighting equipment) to contractor.

The common criteria that all the government departments (we visited) follow, while giving maintenance work to contractors, include:

(1) The contractors must have got registered with government department(s),

(2) Works are given only to those contractors who can get their work done it the lowest cost.

(3) Contractors must have special knowledge or skill about the work

and

(4) Contractors must be financially sound.

In CPWD and P&T, there exists the system of short-listing contractors. But the DDA & MCD do not have any system of short-listing of contractors. While the managements of P&T, DDA and MCD are satisfied with the present arrangement for maintenance work as well as the quality of work provided to them, the management of CPWD is neither satisfied with the present arrangement nor with the quality. At the same time while the MCD, DDA and P&T are interested in giving their work to a skilled workers' cooperative society, the CPWD is not at all interested in it. The managements of MCD, DDA and P&T offices also have some suggestions for such a skilled workers' cooperative society. These are, that : 1) it should provide quality work, 2) it should be economically & technically competitive and that 3) it should be well equipped.

#### CONTRACTORS

Altogether we interviewed four contractors, one from each of the four government department. All the contractors we met have got themselves registered in the respective departments where they take up work. The contractors from CPWD, DDA and P&T are also short-listed in the respective departments. All the contractors get work through tender notices. The proportion between outlay of the projects of work (in terms of money) undertaken by the contractors and the number of workers employed in these projects varied from contractor to contractor as well as from work to work. From the projects that the contractors were undertaking at the time of our interview, we have four sets of data in our hand. These are :

- 1. The outlay of the Project is fifty thousand where the number of workers employed is eleven.
- 2. The outlay is 3 lacs where the number of workers employed is twenty.
- 3. The outlay is fifty thousand where the number of workers

employed is six, and,

4. The outlay is unspecified where the number of workers employed is 25.

According to all the contractors, they get workers through personal contract and the nature of their employment is temporary. The contractors further informed us that the small and ordinary tools were provided by the workers and the big and costly ones by them. This information was also confirmed by the workers. The workers were paid either on weekly or monthly basis. Though according to the MCD & DDA contractors, skilled workers are easily available, the contractors in the CPWD & P&T departments observed contary to this. Except for the MCD contractor, the other contractors do not take up construction work. The MCD contractor told us that the construction work was more profitable. Though the three other contractors do not have any idea about the relative advantages and disadvantages of the maintenance and construction work, according to the CPWD contractor construction work is more advantageous than the maintenance work. But he did not give any explanation for this.

While according to two contractors, the payment is cleared within a week or a month after the bills are submitted, the other two contractors informed us that getting of payment depended upon the work and the financial position of the concerned department or office. Again, two of them said that they did not face any difficulty in getting the payment. But the other two contractors told us that sometimes they faced difficulties. All the contractors we met preferred the government sector than other sectors and according three out of the four contractors, the maintenance work is more easily available.

#### WORKERS

We interviewed only male workers. The workers we interviewed in this sector fall in different age groups. Two were above forty; one in the age group of 30 to 40; and one between 20 and 30. All of them are literate. Three of them had primary education, while the other had secondary education. The four workers are from four different trades: Plumbing, Masonry, Carpentry and Barbendry (iron worker). All of them had work experience of more than ten years. Out of four, three workers were temporary while one was permanent. The daily wage of the temporary workers varies from sixty rupees to eighty rupees. The permanent worker got Rs2500.00 on a monthly basis. Besides, the permanent worker got a few statutory benefits, while the temporary workers did not get anything.

While the temporary workers got the present work through personal contact with the contractor, the permanent worker got the work through employment exchange where he got registered. According to three workers, plumbing and masonry were in greater demand, whereas according to one worker all the trades are in equally great demand, and available in all geographical locations.

No difference was made by them between maintenance and construction work.

Two of the workers informed us that they got maintenance work once or twice in a week. The other two workers said that they could manage to get maintenance work once only in twenty to twenty five days.

According to the management only those contractors get the maintenance work from their departments who has registration. Both the managements as well as the workers, agreed that the trades in great demand are plumbing, masonry, carpentry and painting. According to the management the demand for electrical work is also great while the workers said that the demand for electrical work is less. All the four contractors said that they got workers through personal contact with workers which was confirmed by the workers. Thus personal contact and relationship between contractors and workers played a vital role in recruitments.

While three out of the four contactors do not take up construction work, three out of the four workers take up construction work. Thus most of the contractors

taking up maintenance work do not prefer construction work. Workers engaged in the maintenance work on the other hand look for construction work. The contactors take up work according to preference. But in the case of the workers the question of choice does not much arise.

According to both the contactors as well as the workers, the small and ordinary tools implements are provided by the workers and the big and costly ones are provided by the workers. Though according to three out of four contractors the maintenance work is easily available, in reality only half the workers get work frequently. The rest half do not get work as frequently.

#### **Conclusion:**

From these interviews we could arrive at the conclusion that the maintenance work is available mostly in plumbing and Masonry.

In all the government buildings most of their maintenance work are done on a daily basis. The annual expenditure of each of the government departments exceeds one lakh. Trades in great demand are electric, plumbing, masonry, carpentry and painting. The various government departments get their maintenance work done in two ways : 1) with their own permeant workers and 2) by giving work to contactors. There is no specific choice as to which trade is to be given to The criteria for giving the maintenance work to contractors are that contactors. (1) the contractors must have got registered with the departments where they want to take up work (2) contractors must fulfill the lowest Price Bid. (3) contractors must have special knowledge or skill about the work and (4) contractors must be financially sound. In some departments there is a system of short listing of contractors.

The majority of the departments are satisfied with the present arrangement for maintenance work as well as with the quality of work provided to them, and most of them are interested in giving their maintenance work to skilled worker's cooperative society. The contactors get skilled workers through personal contact, but skilled workers are not always easily available. The contractors employ skilled workers more on a temporary basis. The contractors in the government sector get work mainly through tender. The contractors provide the big and the costly tools & implements and the rest are provided by workers. The workers are paid either on a weekly or monthly basis.

Some contractors also look for construction work because the construction work is more profitable. A few contractors see the construction work as more advantageous than the maintenance work. In some government departments, it takes a long time for clearing the payments to the contractors. Again, some contractors face difficulties in getting the payment. Despite these constraints the government sector is the most preferable for the contractors. Also, the maintenance work in the government sector is easily available.

The minimum age group of the workers is 20 and the maximum is between 40 and 50 years. All the workers are literate. Most of them studied upto primary class.

In more or less all the important trades like plumbing, masonry, carpentry etc. the workers get engaged in the government sector. The workers are experienced in their respective trades. However, most of them work under contractors in the government sector and are temporary. The daily wage of the workers is between Rs. 60 and Rs.80. In most of the cases the workers get work through personal contact with the contractor. The maintenance work is available mostly in North and South Delhi. Majority of the workers engaging in the maintenance work also take up the construction work, but do not have any preference bet the maintenance work and the construction work. Moreover, the frequency of employment in maintenance work is not always good.

## Multi Storeyed Buildings

A number of Multi-storeyed building complexes are coming up in the Union Territory of Delhi. Certain areas like Connaught Place, Nehru Place and ITO are conspicuous by the overwhelming presence of Multi-storeyed buildings. A survey on the nature, extent, magnitude and market of maintenance of buildings in Delhi has to invariably take into account the maintenance of Multi-storeyed buildings. We were able to meet four managements for maintenance of four different Multi-storeyed buildings - one from Nehru Place, one from Connaught Place and two from the I.T.O. Following are the major findings of the investigation.

The ITO building requires maintenance work of electrical and masonry: National Herald Building also needs plumbing, carpentry and painting apart from the electrical and masonry, Hemkunt Tower at Nehru Place has demand for barbendors apart from the trades mentioned above. Amba Deep building has requirement for electrical plumbing and painting. Frequency of maintenance works done there is daily. For some trades like painting and carpentry it is occasional.

All the four respondents unanimously agreed that plumbing is in greatest demand. Three respondents of the above four said that electricity was in great demand, followed by plumbing. National Herald building mentioned about plumbing and masonry only. Masonry was mentioned by the management of Hemkunt Tower also. All the respondents spent above hundreds of thousand of rupees which could go up even to millions on the maintenance in a year.

These respondents mostly had permanent workers to do the maintenance work as well as giving work to the contractors. Only Ambadeep at CP engaged temporary workers whenever there was over load of work. One of the reasons common to all the respondents for giving work to contractors was that they found it difficult to manage themselves. At Nehru Place & Connaught Place apart from reason mentioned above another common reason was any work requiring multiplicity of skill and high technical expertise was better managed by contractors. Hemkunt Tower at Nehru Place follows a system whereby if any maintenance work is likely to go beyond Rs. 20,000, that work would be given to a contractor. In all the cases painting while working was given on the contract. In Ambadeep even electrical and plumbing were given on contract. In case of National Herald and Hemkunt Tower any maintenance work which was big was given on contract.

All the respondents except of National Herald wanted the contractors to be reputed as well as be in possession of requisite capital or be financially sound. The Management of buildings at CP and NP also wanted the contractor to have required manpower. Only that of National Herald wanted the contractor to have got registered. All the respondents except of Hemkunt Tower at Nehru Place were satisfied with their present arrangements. All the respondents including of Hemkunt Tower were satisfied with the quality of work provided to them. Management at ITO and Ambadeep wanted the cooperative society to be well equipped, competitive, reliable and credible. That of Hemkunt Tower wanted that quality of work within the stipulated target of time and money should be maintained.

We met two contractors who get the contract of maintenance work from multistoreyed buildings. Both of them got the contracts on the basis of personal contact. One of them used to get the contract by filling up the tender too. One of the above contractors who is getting contracts from the ITO is present by working on masonry work worth above Rs.10 lakhs. He got this contract through tender. He has employed more than 12 workers for this contract. They are the permanent workers of this contractor - primarily masons, carpenters and plumbers. Workers bring tools and implements for this work. The contractor says that skilled workers are easily available. He takes the construction work also because it is more advantageous for him. He prefers the contract from the Government buildings. Another contractor who gets the contract from Ambadeep at Connaught Place prefers to have the contracts from multistorey buildings. He gets his contract through personal contact only. He avoids contracts from Government buildings. Presently he is working on electrical repairing of a Multi storeyed building worth Rs. 10,000. He got this contract through personal contract. Seven workers are working on this project. These workers are electricians and his permanent employees. He provides his workers with tools and implements and monthly salary. This contractor also says that skilled workers are easily available. He does not take up construction work. He gets the payment for the work within a month.

Three individual flat owners were also interviewed - one each from National Herald and Hemkunt at Nehru Place and Ambadeep at CP, and all of them having maintenance work of electric, plumbing, masonry, carpentry and painting done. The National Herald flat owner was getting the work done weekly while the rest two do it monthly. Hemkunt Tower gets the work done by directly employing the workers whereas, National Herald gives the work to contractors. Ambadeep flat owners either give it to contractors or get it done through its maintenance society. Workers approach the flat owners of Hemkunt Tower for work, or the flatowners call them on the basis of personal contact. National Herald flatowners agree that workers are easily available. They prefer contractors, whereas flatowners at Hemkunt Tower directly employs the workers and Ambadeep through the Maintenance society. All of them are satisfied with the quality of work provided to them and get the complete work except Ambadeep. All of them spend well above Rs.5000/00 per annum on the maintenance. All of them, except Hemkunt, can give their work to a cooperative society.

Two workers were interviewed – one, with the contractor of Times of India who was a temporary work and another worker was with the contractor of Ambadeep, CP who was a permanent worker. These workers got employment by personal contact. The permanent worker was getting below Rs.2000/00 per month. None of them were getting statutory facilities. The permanent worker got the tools and implements from the contractor. Amongst the temporary, carpentry and painting are in great demand. According to the permanent worker electrical and plumbing are most wanted jobs while temporary workers took up maintenance only, the permanent worker took up construction work also whenever there was opportunity. The temporary worker gets 3 to 4 work per week. For the permanent it is work every day. Both the workers were confident that they were capable of forming a cooperative society and getting the contract. But none of them felt like suggesting anything about an existing cooperative society.

## Shopping Centre

In the shopping centres there are two types of maintenance markets. One is with the management and the other is with the individual users or flat owners. The management is responsible for those areas which are common to individual users and the individual users are responsible for the maintenance of their respective shops.

In this sector, we could meet only one management. Though we intended to meet atleast one from each shopping centre, as the category of management (as defined in the beginning) does not exist in the shopping centres we decided to choose as our samples. Under this circumstance, we decided to increase the number of samples of individual users. And accordingly we interviewed altogether ten individual users.

#### MANAGEMENT

The categories of maintenance work available with the management are electrical, plumbing and Masonry. The maintenance is done daily. All the trades in which maintenance work is available, namely, electrical, plumbing and masonry are, in great demand. The management told us that they spent more than one lac on maintenance work in a year. The maintenance work is done in three different ways:

- 1. With his own permanent workers.
- 2. Hiring temporary workers.
- 3. By giving to contractors.

For two reasons the maintenance work is given to contractors. One when the permanent staff can not manage because of its bigger size or when the work gets overloaded, and two, when some work requires multiplicity of skills or high technical expertise which are not available with them.

According to the management any of the works that are available with them may be given to contractors. The management has two criteria in giving maintenance work to contractors. One, the contractors must have special knowledge or skill about the work. And two, the contractors must be experienced. Unlike the managements of the government sector, they do not follow the system of short listing of contractors.

The management is satisfied with the present arrangement for maintenance work as well as the quality of work. Though they are not interested in giving work to a skilled workers' cooperative society, the respondent has a few suggestions for such a cooperative society. They are:

- 1. It should meet the target (that is the work taken up) in terms of time and money.
- 2. It should be economically & technically competitive.
- 3. It should obey the guidelines given by the management.

### HOUSE OWNER/INDIVIDUAL USERS`

In this sector, we met ten individual users. The trades of maintenance work available with the individual users include electric, plumbing, masonry, carpentry, paintings, Barbendry and glass.

Different individual users require maintenance service in different frequencies. Only one individual user requires weekly service, while three require monthly service- three quarterly, two half-yearly, six requires yearly and two occasionally- nobody requires daily service. Out of ten individual users, four individual users give their maintenance work to contractors while six directly employ workers. Out of the individual users who directly employ workers, five get the necessary skilled workers through personal contract and one gets from the nearby market.

According to all the individual users who get their work done by directly employing workers, skilled workers are easily available. On the other hand all the four individual users who give their work to contractors prefer to get their work done by them. And out of six individual users who directly employ workers, four prefer the present method of getting their work done while the remaining two feels that it would be better if there is an association of residents. Out of ten individual users, eight are satisfied with the quality of work provided to them. But the remaining two are not satisfied with the quality.

From our data the available range of amount that the individual users spend on maintenance work annually are as follows: upto500, between 500-1000, between 10,000 to 30,000, 30,000-50,000.

#### CONTRACTORS

In this sector, we have interviewed three contractors. Two of them do not have any registration while me other has got registered with CPWD. One gets maintenance work in plumbing and masonry. The other two get in all the categories. Two contractors get work through personal contract while the other gets it through tender. As available from the data, the various ranges of outlay of the projects that were undertaken by the contractors at the time of interview and the number of workers employed in each project are as follows:

- 1. The outlay is 1 lac and the number of workers employed is fifteen.
- 2. The outlay is 3 lacs and the number of workers employed is eighteen.

Two contractors get workers through personal connection and the other contractor has permanent workers. According to two contractors, the tools and implements are provided by them while the other contractor told us that workers themselves bring the necessary tools and implements. The period of payment to workers varies from contractor to contractor. One contractor pays workers daily and weekly, one pays monthly and the other one pays weekly. According to all the contractors, skilled workers are easily available. All the three contractors also take up construction work. Two of them take up construction work, because as they informed us, the maintenance work is not profitable. But the other did not specify the reason for it.

Again, according to one contractor, both the maintenance work as well as the construction work are advantageous. Of the other two, one sees advantage in the maintenance work while according to the other the construction work is advantageous. While two of the contractors we met informed us that they got the payment as soon as the bills are submitted, according to the other one, the payment is made within a month. But nobody faces any difficulty in getting the payment.

#### **Sectorwise Preference**

While one prefers only the private sector, the other two do not have any preference between government and private sector. According to two contractors the maintenance work is easily available. But the other one said that the maintenance work is not easily available.

#### WORKERS

We have met two types of workers. One permanent, and the other temporary. However, the most important difference between them is in the mode of getting their wages. The permanent workers get their wages on monthly basis, while the temporary workers get their wages on daily basis. Also, two out of the three workers we met get a few statutory benefits, like Provident Fund, extra payment for overtime, holdings, etc. The total number of workers we have interviewed is ten. Out of this ten three are permanent and the rest is temporary.

All the workers fall in various age group. Out of them five fall in the age group of 20-30, two fall in the age group of 30-40, two are above forty, and the remaining one is below twenty years. Out of the ten workers, eight are literate while two are illiterate. Of these eight literate workers, six have secondary qualifications, one has primary qualification and the other has intermediate qualification. The distribution of trades among the workers is as follows: two electricians, two masons, two carpenters, and rest are- plumber, painter, lift mechanic and a glass fitter each.

All the workers we interviewed are male workers. All of them are also experienced in their trades, for example, five workers have around ten years of experience, three of them are in the group between eleven and twenty years, and two are above twenty years.

While all the permanent workers and one temporary worker told us that they got the present work, where they were working at the time of interviewed, through personal contract with the management, the other five temporary workers got the same through the personal connection with the contractor. Out of the three permanent workers, two get below Rs.2,000 and the other gets Rs.2,500/- monthly as their salaries. On the other hand the daily wage of the temporary workers varies from Rs.80 to Rs.125.

Except for one permanent worker, every worker we met informed us that the necessary tools and implements are provided by themselves. According to one permanent worker, the tools and implements are provided by the contractor. Out of the total ten workers, according to six almost all the trades, namely, electric, plumbing, masonry, carpentry and painting are in great demand. Of the remaining four, two told us that only electric is in great demand while according to one worker electric and plumbing are in great demand. According to one worker carpentry and painting are in great demand. Out of total 14 responses we got from the ten workers interviewed about the location in which maintenance work is available, four responses go in favour of North Delhi. Again, according to one it is available in West Delhi.

When we asked the workers how often they get the maintenance work, seven of them did not say anything in clear terms. However, of these four informed us that they got the maintenance work very often while three workers told us that they did not get it very often. And according to the other three remaining workers, one to two maintenance works can be managed in a day, but sometimes they get only one to two maintenance work in a week. Six out of ten also take up construction work. 3 do not go for construction, work, - one did not answered this question. Four of them prefers maintenance work, two prefer construction work and the remaining prefer both.

### **Category wise Analysis**

#### I. AMONG MANAGEMENT AND HOUSE OWNER/INDIVIDUAL USERS

The common categories of maintenance work available with both the managements and the house owner/individual users are electric plumbing But there are additional trades of maintenance work like and masonry. carpentry, painting, Barbendry and glass work with the individual users. As our findings have revealed, the managements in the shopping centres do their maintenance work daily. On the other hand individual users do not require Individually users do their maintenance wok daily maintenance service. weekly, monthly, quarterly, half yearly, yearly or occasionally. While the managements get their maintenance work done in three ways, namely with his own permanent workers, hiring temporary workers and giving to contractors, the majority of the individual users directly employ temporary workers for their maintenance work. Some individual users give their maintenance work to contractors.

While the management spends more than one lac on maintenance annually, the annual expenditures on the part of the individual users do not cross Rs. 50,000.00 at any cost as apparent from the available data. Most of the management as well as the individual users we met with the exception of only a few individual users are satisfied with the present arrangement. Except a few individual users, the management as well as the individual users are also satisfied with the quality of the maintenance work.

#### **II. BETWEEN MANAGEMENT AND CONTRACTORS**

While registration of contractors is not a criteria for the management, two out of four contractors we met in the shopping centres have got registered with the CPWD.

#### **III. BETWEEN MANAGEMENT AND WORKER**

According to the management as well as the majority of the workers, the

trades in great demand are electric, plumbing and masonry. A few workers said that carpentry, painting and glass work are also in great demand.

#### **IV. BETWEEN HOUSE OWNER AND CONTRACTOR**

According to both the individual users as well as the contractors, the skilled workers are easily available.

#### **V. BETWEEN CONTRACTOR, HOUSE OWNER AND WORKER**

In most of the cases the demand for skilled workers on the part of the contractors as well as the individual users and the demand for work on the part of the workers are met on personal contract.

#### VI. BETWEEN CONTRACTOR AND WORKER

Most of the contractors as well as the skilled workers also take up construction work. But their reasons are not the same. While the contractors take it up as the maintenance work is not profitable, the workers go for it as a general pursuit of work. According to most of the contractors (2 out of 3 we met) the tools and implements are provided by them. But this is contradicted by 90 percent of the workers. According to them, they carry their own tools and implements. According to the majority of the contractors as well as the workers the maintenance work is easily available. While on the other hand a few of them said that the prospect for maintenance work is not good.(30 June 1996).

# 3. The Shopping Centres

#### CONCLUSIONS

In the shopping Centres the main categories of maintenance work (in terms of trade) are electric, plumbing and masonry. There is also a small quantity of maintenance work in painting, carpentry, Barbendry and glass work. The maintenance work is mainly done daily, monthly quarterly and yearly. In terms of the amount spent, the big market is with the management. But though annual expenditure of all the individual users do not cross 50 thousand or so, the availability of the maintenance work with them is also good. The trades in great demand in this sector are Electric, Plumbing and Masonry. The maintenance work is done mainly by two methods in this sector:

- 1. By directly employing workers (in the house of the individual users).
- 2. By giving work to contractors (in the case of the managements)

For two main reasons, the managements give their maintenance work to contractors.

1. When the permanent staff can not manage because of its bigger size or when the work gets overloaded and 2) some work requires multiplicity of skills or high technical expertise, which are not available with them.

Any of the categories of work may be given to contractors.

The main criteria for giving maintenance work to contractors are: first, the contractors must have special knowledge or skill about the work, and second, the contractors should be experienced. There is no system of Short-listing of contractors here.

The majority of the employers are satisfied with the present arrangement for maintenance work as well as with the quality of work provided to them.

But still most of them have shown interest in giving their maintenance work to the skilled workers' society. The employers get skilled workers mainly through personal contract. They are easily available. Only a few contractors have registration. Registration is not an essential criteria for getting work in this sector. In most of the cases, the contractors get maintenance work through personal contract. Workers are employed on temporary basis.

The small and ordinary tools and implements are provided by workers while the big and the costly ones by the contractors. Workers are paid on a daily, weekly of monthly basis. The contractors also take up the construction work as the maintenance work alone is not profitable.

Unlike the contractors here do not face much difficulties. They get it either as soon as the bills are submitted or within a month. Most of the contractors do not have any preference between the various sectors.

The maintenance work is easily available. Most of the workers here are middle aged. Except a very few, all the workers are literate. The majority of them did upto the secondary level.

The workers do not have strong preference between the maintenance work and the construction work. But they do not get regular maintenance work. As such many of the workers also take up construction work.

# **Housing Societies**

Housing societies were divided into four categories for the convenience of our study.

- a. Cooperative group Housing Society (CGHS)
- b. Delhi Development Authority (DDA)
- c. Central Public Works Department(CPWD)
- d. Private Complex Like DLF

CGHS are most abundant in Western Delhi areas like Pritampura, Rohini etc. Apart from the West, our study takes into account South Delhi (Vasant Vihar) also. DDA Houses are spread all over Delhi but our study is confined to the west and south only. Government Quarters are maintained by CPWD and here again our study is on South Delhi. South was preferred in case of Private Complexes also. The rational of making these categories is that once we study a particular area of a category we can generalise the problems of market and maintenance for the category all over Delhi. For example, the system of CPWD quarters studied in South Delhi will be the same all over Delhi.

#### **MANAGEMENT (OF CGHS & CPWD)**

Electrical, plumbing, sewage and drainage are common to all types of residential houses in Delhi though trades of electrical, plumbing and masonry are in great demand. Frequency of the maintenance work is daily in the case of CGHS and CPWD enquiry offices.

In the case of CGHS, expenditure on the maintenance per annum varies from Rs.5000 to Rs.100,000. In the case of the CPWD Enquiry Office which is responsible for looking after the maintenance of Government quarters in a particular area it goes up to two million. In the case of CGHS either they have permanent workers or hire temporary workers to do the maintenance work. In some cases they are doing both. In case of the CPWD Enquiry they don't hire temporary workers. Either they give the work to contractors or their permanent workers do it.

Only in exceptional cases is maintenance work given to contractors. This is done because work is so huge that they cannot manage themselvs. In the case of CPWD work is done by their own permanent workers or given to contractors. If the nature of work is huge and stupendous that work is given to contractors. Second reason for giving it to contractors is unavailability or shortage of skilled workers in the permanent staff of CPWD. Any work whether it is electrical or masonry or other trade is given to contractors when that work has to be done on a big scale. In the case of CPWD registration of contractors is important and even must but in case of CGHS they look for reliability and experience. None of them had a system of shortlisting the All of them were satisfied with their arrangement for the contractors. maintenance work and quality of work provided to them. CGHS could provide their maintenance work to a skilled worker's cooperative and technically competitive and provide quality work.

#### CONTRACTORS

Two contractors were interviewed one from DDA and another from the Private Complexes(DLF) - former with no registration at all and the latter registered with DDA. None of them was a shortlisted contractor. While the former got work in DDA residential areas, the latter got work in private complexes, DDA and government quarters. Both of them got maintenance work through personal contact.

The contractor from DDA had undertaken carpentry work whereas the contractor from private complexes was doing the painting. Outlay of project in both the cases was Rs.50,000. Both of them got the contract from DDA flats and private complexes respective of though the personal contact former had employed six workers and letter above 12 workers. Both contractors hired their workers from the labour market. They were the temporary workers of their contractors former contractor having carpenters and their attendants the latter was having painters and unskilled labours. Both the contractors provided tools and implements to their labourer but the former paid them

daily and the latter fortnightly. According to them skilled workers were easily available. The former did not take up construction work and the latter took it up only when his customers of maintenance work asked him to do so. He feels that monetarily maintenance work is more profitable than the construction work. Former got the payment from the customer as soon as the bill was submitted, the latter got the payment within a week but in some cases they used to face delay, harassment and non payment too. Former preferred the work of housing societies as well as the private complexes.

#### **HOUSE OWNERS**

A number of house owners were interviewed three from CGHS, six from DDA, two from CPWD and two from DLF houses in Chhatarpur. Many common patterns emerge from these interviews. Electrical and plumbing are most demanded in CGHS complexes. Plumbing is in greatest demand, followed by electrical in DDA. In CPWD electrical is more in demand than plumbing. In all these types of houses carpentry, masonry and painting are in demand only occasionally. In DLF electrical and masonry are more in demand than plumbing. In CGHS it is occasionally, in DDA Rohini monthly, in DDA Vasant Kunj weekly, CPWD South quarterly, and in DLF it is done both on monthly and quarterly basis.

CGHS Maintenance committee/management committee looks after the maintenance work by directly employing the workers on temporary basis. In a few cases they keep permanent workers specially if it happens to be a larger CGHS. In DDA flats/houses in the west and the south residents do their maintenance work by hiring the workers from open market. Government quarters residents do through CPWD enquiry office. In DLF residents keep permanent workers for maintenance work. Sometimes they give their work to contractors also.

In case of CGHS they got the workers from the nearby market. In the case of DDA they got workers through personal contact and even by ringing up the shop owners to send them workers. In the case of CPWD and DLF hiring of

temporary workers is not the common practice. Non-availability of good workers was a complaint from Government quarters of R.K. Puram and some of the residents of the DDA flats at Vasant Kunj. Except these two everybody was of the opinion that workers one easily available.

CGHS residents preferred hiring workers directly, one of them preferred to get the maintenance work done through the Management Committee. Residents of DDA flats of Rohini and Vasant Kunj overwhelmingly preferred to have some sort of association or maintenance committee or management of their house. The association or committee is not really existing right non but they would like to have it. In case of CPWD quarters they would like it and do through CPWD and in some cases by directly hiring the workers. In the case of DLF they would like to continue their present system - that is employing permanent workers to do the maintenance work.

CGHS and DLF residents were quite satisfied with the quality of work provided to them but the response from CPWD was a mixed one. Residents of DDA flats were not at all satisfied with the quality of work provided to them. CGHS and DLF residents got their maintenance work completed. In case of CPWD another was mixed in some case yers and in other case no. DDA residents didn't get their maintenance work completed-reasons being non availability of skilled workers and even exorbitant fees demanded by maintenance workers.

CGHS flat owners spent upto Rs.500 per annum on maintenance work. DDA residents at Rohini spent between Rs.500 to 1000. But at Vasant Kunj DDA residents spent between Rs.500 to Rs. 5000. Govt quarters expenditure on maintenance was nil because they get it done through CPWD enquiry office. DLF resident spent above Rs.5000 per annum on maintenance. Majority of the respondents expressed that they would like their maintenance work to be taken care of by a skilled workers cooperative society. Only DDA residents at Rohini had some reservations about it.

#### WORKERS

We were able to meet 13 workers who were doing maintenance work at different places in CGHS, DDA, CPWD and DLF. 10 workers belonged to the age group of 20 to 30 and the remaining three between 30 and 40. Five workers had education up to the secondary level, three had primary level education and three were illiterate. Remaining two were intermediate, one of them having diploma in electrical applications also. Seven workers were electricians, 2 were plumbers and we were able to meet a mason, a carpenter and a painter. Most of them had experience of their respective trades up to 10 years. We could not meet a female worker. We were able to meet permanent workers and three temporary workers and a few workers who worked individually. These workers were working at their respective places between past one year to 10 years. Six workers got their job through personal contract with the contractor or management and three got the job through employment exchange or applied for the job and got it. Three got monthly salary below Rs. 2000 and three got between Rs. 2000 and Rs 2500. Most of them were getting statutory facilities of one kind or the other or many of them but they brought their own tools and implements for work.

Most of the workers confirmed that electrical and plumbing were in greatest demand followed by carpentry, painting and masonry. Six workers felt maintenance work is more available in South Delhi and three felt it to be in the West Delhi. Two felt it is in the East. Eight workers did take up construction work and five did not. Most of the workers who preferred construction work were electricians and they preferred it because it is more convenient and of less complication. Monetary advantage was not the reason behind preferring construction work.

Some workers get and attend 8 to 10 complaints per day. There are others who do four to five per week. Most of the workers felt that they couldn't take contract after making a cooperative society. Firstly it would be difficult to organise workers in a cooperative. Even if they are able to do so it would be full of internal rivalry and bickering, and lastly, a workers' cooperative would not be able to muster sufficient capital to take up the contract directly. Most of workers offered some advice to a workers' cooperative so that it can take up the contract. Personal contact, according to them, is the most important factor for getting the contract and technically competitive. However the cooperative, they felt should also give advertisement in newspapers about its existence and provide quality work when the opportunity comes.

## HOSPITALS

In the hospital section we have covered the All India Institute of Medical Sciences, Dr Gupta Nursing Home and Hospital, Shahadra and ------Maya Ram Jain Hospital Pritampura. Private hospitals either keep permanent workers to do the maintenance or hire temporary workers. Hence there is almost non-existent scope in them. The case of AIIMS is altogether different. A lot of the maintenance work especially bigger projects are given on contract there. We were able to meet three management, one contractor and five workers.

#### MANAGEMENT

Leakages in pipes, robs repair of door, windows, plastering of walls, electrical and plumbing work are the maintenance work commonly found in Hospitals. These maintenance works are being done almost daily. Plumbing, masonry, electrical and carpentry are particularly in great demand.

The annual expenditure on maintenance varies from Rs.70,00000 (Seventy lakhs) excluding electrical maintenance in the case of All India Institute of Medical Services to Rs.500000 (Five lakhs) in the case of a private nursing home in Pritampura. Some nursing homes keep permanent workers to do the maintenance work some others hire temporary workers as and when required. Big hospitals like AIIMS having permanent workers to do the maintenance, hire temporary workers and still give big project of maintenance to contractors. Usually a huge or big maintenance work which they cannot manage themselves is given to contractors. By implication it means shortage of required manpower.

Washing, changing of doors and stone work are mainly given on contract. But the contractor should be registered with CPWD or MES or the Railways. They do not have a system of Short-listing of contractors. As far as the management is concerned all of the respondents were satisfied with their present arrangement for doing the maintenance work as well as the quality of work provided to them. Only AIIMS management was willing to give its work to a skilled workers cooperative. They would like the cooperative to have good skilled workers and expect better quality of their work than that provided by contractors. They would appreciate the promptness in obeying orders. The cooperative should, they feel, be economically competitive too.

#### CONTRACTOR

We could meet only one contractor in the hospital section. He is registered with CPWD class IV and gets the contract from AIIMS too through tender. Normally they get the contract from govt. buildings for doing painting, plastering brick repairing, stone work etc.

Presently he was involved in glass work in windows of the All India Institute of Medical Science. For this he employed six workers, two masons two attendants and two glass workers who bring their tools and implements and are being paid weekly by the contractor. Out lay of this project is Rs. 100,000/00 only. All the workers were temporary from the labour market at Gautam Nagar near Yusuf Sarai. The contractor says that skilled workers are easily available.

He also takes up construction work. Construction work according to him is less complicated in govt. sectors. Authorities don't allow the maintenance work to proceed smoothly for plam greasing by the contractor. It usually takes one year to get the payment after the bill is submitted. Running bills are passed only after required commission is paid an he has to face a lot of unnecessary harassment. Still the contractor prefers the govt. contract because he has been doing it for the last 30 years. He is of opinion that the situation was better in the pre' 84 days. He says maintenance work is easily available.

#### WORKERS

We were able to meet five workers. Their age varied from 24 years to 35 years and their educational qualification varied from 7th standard to 12th standard. Out of the five, two were plumbers, one carpenter, one mason and one electrician. All workers were male and whereas three of them had experience of upto 15 years the rest two upto five years only. Three of them were temporary workers and two permanent. Two permanent workers and one temporary worker of AIIMS used to get Rs.2500/00 per month each. One temporary got Rs.75/00 per day and the other Rs.100/00 per day. In most of the cases implements were carried by them for the work.

Plumbing masonry and carpentry is in the greatest demand in hospitals. Two workers were of the opinion that maintenance work is available in the West and the East of Delhi. Others didn't have any idea about it. Three workers didn't take up construction work but two did. Even those who took up construction work maintained that maintenance work is monetarily preferable than the construction work. A worker of AIIMS attended seven complaints per day. But others attended only one per day. One per day is not or same. Sometimes they had no work to do at all.

Three of the workers thought that they could form a cooperative and take the maintenance contract but the other two didn't think so. Workers thought the cooperative should fill up the tender, should develop contract with shop owner where complaints do come. They also wanted the cooperative to be well equipped and provide quality work.

## **SCHOOLS**

We were able to cover one government school that is in East Delhi and three private schools spread in South, West and North each. We were able to meet four managements and one worker for this survey.

#### MANAGEMENT

Electrical, plumbing, masonry carpentry and painting are the trades available for maintenance. Schools do maintenance work only occasionally. But DAV school in Pritampura does it every day. DPS R. K. Puram does it on weekly and monthly basis. Electrical, plumbing and carpentry are in greatest demand in schools.

Annual expenditure on maintenance of three school varies from Rs.30,000 to Rs.50,000. The Budget of the Govt. Secondary School in East Vinod Nagar goes over beyond Rs.50,000 per annum. Every school has permanent workers to do the maintenance work. Apart from it DAV school gives painting and carpentry on contract. In DPS R.K. Puram most of the maintenance work has been given on contract. Any huge or big maintenance work which they cannot manage themselves because of shortage of requisite manpower and also higher level of skill involved in doing that work is giving on contract. Some maintenance work is required occasionally, for instance, putting electric generators in order and painting or white-washing of the building is occassional. Keeping permanent workers for a work which may be required to be done once in six months or a year is not at all an economically profitable proposition.

Painting or whitewashing, electrical in -----ACIS, sanitary, sewerage, drainage, carpentry are given on contract. The criteria applied are, generally, that the contractor should have special knowledge, skill and experience and provide quality work. He should be able to finish the work within stipulated time and budget. They have no system of short-listing the contractors.

Two of the management were satisfied with their present arrangements but the other two were not. Management of the Govt. school in the East was not satisfied with the quality of work provided to it but the rest three were.

Only Montford school in Ashok Vihar was willing to give its maintenance to a skilled workers' cooperative. Others were not. None of them had any suggestion even for such a cooperative society.

#### WORKER

We could meet only one worker in the school sector. His age was 35. He was educated up to the secondary level. He was a mason, having experience of 15 years. He was a temporary worker and got this work through personal contract with the management for which he had been working for the last three months and receiving Rs. 100/00 per day. He was neither satisfied with his present work nor getting statutory facilities. He brought his own tools and implements for work. According to him, masonry was in great demand, anywhere in Delhi. He takes up the construction work too and prefers it to the maintenance work. His frequency of attending to complaints is one or two in a week.

He is confident that he along with other workers could form a cooperative and take up the contract of maintenance work. He does not have any suggestion for establishing a cooperative and to enable it to get the maintenance work.

## **CINEMA HALLS**

We have covered Alpana Cinema in the north and Sangam Cinema in the South. We could not interview contractors and workers well due the noncooperation of the management. We have done two managements.

#### MANAGEMENT

We met the Assistant Manager of Alpana Cinema and the caretaker of Sangam Cinema. Plumbing, carpentry, sewerage, drainage, electrical, painting are the categories of maintenance they require. One says that they do it occasionally but the other does it daily. Plumbing, sewerage, drainage and carpentry are in great demand in these places. Each of them spent more than Rs. one lakh per annum on the maintenance of their respective cinema halls. They are having permanent workers to do the maintenance. But they also give large scale work like painting, repair of chairs on contract.

Shortage of skilled workers and big amount of work i.e. lack of requisite manpower are the primary reasons for giving work to contractors. Painting, carpentry, masonry and major work in plumbing are given on contract. The criteria applied are that the contractor should have special knowledge, skill and experience in his field. He should be reliable too and provide quality work, there was no system of short listing contractors.

Both managements were satisfied with their present arrangement and quality of work provided to them. None of them was willing to give its work to a skilled workers' cooperative. Neither had any suggestion for such a cooperative to enable it to got the maintenance work. There is a very poor prospect for the cooperative in getting maintenance work in these places.

## CORPORATE SECTOR

In the corporate sector, we have met two managements and two workers only unfortunately, despite out desperate attempt.

#### MANAGEMENT

According to the managements, the common trades of maintenance work available in their office complexes, include electrical, plumbing, masonry, carpentry, painting and sanitary work. According to one management, he gets his maintenance work done daily. The other gets it done only weekly. The most common trades that are in great demand in both the places include electric, plumbing and masonry. Carpentry and painting are also in demand in one place. Both the managements told us that their annual expenditure on maintenance work exceeds one lac.

In both the places, the maintenance work is given to contractors. According to one management, he gives his maintenance work to contractors when it gets overloaded while the other told us that certain maintenance work is required occasionally and to keep permanent workers for that purpose is not economically viable. While one told us that he gives all the maintenance work to contractors as he does not have his own permanent workers, according to the other categories given to contractors are plumbing, masonry, carpentry and painting.

While in one place there is only one criteria, namely the lowest price bid, in the other place, there are more than one criteria for giving work to contractors: Registration, special knowledge or skill about the work and also the Lowest Price Bid were the other reasons. Thus the criteria `Lowest Price Bid' is common in both the offices.

Only in one place, is there the system of Short-listing of contractors. While one management is satisfied with the present arrangement for maintenance work as well as with the quality of work provided to them, the other is neither satisfied with the present arrangement not with the quality.Only one management responded positively when we wanted to know his reaction to a skilled workers' cooperative society for taking up work.

#### WORKERS

Both the workers fall in the age group of 20 to 30 years. One has secondary qualification while the other studied upto intermediate. Both are male workers, one an electrician and the other a plumber. Both of them have around 10 years of experience. One worker is purely temporary while the other is, in a sense, permanent. He has been working with the present contractor for a long time. The permanent worker gets work through his contractor while the temporary one gets through personal connection with the management. The permanent worker gets 2,000 Rs and the temporary worker gets 16,000 per month. The permanent worker also gets some statutory benefits like bus fair from his place to the working site, and leave on Sundays. But the temporary one does not get any thing like this as informed by him.

Both the workers informed us that the necessary tools and implements are provided by the contractor under whom they work. According to one worker, the trades like electric, plumbing, masonry, carpentry are in great demand and according to the other all the trades are in great demand.

Both the workers, felt that maintenance work is available in mostly South Delhi.

One of them also takes up construction work as there are lots of scope for this trade in construction work. Both of them told us that they get maintenance work quite often. According to the electrician, he gets 6 complaints per day.

## RAILWAYS

#### MANAGEMENT

In the Railways, we have met the Divisional Manager in the engineering department who is responsible, among others, for the maintenance work. We have also met one railway contractor and one worker who work under this contractor. The manager did not specify about the various categories of maintenance work that were available in the Railway sector. Yet, he said that a wide range of maintenance work involving all the trades that are associated with building is available. The maintenance work is done daily, weekly, monthly, quarterly, half yearly and yearly. In fact in the railway, the maintenance itself is a major enterprise.

As informed by the management, almost all the trades are in great demand. The annual expenditure of the Railways on the maintenance touches 11 crores. The maintenance work is managed like some other sectors in two different ways: viz., with their own permanent workers, and by giving to the contractors. Maintenance work is also given to contractors as the railways do not have full capacity to meet the demand of the work. Any kind of maintenance work which is listed in the "standard specification" book may be given to contractors.

But the management has certain criteria for giving work to contractors, namely;

- 1. the contractors would have to fulfill the Railway's own rate work would be given through competitive biding.
- 2. The contractors should be experienced and expert in specialized work, and
- 3. The contractors must fulfill the standard that is set in the Railway's standard book (including registration of contractors).

The railways has some 300 odd short-listed contractors based on the criteria set by the Railway Board. These are short-listed annually and this is done

mainly on the basis of financial position. For example, contractors are shortlisted into five different levels depending on their financial position. Below we give the table below shows the different levels with the financial position.

Levels	<b>Financial Position</b>	
А	50 LACS	
В	UPTO 50 LAC	
С	UPTO 20 LACS	
D	5 LACS	
E	1 LAC .	

The manager is satisfied with the present arrangement for maintenance work as well as the quality of work provided to him.

He, however, would like to give his maintenance work to a skilled workers cooperative. He has also some suggestions for such a cooperative. He said that the cooperative has to compete with others in the market and for that matter it should be well equipped, both technically as well as financially.

#### CONTRACTORS

The contractor whom we met in the Railway sector has got registered with the Railways. He is also short-listed as category 'C' contractor. He gets maintenance work through tenders called by the management. The outlay of the present project which he was undertaking at the time of the interview is 12 lacs and the number of workers is 60. The project is day to day

maintenance work and the period of the project is one year. He got the project from DRM, New Delhi Railway office. He got the workers from the labour market and they were temporary workers. According to the contractor, the necessary tools and implements are provided by him as well as by the workers themselves. Workers are paid weekly.

#### **Availability of Workers**

The contractor was of the opinion that, workers are easily available.

The contractor also takes up construction work because the maintenance work is not profitable. But he said that in some other respects, the maintenance work is advantageous than the construction work. For example the maintenance work is very easy to handle. The contractor informed us that he got the payment as soon as the bills are submitted and did not face any difficulty in getting the payment. He prefers the Railway sector compared to the other sectors. The contractor informed us that the maintenance work is also easily available.

#### WORKERS

The worker whom we met in the Rly. sector is a thirty-five year old male worker. He does not have any formal educational qualification. His trade is plumbing and he has been working in this trade for the last fifteen to twenty years. His nature of work is temporary.

Since he has been working for the last few years under the same contractor, he gets maintenance or other work through the contractor only.

His daily wage is 100 Rs. and he does not get any statutory benefit. But the worker is satisfied with the present work. According to him the small and ordinary tools are provided by him and the big and costly ones are provided by the contractor. Almost all the trades he felt are in great demand.

He informed us that maintenance work is available in the Railway department all over Delhi. He gets maintenance work at an interval of 10 to 20 days.

### **COMPARISON - RAILWAYS**

For getting work in the Railway, contractors must be registered with Railways. This was confirmed by both the management as well as the contractor. According to the management as well as the worker we met, all the trades related with building are in great demand. The contractor who was interviewed informed us that he got the skilled workers from labour markets through personal contact. Similarly the worker gets work through personal contact with the contractor. Both the contractor and the worker do not take up construction work because the maintenance work is preferable to them.

Both of them agreed on the fact that the small and ordinary tools and implements are provided by the workers and the big and the costly ones by the contractors. While according to the contractor, the, maintenance work is easily manageable, the worker told us that he cannot manage maintenance work so easily.

## HOTEL

We have categorised hotels into big (five star) and medium (three star). From our field survey, we have noticed that the market opportunity in both the categories is more or less the same. So, for our analysis we have grouped them into one category.

#### MANAGEMENT

We have visited three hotels and met altogether three managements, one from each of the three hotels.

Most of the maintenance work available in all the three hotels are electric, plumbing, masonry and carpentry. Two hotels also have painting work. Some other categories such as sanitary, repairing of fire-fighting equipments, and glass work are also available occasionally. They do the maintenance mainly daily, weekly and monthly. The trades in great demand in the hotels we visited are electric, plumbing, masonry and painting. All the three managements informed us that their annual expenditures on maintenance work in a year exceeds 1 lac.

As informed by all the managements, the maintenance work is managed in three various ways in their hotels:

- 1. With their own permanent workers.
- 2. By hiring temporary workers, and
- 3. by giving to contractors.

The most common reason why all the three managements give their maintenance work to contractors is the unavailability or shortage or insufficiency of skilled workers with them. Two of them told us that sometimes overloading of work compel them to give work to contractors. The managements in the hotels also have certain criteria for giving work to contractors. Two out of the three hotels in our sample survey are from Indian Tourism Development Corporation (ITDC) group. The management from these two hotels informed us that for getting work in these hotels, the contractors must be registered with the ITDC. But in the other hotel the management does not stick to this criterion. The other common criteria are:

- 1. The contractors must have special knowledge or skill about the work.
- 2. They should be financially sound, and
- 3. the Management always prefer the Lowest Bid Price.

### **Short-listing of Contractors**

One of the ITDC hotels followed the system of short-listing of contractors but the other two hotels do not have this system. While two of the managements are satisfied with the present arrangement for maintenance, one is not satisfied. When we asked them about their reaction to a skilled workers cooperative society, two of them responded positively. They would like to give their maintenance work to such a society. But one was not interested in giving their work to such a society.

### CONTRACTORS

Out of the three contractors we met in the hotel sector, two are registered (with ITDC), while the other is not. All the three contractors get maintenance work through tenders. The available range of outlay of the projects that were undertaken by the contractors at the time of interviewed and the number of workers employed are as follows:

- 1. The outlay is 50,000 and the number of workers employed is 10,
- 2. The outlay is between 1 lac and 2 lac and the number of workers employed is between 5 and 8.

Two contractors get workers through personal contact and the others get from the labour camps. All the workers are temporary.

Workers are paid daily, weekly and monthly, and all the contractors reported

that, the tools and implements are provided by them as well as the workers. According to two contractors, workers are easily available, while according to the remaining one workers are not easily available. Two of them take up construction work as it is advantageous financially than the maintenance work. All of them told us that they faced difficulties in getting the payment. Two informed us that it takes two to three months in getting the payment. But despite this all the contractors prefer hotels than the other sectors.

According to all the contractors that were interviewed the maintenance work is most easily available.

#### WORKERS

Workers interviewed fall in the age group of 20 to 40 years. Two of them were secondary passed, one intermediate and the other primary. Two of them are masons and the third a carpenter. All of them are male and temporary workers.

All three workers informed us that they got work through personal contact with the contractor and their daily wages vary from Rs.60 to Rs.100. While two workers are satisfied with the present work the remaining one is not satisfied. According to all the three, they themselves provide the necessary tools and implements.

Masonry is in great demand in this sector.

Maintenance work was available more in South Delhi. Two of them also take up construction work.

## **Private Residential Places**

In this sector we were able to cover Shahadra, Shalimar Bagh, Greater Kailash and Model Town. There was no management in all these places. Hence we met houseowners and workers. In Greater Kailash we could meet a contractor too.

#### HOUSEOWNERS

Majority of the six houseowners whom we met were in the age group of 35 to 60 and doing business as profession. Electrical, plumbing and painting were in greatest demand followed by masonry and carpentry in these complexes. In Shahadra, the frequency of maintenance work was yearly, in Shalimar Bagh the response was mixed - quarterly, and in Greater Kailash they do it on a monthly basis. It was an unanimous response that they hire workers on temporary basis directly to do their maintenance work. In Greater Kailash houseowners get workers through personal contact or by making telephone calls to the shop owners. In Shalimar Bagh and Shahadra they get them from nearby market. All of them said that workers were easily available. Most of the houseowners preferred the method of directly employing the workers for maintenance work. All of them were satisfied with the quality of work provided to them. Some got their work completed, others not.

In Shahadra houseowner spent Rs. 500 and another upto Rs. 1000/00 per annum on maintenance work. Figures of Shalimar Bagh couldn't be known. In case of Greater Kailash they spent more than Rs. 2000/- which goes up to Rs. 5000/00 per annum for maintenance work. In Shahadra two out of three respondents were willing to give their maintenance work to a skilled workers' cooperative, but in Shalimar Bagh none wanted to do that. In Greater Kailash one response was yes and another no.

### CONTRACTOR

We met a contractor who had no registration whatsoever but got contract from private residential houses in Greater Kailash. He gets the maintenance work through personal contact. At present he is doing stone work in a private residential place at Greater Kailash. He didn't reveal the outlay of the project. He got it through personnel contact. About six to eight workers were working on this project. He hired those workers from the labour market and all of them were temporary workers. They consisted of mason attendants and unskilled labour. The contractor provided them with tools and implements. He paid them daily wages. He does not take up any construction work. Mostly he gets the payment within a week after the work is over. Sometime he faces difficulties in getting the payment. He prefers private residential places to get contracts from.

#### WORKERS

We met eight workers and six of them belonged to the age group of 20 to 20. Three were illiterate, two studied upto primary and two secondary level. Three were carpenters, two painters, one electrician and one mason. All were males and their experiences varied from 10 years to 20 years. All of them were temporary workers. Except one among the temporary workers the got their work through personal contact, and for the other three the houseowners or contractor or management approached then and gave them work. Most of them were working for least one month and two were working for last two to six months. Three workers got daily wages in the range of Rs.60 to Rs.80 and three others got in the range of Rs.81 to Rs.100. None of them got any statutory facilities. Three of them were satisfied with their present work and the other three were not. Some did not face any difficulty in getting the work but some had to wait and remain idle till they got the work. Most of them brought their own tools and implements for the work.

Masonry, carpentry, electrical and plumbing were in greatest demand in this sector. There are lots of maintenance work in North and West of Delhi.

Most of the workers who took up construction work did so because they preferred construction work. One preferred maintenance work to construction. Five of them got between four and five maintenance work. Rest of them got one or two maintenance work per week.

Most of the workers appeared confident that they could from workers cooperatives and take up the contract. They believe that personal contact is the most important factor in getting a contract.

#### **GOVERNMENT SECTOR**

All government departments have their own employees to look after the maintenance of govt. buildings/houses. Any maintenance work which is big and their employees cannot manage themselves is given on contract. Electrical, plumbing, masonry and carpentry are in great demand in the government sector. Any maintenance work which is big or complex or requires high technical expertise is given on contract. Registration is a must for all government work. In CPWD and P&T there is a system of short-listing of the contractors. Experience, special knowledge and lowest price bid are also sought. They spend more than Rs.100000. per annum on maintenance and are willing to give their work to the cooperative provided its quality of work is better than that provided by the contractors.

#### Conclusion

In the government sector, payment for the work done may be delayed, officials may be seeking bribes and commission, but ultimately payment is made to the cooperative. In the private sector this security or guarantee does not exist. The cooperative may manage the working capital up to Rs. four lakhs. Hence it is capable of taking up the govt. work which will be quite suitable to it. In terms of requisite skilled workers the cooperative has the good band of masons, carpenters and painters. These are also the trades in great demand.

# Multi Storeyed Building.

These establishments keep permanent workers to do the maintenance workers, they hire temporary workers when required, and they also give some of their work on contract.

Electrical, plumbing, masonry, and carpentry are in great demand in the multi storeyed buildings. Of these masonry, carpentry and painting are given on contract. In giving contracts they look for reputation and requisite manpower and working capital with contractors,. The contractors should be reliable in terms of meeting the target of time and budget. A Multi storeyed building spends more than Rs.10 lakhs on maintenance per year. They appeared to be well disposed towards the cooperatives provided it fulfils their criterions.

#### **Conclusion.**

They are looking for reputation but the cooperative has yet to establish its reputation in the maintenance market. Besides, the cooperative shall have to compete with well established contractors for getting work from a Multi storeyed building. In terms of requisite working capital the cooperative has to prepare itself to get the maintenance work. In terms of skilled manpower the cooperative has good band of masons, carpenters and painters, These trades are in great demand.

# **Shopping Centres**

In a big shopping centre maintenance work is with the management which keeps permanent workers to do the maintenance work. It hires temporary workers when required. It also gives work on contract. In a medium or small shopping centre maintenance work is with the individual shop owners who hire temporary workers whenever there is a maintenance work with them. As against the big shopping centre, where electrical, plumbing and masonry are in great demand, in small and medium shopping centres it is electrical and masonry works only. Trades given on contract are painting and masonry. They look for special knowledge and experience in contractors.

#### **Annual Expenditure on Maintenance**

In a big shopping centre the annual expenditure on maintenance varies from Rs.10,000 to Rs.30,000 per annum. For medium and small shopping centres it varies from Rs.500. to Rs.5000. annually. A big shopping centre has a positive attitude towards the cooperative but small and medium ones have negative attitude.

#### **Conclusion of the Shopping Centre**

Trades of electrical, plumbing and masonry are in great demand but only painting and masonry are given on contract and the cooperative has 26 masons and two painters to take up the maintenance work. Maximum they spend on the maintenance work is Rs. 30,000/- . The cooperative has the working capital of to Rs. 4 lakhs. Hence the cooperative may take up the maintenance work of big shopping centres.

# **Housing Societies**

Different housing societies follow different patterns. Cooperative Group Housing Societies and DLF Quarters keep their permanent workers to do the maintenance. They hire temporary workers and also give work to contractors. CPWD enquiries have permanent workers and they give work on contract too. DDA flats residents hire temporary workers whenever required. The kind of maintenance required also varies from complex to complex. In CGHS it is electrical, plumbing and masonry, in DLF it is electrical, masonry and painting, in CPWD it is electrical and plumbing and in DDA it is more plumbing than electrical. DLF provides painting and masonry on contract. In CPWD and CGHS any work which is big or complex and which their own workers cannot manage, is given to a contractor. In DLF it is reliability and technical competence, in CGHS it is reliability and experience but for CPWD registration more than anything else are the qualities looked for while contracting out maintenance work. The annual expenditure in CGHS varies from Rs.5000. to Rs. 10,000 but for DDA it is between Rs.500. to Rs.5000/. In case of CPWD enquiry office it goes well beyond Rs.20 lakhs. In DLF it is well above Rs.5000. All categories of housing societies were positively inclined to wards the cooperatives for doing their maintenance work.

#### Conclusion

In case of CPWD the cooperative has to increase its working capital and also perhaps high technical expertise to take up the maintenance work. In case of DLF, painting and masonry are given on contract whereas two painters of the cooperative supported by four helpers (unskilled worker) can do the job of painting. Besides, the cooperative has 26 masons - more than that required by this sector. In case of DDA, the cooperative may be constrained because electrical and plumbing are in great demand but the cooperative has only one plumber and only two electrician. It has a working capital of Rs. 4 lakh which is sufficient to take up the work in this sector.

# Hospitals

In case of government hospitals, they mostly have permanent workers. They also hire temporary workers and give work on contract too. But private hospitals have permanent workers though sometimes they too hire temporary workers. In govt. hospitals electrical, masonry, carpentry and painting are in great demand. Of these painting and carpentry, and stone work are given on contract to contractos who are registered, maintain better quality, and are economically competitive. In government hospitals, the annual expenditure on maintenance is more that Rs. 70 lakhs (excluding electrical maintenance). In a private hospital it is Rs. 500,000 and above.

The government hospitals have a positive attitude towards the cooperative but the private ones haves a negative one.

### Conclusion

Painting, masonry and stone work are given on contract in the hospitals. The cooperative has two painters, 26 masons and six stone masons to take up the maintenance work of government hospitals. Annual expenditure on maintenance goes up to Rs.70 lakhs. The cooperative has to look for more working capital than what it has at present, that is Rs.400,000. Since private hospitals are not giving work on contract hence prospects for getting work from them is bleak.

## Schools

Schools have permanent workers though they give on contract too. Electrical, plumbing, masonry, painting and carpentry are in great demand here. Of these painting, carpentry and electrical works are given on contract, on the basis of special knowledge, experience and reliability of the contractors. Their annual expenditure on maintenance varies between Rs.30,000/ to Rs. 50,000/00. The attitude of the schools towards the cooperative is highly negative.

### **Conclusion of Schools**

Maintenance related to painting, electrical and carpentry works are given on contract. The cooperative has only two electrician which is not sufficient. Of course two painters can do the work supported by four helpers (beldars). The cooperative has six carpenters which is sufficient. School managements are quite suspicious of the cooperative, or for that matter any unknown person or organisation. The cooperative may have to face difficulties in getting work from them. Economically the cooperative has a requisite working capital (Rs. 4 lakh) to take up the maintenance work.

# **Cinema Halls**

They have permanent workers and give work on contract too.

## **Trades in Great Demand**

Plumbing and carpentry are in great demand.

### **Trades Given on Contract**

Painting, carpentry and masonry are given on contract.

### **Qualification for Contractors**

Reliability, special knowledge and experience are qualities for contractors.

### **Annual Expenditure on Maintenance**

It is Rs.100000/00 and above per year.

### Attitude Towards the Cooperative

Their attitude towards the cooperative is highly negative.

## **Conclusion.**

Painting, masonry and carpentry are given on contract and in that trades the cooperative has the requisite man power. Annual expenditure is Rs. 100000/00 which is well within the capability of the cooperative.

## **Corporate Houses**

All of the maintenance work in this sector is given on contract. Electrical, plumbing, carpentry and painting are in great demand. The criteria sought for while contracting these works out are lowest prices bid, registration and special knowledge in the fields. The annual expenditure on maintenance is Rs. 100,000.00 and above. Their attitude towards the cooperative is quite positive. They have become fed up with contractors and would like to give cooperative a chance.

### Conclusion

The cooperative shall have to compete with big and well entrenched contractors to get the maintenance work from the corporate sector. Otherwise it is quite a prospective market for the cooperative. Corporate sectors' annual expenditure being Rs.100000.00 above, it is well within the capability of the cooperative. Electrical, plumbing, carpentry and painting are in great demand. Though all trades are given on contract, the cooperative has only two electrician and one plumber, which is less than the requisite manpower to take up maintenance work from the corporate sector. Though considering the magnitude of the market in this sector even six carpenters and two painters may not be sufficient, still the cooperative ay take up medium and small projects related with there trades.

# **Railway Colonies**

The Railways have permanent workers for their colonies'maintenance work and give work on contract too. All trades are in great demand here, and as such are available for contractors. They want that the contractors should be registered and short-listed by the Railways and that their rates should be consistent with the rates of the railways. Their annual expenditure on maintenance of buildings is Rs.11 crores, which is the highest among all sectors/categories surveyed during field work. Their attitude towards the cooperative is also positive.

### Conclusion

The cooperative has to be registered and short-listed by the railways to get the maintenance work from this large and lucrative sector. Though there is considerable, a competition huge market for the cooperative lies in the railways.

## Hotels

Hotels have permanent workers, but they hire temporary workers when required and give work on contract too. Electrical, plumbing, masonry and painting are in great demand in the hotels. Of these Masonry and painting are given on contract. Registration, special knowledge and lowest price bid are the qualifications looked for in contractors. The hotels spend more than Rs. 100,000.00 on maintenance per year. Their attitude towards the cooperative is positive.

### Conclusion

It is well within the technical and economic capability of the cooperative to take up maintenance work of hotels. Because the cooperative has Rs. 4 lakhs as working capital, and also has 26 masons and six carpenters and 10 unskilled workers, it is sufficient to take up projects in these two trades which are in great demand in hotels.

# **Private Residential Places**

Private residences usually hire temporary workers and give work on contract too. Electrical, plumbing, painting, masonry and carpentry are in great demand in these places of which painting, masonry and carpentry are given on contract. The private houseowner\residen wants that a contractor be reliable, provide quality work and be sensitive towards the architecture and aesthetic dimension of a building. Their expenditure varies from Rs.2000/00 to Rs.5000/00 per year.

Their attitude towards the cooperative is highly negative and critical. They deeply mistrust anybody/any organisation whom/which they do not know personally.

#### Conclusion

The cooperative may take up this sector only by developing personal contact with house owners. Painting, masonry and carpentry are given on contract, and the cooperative has efficient band of workers in these trades. Their annual expenditure on maintenance is between Rs.2000/ to Rs.5000/ which is also well within the capacity of the cooperative. Only they have to make a special effort to cross the barrier of mistrust erected by the private residential units

## Apna Nirman Mazdoor Cooperative Society - A Profile

Apna Nirman Mazdoor Cooperative Society is a cooperative society of construction workers. Its office is located in the serene and peaceful environment of C-189 Pushpanjali Enclave, Pritampura, New Delhi. Most of the members of the cooperative have been closely involved in the movement of construction workers spearheaded by National Coordination Committee for Central Legislation. Due to the constantly shifting relationship of employers and employees most of the laws for the welfare of working class do not apply to construction workers who are the insecure and exploited lot. They have been demanding through Central Legislation that a tripartite board of construction workers, employers of the construction industry and government representatives be set up so that construction workers could get a better deal.

Apna Nirman Mazdoor cooperative society has been in existence since 1988 but formally it could get itself registered under the cooperative societies Act only in March 1995. The objective of the cooperative is to get contracts of maintenance works as well as construction works so that the profit taken away by the contractor could accrue to construction workers for their benefit and welfare. Secondly, it is believed that the cooperative will be able to play a pioneering role in skill upgradation and training of the construction workers. The cooperative would have to provide an example and a success story so that other cooperatives of the construction workers could be set up. It will have to take forward the collective consciousness of the construction workers and promote and protect their interest and welfare.

Apna Nirman Mazdoor cooperative society has 60 members on its rolls at present. Out of the 60 members 54 are construction workers and of the remaining six nonworker-members one is a civil engineer, one has a degree in Business Management, one is a security guard of the cooperative and the remaining three are doing social service. Of the 54 worker members of the cooperative, 44 are skilled workers and 10 are unskilled workers. Of the total 60 members of the cooperative five are women three unskilled workers and two doing social service. The origin and background of the members of the cooperative are varied 20 come from Madhya Pradesh, 17 from Bihar, nine from U.P., seven from Rajasthan and one from Bengal. Only three members are locals, that is from Delhi. In case of many workers a specific trade of the construction industry has been their family occupation. For example, a carpenter from Bihar was doing carpentry is Bihar because his father and fore fathers did the same. That carpenter migrated to Delhi and has been doing carpentry at a construction site at Delhi. He is also a member of the cooperative. This type of workers migrated to Delhi because there were few job opportunities back home and they did not get regular employment. Besides, wages are considerably higher in Delhi as compared to their native places. There are workers of the cooperative who migrated to Delhi and then learnt a specific trade of the construction industry. In fact they started as helpers to skilled workers and gradually learnt a specific trade. This type of workers came from agricultural background, having some land back home which is not sufficient to sustain their lives. Some were landless agricultural labourer who used to get meagre ways. Moreover, work was not available for them round the year. Most of these workers have links with their native places which they visit twice or thrice in a year. Each visit varies from one week to one month on an average. In the months of May, June and July most workers prefer to visit their native places. Hence availability of a worker at Delhi round the year cannot be taken for granted.

The workers of the cooperative are very enthusiastic about the idea of the cooperative providing them the work. They think they would got reasonable wages as well as statutory facilities like weekly holidays, extra money for overtime, payment in case of sickness and so on. In addition, workers would also have a share in the profit of the cooperative.

20 members of the cooperative fall in the age group of 25 to 30 years, 17 are of 31 to 36 years, 10 fall between 37 and 45 years and 7 are in the age group of 20 to 24 years. The oldest member of the cooperative is a stone mason of 55 years and the youngest an electrician of 20 years. Three unskilled women workers come in the age group of 25 to 30 years.

## Trade or profession of all the 60 members of the cooperative

MASON		26
STONE MASON		06
CARPENTER		06
ELECTRICIAN		02
PAINTER		02
PLUMBER		01
BARBENDOR		01
UNSKILLED WORKERS		10
CIVIL ENGINEER		01
BUSINESS MANAGEMENT		01
SECURITY GUARD		01
SOCIAL SERVICE	TOTAL	03 60
		00

Masons constitute 43% of the total members of the cooperative. Four of them also take small contracts of construction work on individual basis. Stone Masons constitute 10% of the total members of the cooperative, and therefore mason and stone masons constitute 53% of total members. Carpenters constitute 10% of the total members, electrician and painter 3% each, plumber and barbendor only 1.6% each, and unskilled workers constitute 16% of the total members of the cooperative. Women workers constitute 33% of the unskilled workers of the cooperative. The cooperative can hire good electricians and plumbers from the market as and when need arises because these two are grossly under represented among the members of the cooperative.

#### Work Experience of the Cooperative

The cooperative prepared the sets of toilets and bathrooms for slum dwellers in Rajouri Garden (between Vishal Cinema and Police Station), which was sponsored by the Slum Department of the Government of Delhi. The cooperative got this project in parts for doing the whole work. For instance, the first contract was to make platforms, another was to make water tanks, yet another for outer structure of the toilet and bathrooms, and so on. Thus the cooperative got five separate contracts of this whole project of total outlay of Rs.500,000. Six masons, three helpers (unskilled workers), one painter, one barbendor and one plumber totalling 12 workers of the cooperative who worked from September 95 to December 95 to finish this project. Recently the cooperative has got two sub-contracts from JK company to construct 60 toilets and 60 bathrooms in Rohini.

#### **Financial Situation of the Cooperative**

At present the cooperative has the liquidity or running capital of Rs.85,000. Apart from this five members of the cooperative have deposited Rs.10,000 each in a bank in the name of the cooperative. Thus the cooperative has the share capital of Rs.50,000. Against this share capital the cooperative can procure the construction material upto the value of Rs.2,50,000 from the market on credit. This can be done under the scheme of Maximum Credit Limit.

The cooperative can play a pioneering role in familiarising its workers with the latest instruments, tools, equipment and technology coming in construction industry and also train them in the use of those instruments and technology etc. For example, carpenters of the cooperative are yet not aware of the cutter machine. The cooperative of course did a commendable work by inviting a representative of the New Board Company to provide new information and style to its carpenters. This trend should be encouraged and expanded in other trades also.

#### Conclusion

Apna Nirman Mazdoor Cooperative Society is primarily a skilled construction worker's cooperative. the cooperative has 60 members on its rolls. Masons constitute 43% of the total members of the cooperative and stone masons constitute 10%. Thus mason and stone masons together constitute 53% of the total members of the cooperative. Is it a mere coincidence that more and more masons became members of the cooperative? Is it because more masons were involved in the construction workers' movement and that is reflected in the composition of the cooperative? or is it because masons are more required in the construction work and the cooperative is more oriented towards construction work than the maintenance work?

We could not find satisfactory answers or definite answers of above-mentioned questions. What we can say with a certain amount of confidence is that the composition of the different trades of the constituting members of the cooperative requires to be more even and balanced if the cooperative has to come in a big way in the maintenance market of Delhi. Electrical, plumbing and masonry are trades in great demand in the maintenance market of Delhi. Electricians constitute 3% and plumbers only 1.6% of the total members of the cooperative. Masonry, painting and carpentry are the trades normally given on contract in the maintenance market. Carpenters constitute 10% of the total members and the painter merely 3% of the total members of the cooperative. We have surveyed 11 sectors of buildings all over Delhi. If we add the annual expenditure of all the respective buildings/offices/

sectors we visited, it comes to Rs.12 crores 14 lakh\per anum.

But our survey was the sample survey. For example we visited four multi storeyed buildings. We have added their respective annual expenditures in our total. But there are more that 400 multi storeyed buildings and we don't know their annual expenditure.

Actual maintenance work available in Delhi per year should be thousand times more than Rs. 12 crores and 14 lakhs.

If we take it that the annual expenditure on the per year maintenance work by a multi storeyed building is more that Rs.10,00000/00, by a CPWD enquiry office Rs. 20,00000, by a government hospital Rs.70,00000, by railway colonies is Rs. 11 crores, the cooperative's working capital including the share capital at present being Rs.40,000/00, its working capital has to be considerably strengthened to get into the maintenance market in the above mentioned sectors. In these sectors the cooperative may try for small projects on masonry, carpentry and painting`.

In other sectors like corporate house, government sectors, and hotels, annual expenditure on maintenance work is Rs.100000 and above. These sectors are well within the capability of the cooperative. In a big shopping centre the annual expenditure on the maintenance varies from Rs.10,000 to Rs.30,000. This is also suitable for the cooperative. Annual expenditure on maintenance in case of private residential flats/houses goes as low as Rs.500/-. But in this sector margin of profit should be very small.

In the government sector registration is a necessary condition, in case of the Railways and CPWD short listing by them is also necessary. Special knowledge, experience, meeting the target in terms of time and budget quality of work are the qualities sought for providing contract of maintenance work. Many contractors possess these qualities and qualifications. Personal contact with the management, in addition to possessing the above mentioned qualifications proves advantageous in getting maintenance contracts.

Normally we have found that workers keep their own instruments and tools for doing the maintenance work. Probably the same is true about the members of the cooperative too. In many cases workers are not able to buy the latest tools, implements and instruments. The cooperative may devise some mechanism to provide its members with latest tools and implements or assist them in buying it particularly because it is a very competitive market. The cooperative has to familiarise its workers with the latest instruments, tools, equipments, technology and style used and practised in the maintenance work. Ernest efforts should be made for training and upgradation of skill of member workers of the cooperative.

# Apna Nirman Mazdoor Cooperative Society and the Maintenance Market

A comparison between Apna Nirman Mazdoor cooperative society and the expanding market of maintenance of buildings has to take into account a realistic evaluation of the capabilities of the cooperative on the one hand and potentialities of the maintenance market in different sectors of buildings in Delhi on the other. The cooperative has an efficient band of workers and there is no harm if it hires some workers from the open market when need arises. This will provide the cooperative with the requisite manpower to take up any maintenance work. If the cooperative can manage a running capital up to 4 lakhs (including share capital), it would be a sound financial position to take up the maintenance work. Many members of the cooperative are well-connected and have lots of personal contact and this factor will stand them in good stead to get the maintenance work.