

EASTERN RAILWAY

WORK STUDY REPORT

ON

**REVIEW OF WORKLOAD OF SAFAIWALAS
AT JAMALPUR COLONIES UNDER CHI OF
MEDICAL DEPARTMENT**

(STUDY NO.WSER-06 / 18-19)

(Submitted on 26.06.2018)

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BY

CENTRAL PLANNING ORGANISATION

GM'S EFFICIENCY CELL

EASTERN RAILWAY

KOLKATA

CONTENTS

Sl. No.	Particulars	Page No.
1	<i>Acknowledgement</i>	1
	<i>Terms of Reference</i>	
	<i>Summary of Recommendation</i>	
2	<i>Executive Summary</i>	2
3	<u>CHAPTER-I</u> <i>Introduction</i>	3 - 4
4	<u>CHAPTER-II</u> <i>Existing Scenario</i>	5 - 8
5	<u>CHAPTER-III</u> <i>Critical Analysis</i>	9 - 15
6	<u>CHAPTER-IV</u> <i>Financial Appraisal</i>	16
7	<i>ANNEXURES</i>	<i>Annexure I & II</i>

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TERMS OF REFERENCE

The subject workstudy has been undertaken by the GM's Efficiency Cell of Eastern Railway in financial year 2018-19 under the following terms of reference:-

- (i) Evaluate the quantum of work.
- (ii) Examine the deployment of Safaiwala against workload.
- (iii) Scrutinize the benefit of participation of foreign agency in cleaning work.

SUMMARY OF RECOMMENDATION

<i>Sl. No.</i>	<i>Recommendation</i>	<i>Para reference</i>
1	<i>Keeping in view of the financial benefits of Railways, it is recommended for outsourcing the cleaning activities of Jamalpur Railway colonies keeping 8 posts of departmental safaiwalas for misc. activities and emergency purpose which would result in surrender of 40 nos. of posts as against the present total Sanctioned Strength of 48 posts.</i>	3.15

EXECUTIVE SUMMARY

<i>Study Name & No.:</i>	REVIEW OF WORKLOAD OF SAFAIWALAS AT JAMALPUR COLONIES UNDER CHI OF MEDICAL DEPARTMENT (Study No.WSER-06/18-19) <u>Submitted on 26.06.2018</u>
<i>Year of conducting the study:</i>	2018 - 19
<i>Terms of reference:</i>	(i) Evaluate the quantum of existing workload. (ii) Examine the deployment of Safaiwala against workload. (iii) Analyze the benefit of participation of private agency in cleaning work.
<i>Methodology:</i>	<ul style="list-style-type: none"> • Collection of data. • Discussion with officers and CHI/ JMP Colony. • Study of existing workload and manpower. • Critical analysis of existing workload. • Scrutinize the financial benefits achieved due to outsourcing of cleaning activities to private agencies.
<i>Existing Sanctioned Strength</i>	48
<i>Existing Men on Roll</i>	51
Proposed Surrender	40

Justification
Assessment is based on the analysis of financial savings achieved due to outsourcing of the cleaning activities of Jamalpur Railway Colonies.

CHAPTER-I

1.0 INTRODUCTION:

- 1.1 **Indian Railways** is an Indian state owned enterprise, owned and operated by the Government of India through the Ministry of Railways. It is one of the world's largest railway networks comprising 115,000 km (71,000 mi) of track over a route of 65,000 km (40,000 mi) and 7,500 stations. Indian Railways is the world's ninth largest commercial or utility employer, by number of employees, with over 1.33 million employees. Indian Railway is not a mere operation. It is an institution. It is an industry. It is a prime mover of India's infrastructure. As of December 2012, it transported over 25 million passengers daily (over 9 billion on an annual basis).
- 1.2 Railways are the most preferred mode of transport for the masses in India, running 11,000 trains every day in which 7000 are passenger trains and handling approximately 1.4 crore passengers per day. One of the commitments of the Railways in its 'Citizen Charter on Passenger Services on Indian Railways' is to provide safe and dependable train services to the passengers and ensure adequate passenger amenities in trains and at Railway station, which includes provision of clean and hygienic surroundings both at Railway stations and in trains.
- 1.3 Sanitation means maintaining a clean environment so that the beneficiaries stay in neat and hygienic environment. Railway Stations, colonies and all work places are to be maintained in a hygienic and clean manner and adequate steps is to be taken at the planning stage itself. Keeping this objective in view, special emphasis is laid on the collection and disposal of refuse, sewage and sullage in a scientific manner. Sanitation services are provided in all the Railway premises including the Railway colonies, Railway stations, circulating areas, Railway Yards, offices, coaches and tracks. Cleanliness of these areas is multidisciplinary approach by various departments of the Railways viz. Medical, Engineering, Operating and Mechanical Department. The Medical Department performs the Sanitation job at Railway colonies and major stations under the supervision of Health Inspectors.
- 1.4 Cleanliness in Railway colonies includes maintaining cleanliness in circulating area of the colonies, roads, colony drains, common latrines/ urinals and sewer inside the colony premises in addition to a proper waste management system. Railway colonies are maintained either departmentally through safaiwalas or through outsourced agencies. Effective manpower management and contract management are therefore, essential. Apart from this, the Railways should have an effective monitoring mechanism in place to ensure quality in cleanliness related activities. Inadequate provision of water supply, washable aprons, drains and sewerage system and ineffective utilization of machines were major handicaps in providing a clean and hygienic environment in Railway premises.

- 1.5 Indian Railway is facing tremendous financial crunch after implementation of 6th Pay Commission. Operating ratio is gradually increasing. Though Indian Railway is not a business organization but to survive, it is always essential to make the organization in profit i.e. operating ratio should be less than 1. Performance Efficiency Index shown in the corporate plan published by the Eastern Railway is given below.

2013-14	:	173.32%
2014-15	:	177.27%
2015-16	:	180.75%
2016-17	:	165.25%
2017-18	:	178.76% (Proposed)

- 1.6 There are 7 Railway colonies present at Jamalpur. The Chief Health Inspector (CHI) is nominated for the keeping the railway colonies and surroundings neat and clean. Presently, the sanitation of all the colonies are catered by departmental safaiwalas under CHI of Medical department and overall control of CMS, Jamalpur.
- 1.7 The subject workstudy was undertaken to review the existing deployment of Safaiwalas vis-à-vis their workload as a regular manner, it is essential to assess the optimum utilization of Safaiwalas to cater the daily workload. The subject study is also undertaken to review consequent upon the outsourcing of sanitation services in colonies by which the quality of cleaning has increased drastically along with remarkable financial savings.

CHAPTER-II

2.0 EXISTING SCENARIO:

- 2.1 Jamalpur Locomotive Workshop (An ISO-9001:2008 Certified Organisation) now is the IR's oldest & biggest Wagon Repairing and Manufacturing Workshop in India. Established on the 8th day of February'1862, the Workshop is engaged in periodical overhauling of all kinds of wagons, diesel Locomotives, 140 Ton ART Cranes, Tower Cars, etc. Along with this, the manufacturing work of BLC wagon, BOXNHL wagon, etc are also performed in this workshop. The Locomotive Workshop, Jamalpur is functioning under Chief Work Manager, Jamalpur.
- 2.2 For availability of manpower for running of Workshop and associated offices at Jamalpur, 7 Railway Colonies were established at the surroundings adjacent to the Workshop and also near to Jamalpur station. These colonies are as under:
- i) East colony,
 - ii) New Colony Colony,
 - iii) Amjhar Colony,
 - iv) Rampur Colony
 - v) Daulatpur Colony
 - vi) Munger Line Colony and
 - vii) Loco Colony
- 2.3 The sanitation work of the Jamalpur Rly. Colonies are maintained by Medical dept. of under overall control of CMS/ JMP. In colony area, road sweeping, drain cleaning and garbage removing are designated job of safaiwalas.
- 2.4 It is necessary to maintain the colony surroundings neat and clean and Chief Health Inspector (CHI)/ JMP Colony is the over all In-charge of all sanitation and cleaning activities of Jamalpur colonies. Total 2 posts of CHI are deployed for catering the existing workload. On-Roll and Sanctioned Position of CHI at JMP Colonies is tabulated as under:

S. No.	Designation	Pay Scale & Pay Band (As per 6 th PC)		Staff Strength		
				Sanctioned Strength	On-Roll	Vacancy
1	Chief Health Inspector (CHI)	Rs. 9300-34800/-	GP-4600/-	2	2	0
Total				2	2	0

- 2.5 The present Sanctioned Strength and On-roll position of safaiwalas under CHI/ Colony deputed for catering the workload of cleaning activities at Jamalpur Colonies are given in table below:

S. No.	Designation	Pay Scale & Pay Band	Staff Strength		
			Sanctioned Strength	On-Roll	Vacancy
1	Safaiwala	Rs. 5200-20200/- PB-1	48	51	-3
Total			48	51	-3

- 2.6 Jamalpur houses one of the biggest and oldest Mechanical Workshop of Indian Railway. In addition to that, there are other Railway establishments like Diesel Loco Shed, PWI unit, Works unit, C & W unit also situated in Jamalpur. Since, the Workshop is more than a century old, there were no township present near the Workshop. So, to facilitate manpower for workshop round the clock, Railway colonies were setup nearby workshop at both sides of Railway station. Earlier, for officers & supervisors, East colony was set up at the east side of Railway line in front of main gate Workshop. Later, New colony and Amjher colony were built adjacent to East colony.

In the west side of Railway line, Rampur Colony, Daulatpur Colony, Munger Line Colony and Loco Colony were set up for staff.

Sanitation workload of all these colonies are catered by departmental safaiwalas under supervision CHI/ (C), Jamalpur.

- 2.6.1 In these colonies, different categories of Railway Quarters like Type-I, Type-II, Type-III & Type-IV are there. Altogether, around 2740 Railway Quarters are there at present. There are roads inside and outside the Rly. Colonies, various types of drains, vats for temporary garbage accumulation, etc. which are to be looked after by CHI/Colony with the deployment of Safaiwalas under him. The cleaning of main drains/ house drains, sweeping of roads & surroundings, clearing of latrine blockage & removal of garbage, etc. are the work to be executed in the said Colonies.

The total workload of Jamalpur Railway colonies under jurisdiction CHI/ colony is tabulated as under:

Sl. No	Description of work	Workload (in Sq.ft/ Rft)		
1.	Sweeping of branch roads and surroundings. Collection & removal of all accumulated garbage from said area to scheduled dust bin.	Branch RoadS of East Colony (including Hospital)	186018 Sqft.	494627 Sq.ft.
		Branch roads of Amjher Colony	107800 Sqft.	
		Branch Road & surroundings of Rampur Colony	93009 Sqft	
		Branch Road & surroundings, Loco Colony	107800 Sqft	
2.	Sweeping of all Main road area. Collection & removal of all accumulated garbage from said area to scheduled dust bin.	Main Roads, East colony (including Hospital)	539650 Sqft	1100626 Sq.ft.
		Main Roads of Amjhar Colony & RFP Barrack	226208 Sqft.	
		Main Road, Rampur Colony	218560 Sqft	
		Roads of Daulatpur Colony & Munger Line Colony	116208 Sqft	
3.	Cleaning of main drains and house drains (surface drains). Collection & removal of garbage silt etc. from said area to schedule dustbin.	Main drains of Main Road, East Colony	34285.6 Rft	Main drains = 39972.6 Rft.
		Main drains of Amjhar Colony		
		Main drain of Main Road, Rampur Colony	5687 Rft	
		Colony drains of East Colony	34285.6 Rft	House drains = 58326.6 Rft
		Colony drains of Amjhar Colony		
		Colony drains of Branch Road, Rampur Colony	6827 Rft	
		Colony Drains of Daulatpur Colony & Munger Line Colony	6456 Rft	
4.	Sweeping of Stair Cases of Multistoried Buildings	74 nos. of two storied buildings	10760 Rft	Total nos. of steps = 2886 nos. (approx)

- 2.7 The working hours of Departmental Safaiwalas is 7:00 hrs. to 11:00 hrs and 12:00 hrs. to 16:00 hrs from Monday to Friday and on Saturday the working hour is 7:00 hrs. to 12:00 hrs for catering the sanitation workload (*shown in above table*) of various colonies of Jamalpur.
- 2.7.1 At Colony area, departmental safaiwalas are deployed to cater the workload of sweeping of roads and its surroundings, cleaning of colony drains, disposal of garbage, spraying of insecticides, shrub cutting, fogging at colony area, etc. The whole workload of Colony area are catered by departmental safaiwalas. Garbage disposal from designated area to vat are done by external agencies through outsourcing.
- 2.8 In present system of working, total 51 nos. of Safaiwalas under CHI/ Colony are deployed at colony and other area in the working period from 7:00 hrs. to 11:00 hrs and 12:00 hrs. to 16:00 hrs. The work point – wise deployment of Safaiwalas is given below:

Sl. No.	Area	Activity	Deployment	
			Activity-wise	Total
1.	East Colony, New Colony, Amjhar Colony (including main Hospital)	Road sweeping and collection & removal of garbage	05	17
		Surrounding area cleaning & removal of garbage	05	
		Drain cleaning & removal of garbage silt	07	
2.	Rampur Colony (including Rampur Maidan colony)	Road sweeping and collection & removal of garbage	03	13
		Surrounding area cleaning & removal of garbage	02	
		Drain cleaning & removal of garbage silt	08	
3.	Daulatpur Colony and Munger line colony	Road sweeping and collection & removal of garbage	03	08
		Cleaning of surrounding area & removal of garbage	01	
		Drain cleaning & removal of garbage silt	05	
4.	Loco Colony	Road sweeping and collection & removal of garbage	01	03
		Drain cleaning & removal of garbage silt	02	
5.	Spraying of mosquito anti-larva medicine and fogging		03	03
6.	Shrub cutting		03	03
7.	Heavy duty (attention of blockage of drains, septic tanks, etc)		03	03
8.	Collection of water sample for testing and other misc. activities		01	01
GRAND TOTAL			51	

2.9 The mechanized machines present under CHI/JMP Colony are tabulated as under:

S.No.	Description of Machine	No. of Machines	Working/ Not working
1	Shrub Cutting Machine	03	Working
		06	Not Working
2	Fogging Machine	01	Working
		02	Not Working
3	Spraying Machine	02	Working
		01	Not Working

2.10 It is earlier mentioned in above paras that almost all the routine sanitation workload of Jamalpur colonies are catered by departmental staff. However, disposal of garbage from colony vats to designated vats is done once or twice in a year (*or whenever required*) through external agencies.

Also, cleaning of Main Septic tank is done once in every two or three years through private agency.

CHAPTER-III

3.0 CRITICAL ANALYSIS

The study team has critically analyzed the present workload and effective deployment of Safaiwala as per present system of working considering the existing infrastructural set up.

- 3.1 Keeping in view of the present financial condition of Railways and the increasing trend of operating ratio of Eastern Railway, the subject study is conducted with the objective to explore the ways to attain more financial savings of the Railways along with the motive to improve the quality of cleanliness. In this context, study team has critically examined and analyzed the all possible ways to optimize the Safaiwalas.
- 3.2 During discussion with CHI/ JMP Colony, it is communicated by him that with present strength of safaiwalas, it is very difficult for them to maintain proper cleanliness in the colonies. In the process of optimization of safaiwalas, the minimum possible requirement of safaiwalas are left with the department at present. In this condition, further deduction of strength of safaiwalas to enhance Railway savings will compromise the sanitation quality.
- 3.3 It is observed during the period of study that except East colony, the quality of work i.e. sweeping/cleaning of main roads, colony roads, main/ colony drains, and removal of garbage etc. catered by existing departmental safaiwalas are not up to the mark due to lack of following reasons:
 - a) Non availability of mechanical cleaning gadgets.
 - b) Shortage of departmental manpower in regard to cleaning activities and disposal of garbage from various Railway colonies of Jamalpur.
 - c) Since, JMP colonies are scattered at vast area, so proper supervision is difficult.
 - d) The absentee percentage of safaiwala category staff is quite considerable.
 - e) Inadequate facilities and infrastructure such as dustbins & vats at JMP railway colonies.
 - f) Lack of awareness of Cleanliness in the area of JMP railway colonies.
- 3.4 Keeping the above points in mind, study team felt that the only solution is to outsource the existing workloads of departmental safaiwalas (*shown in para 2.6.1*). The benefits of outsourcing of cleaning activities to professional agencies is listed below:
 - i. Better quality of cleaning will be achieved in various Railway colonies of JMP.
 - ii. After implementation of outsourcing process, the departmental safaiwalas can be utilized in other core activities of Railways (*i.e maintenance & operation activities*) wherever vacancy exists after providing proper training to them.
 - iii. Participation of private agencies at JMP colony under CHI/Colony will result surrender of posts of departmental Safaiwalas which will affect huge financial savings of Railways.

- 3.4.1 Apart from the above mentioned benefits of outsourcing, the cost incurred due to outsourcing of cleaning activities will be much lesser than the expense of keeping the sanitation service departmentally as because the wage rate of Railway staff are on higher side.

The financial viability of outsourcing of cleaning activities of Jamalpur colonies to private agencies is analyzed in details by the study team in the ongoing paragraphs.

- 3.5 On this theory, Medical department of Sealdah division has already outsourced the workload of manual cleaning of Narkeldanga and Moghulbagan colony to private agencies from 18.12.17 (*Annexure-I & II*). The activities like cleaning the surroundings areas of Rly. Qtrs, sweeping of colony roads & main roads, cleaning of house & main drains, collection & removal of silt from drains *i.e. house & main drains*, sweeping of stair cases of multistoried buildings and collection & removal of garbage from road & surrounding area & deposited in dustbin are executed by contractual agency.

The contractual rate of manual cleaning at Narkeldanga and Moghulbagan colony of Sealdah division has been considered by the study team for the evaluation of total contractual value of JMP Railway colonies.

3.6 The details of work and cost incurred per activity in the cleaning contract of Narkeldanga and Moghulbagan colony is tabulated as under:

Sl. No	Description of work	Quantity of work to be done (a)	Rate per day (b)	Rate per Sqft/Rft per day (b/a)
1.	Daily once through manual cleaning of all surrounding area. Collection & removal of all accumulated garbage from said area to scheduled dust bin by hand trolley from 8 hrs. to 16 hrs. excluding service building , Auditorium & play ground for 730 days except Sunday i.e. 626 working days. All works to be done with following consumables. a) Broom coco, b) Cane Basket c) Hand Trolley=02 nos.	624828.67 Sq.ft.	Rs.6014.00	$\frac{6014}{624828.67} = \text{Rs } 0.009625/-$
2.	Daily once through manual cleaning of all road area. Collection & removal of all accumulated garbage from said area to scheduled dust bin by hand trolley from 8 hrs. to 16 hrs. excluding service building , Auditorium & play ground for 730 days except Sunday i.e. 626 working days. All works to be done with following consumables. a) Broom coco, b) Cane Basket c) Hand Trolley=02 nos.	127058.26 Sq.ft.	Rs.1266.00/-	$\frac{1266}{127058.26} = \text{Rs } 0.009964/-$
3.	Daily once through cleaning of main drain along with total house drain (surface drain) with cutting edge of the drains Collection & removal of garbage silt etc. from said area to schedule dustbin through hand trolley. All works to be done with necessary equipments and after cleaning bleaching powder should be sprinkled around the drains. All works to be done from 8 hrs. to 16 hrs for 730 days except Sunday i.e. 626 working days. All works to be done with following consumables.-a) Bleaching powder b) Shovel c) Phowrah d) Drain Brush e) Hand Trolley = 02 nos.	a) Main drain = 4560.59 Rft.	Rs. 1377.00/- (approx)	$\frac{1377}{4560.59} = \text{Rs } 0.3019/-$
		b) House drain = 13937.69 Rft (Surface drain)	Rs. 2104.00/- (approx)	$\frac{2104}{13937.69} = \text{Rs } 0.1509/-$
		Total = 18498.28 Rft.	Total =Rs. 3481.00/-	-----
4.	Daily once through dry and weight cleaning of 82 nos of stair case along with 2050 nos. of steps. Collection & removal of all garbage & dust by poly bucket from said area to schedule dustbin. . All works to be done from 8 hrs. to 16 hrs for 730 days except Sunday i.e. 626 working days. All works to be done with following consumables.- a) Broom coco,b) Poly Buckets c) Poly Mug d) Disinfecting fluid ,	a) No of Stair case = 82 nos. b) No of Steps = 2050 nos.	Rs. 1266.00/-	Rate per steps/day = $\frac{1266}{2050} = \text{Rs } 0.61/-$
5.	Daily door to door collection & removal of household garbage from said area to schedule dustbin by hand trolley. Daily cleaning of chocked underground sewer line, inspection pits, Septic tanks. All works to be done from 8 hrs. to 16 hrs for 730 days except Sunday i.e. 626 working days in a year. All works to be done with following consumables.-a) Poly Mug b) Hand Trolley = 02 nos.	Total Nos. of Quarters = 771 nos.	Rs.3798 .00/-	Rate per Quarter /day = $\frac{3798}{771} = \text{Rs } 4.926/-$

3.7 Based on rates of cleaning contract of Narkeldanga and Moghulbagan colony, the estimated value of expense for cleaning of JMP colonies (volume of workload mentioned in para 2.6.1) is mentioned below:

Sl. No	Description of work	Area of work (from para 2.6.1)			Rate per Sqft/ Rft per day (from table under para 3.6)	Estimated Rate per day
1.	Daily once through manual cleaning of all branch roads and surroundings. Collection & removal of all accumulated garbage from said area to scheduled dust bin by hand trolley. (except Sundays)	Branch Roads of East Colony (including Hospital)	186018 Sqft.	494627 Sq.ft.	Rs. 0.009625/-	Rs. 4760.78/-
		Branch roads of Amjhar Colony	107800 Sqft.			
		Branch Road & surroundings of Rampur Colony	93009 Sqft			
		Branch Road & surroundings, Loco Colony	107800 Sqft			
2.	Daily once through manual cleaning of all Main road area. Collection & removal of all accumulated garbage from said area to scheduled dust bin by hand trolley. (except Sundays)	Main Roads, East colony (including Hospital)	539650 Sqft	1100626 Sq.ft.	Rs. 0.009964/-	Rs. 10966.64
		Main Roads of Amjhar Colony & RFP Barrack	226208 Sqft.			
		Main Road, Rampur Colony	218560 Sqft			
		Roads of Daulatpur Colony & Munger Line Colony	116208 Sqft			
3.	Daily once through cleaning of main drains along with total house drain (surface drain) with cutting edge of the drains Collection & removal of garbage silt etc. from said area to schedule dustbin through hand trolley. All works to be done with necessary equipments and after cleaning bleaching powder should be sprinkled around the drains. (except Sundays)	Main drains of Main Road, East Colony	34285.6 Rft	Main drains = 39972.6 Rft.	Rs. 0.3019/-	Rs. 12067.73/-
		Main drains of Amjhar Colony				
		Main drain of Main Road, Rampur Colony	5687 Rft	House drains = 58326.6 Rft	Rs. 0.1509/-	Rs. 8801.78/-
		Colony drains of East Colony	34285.6 Rft			
		Colony drains of Amjhar Colony				
		Colony drains of Branch Road, Rampur Colony	6827 Rft			
		Colony Drains of Daulatpur Colony & Munger Line Colony	6456 Rft			
		Colony Drains of Loco Colony	10760 Rft			

Sl. No	Description of work	Area of work (from para 2.6.1)	Rate per Sqft/ Rft per day (from table under para 3.6)	Estimated Rate per day
4.	Daily once through dry and wet cleaning of 74 nos of stair case along with 2886 nos. of steps. Collection & removal of all garbage & dust by poly bucket from said area to schedule dustbin. . All works to be done All works to be done with following consumables.- a) Broom coco,b) Poly Buckets c) Poly Mug d) Disinfecting fluid. (except Sundays)	Total nos. of steps = 2886 nos. (approx)	Rs. 0.61/-	Rs. 1760.46/-
5.	Daily door to door collection & removal of household garbage from said area to schedule dustbin by hand trolley. Daily cleaning of chocked underground sewer line, inspection pits, Septic tanks. All works to be done with following consumables.-a) Poly Mug b) Hand Trolley = 02 nos. (except Sundays)	Total nos. of Quarters = 2740 nos.	Rs.4.926/-	Rs.13497.24/-
TOTAL COST				Rs. 51854.63/-

3.7.1 From above table, it can be seen that the cost incurred per day will be Rs 51854.63/- if the cleaning work of Jamalpur colonies will be outsourced as per norms and rates of cleaning contract of Narkeldanga and Moghulbagan colony of Sealdah division.

It is mentioned in the contract details (*Annexure I & II*) that the cleaning work to be conducted by the private firm on all working days except Sundays. So, on 313 working days in a year, the cleaning work will be done.

Therefore, the annual cost incurred for outsourcing the cleaning work of Jamalpur colonies to private agencies (*as per norms and rates of cleaning contract of Narkeldanga and Moghulbagan colony of Sealdah division*) will be

Rs. 51854.63/- X 313 days = Rs. 1,62,30,501/-

- 3.8 It can be seen that several workloads which are catered by present departmental staff like spraying of insecticides (*mosquito anti-larva*), fogging, shrub cutting, etc (*mentioned in para 2.6.1*) are not included during evaluation of contractual cost for JMP colonies done in above table (*para 3.7*).

In the cost estimate analysis, study team has considered those workloads, details of which are available in the cleaning contract of Narkeldanga and Moghulbagan colony of Sealdah division.

Consequently, the expense for the workload of staircase sweeping & garbage removal and collection of household garbage from door to door & disposal (*mentioned in the cleaning contract of Narkeldanga and Moghulbagan colony*) is also included in the cost estimate analysis (*para 3.7*), which are not performed by existing departmental staff.

The cost estimate analysis is done only to draw inference of financial viability of outsourcing of cleaning activities of Jamalpur Colonies. It is not necessary that all the workloads mentioned in the table of contractual cost estimate evaluation (*para 3.7*) to be considered for outsourcing. Ultimately, the concerned department has to decide which workloads they want to outsource to the private agency.

- 3.9 Though workloads like, mosquito anti-larva spraying, fogging, shrub cutting, etc, which were not included in the cost estimate analysis done in above paras, study team, on scrutiny recommend 6 departmental staffs (*as per existing deployment*) for the said workload.

Apart from this, 2 departmental staff are additionally recommended i.e 1 staff for collection of water sample for testing and 1 staff for miscellaneous office work.

Altogether, 8 departmental staff are recommended by the study team for the workloads which were not included in cost estimate analysis (*para 3.7*). These 8 departmental safaiwalas can be utilized in emergency cases also.

- 3.10 It can be observed from para 2.8 that at present 51 departmental safaiwalas are deployed to cater the workload mentioned in para 2.6.1. The salary of these 51 safaiwalas for the month of February'18, March'18 and April'18 (*drawn under Bill Unit No. 500*) is tabulated as under:

S. No.	Month	Bill Unit No.	Monthly Gross Salary	Average Monthly Gross Salary
1.	February'18,	500	Rs. 17,41,362/-	Rs. 17,67,456 /-
2.	March'18		Rs. 17,23,038/-	
3.	April'18		Rs. 18,37,967/-	

- 3.11 From above table, it can be viewed that on an average Railway spends Rs 17,67,456/- on salary bill of 51 departmental safaiwalas per month for the cleanliness activities at various Railway colonies of JMP.

For comparative analysis, expense on departmental staff utilized to cater the workloads mentioned in table under para 3.7 i.e (51 - 8) = 43 safaiwalas [8 staff are utilized for catering other workloads like spraying, fogging, shrub cutting, other misc. workload (*mentioned in para 3.9*)] is calculated below.

The monthly expense spent by Railways on 43 departmental safaiwalas =

$$\frac{17,67,456 \times 43}{51} = \text{Rs. } 14,90,208/-$$

Annual expense on 43 departmental safaiwalas =

$$\text{Rs. } 14,90,208/- \times 12 = \text{Rs. } 1,78,82,496/-$$

- 3.12 The financial savings to be achieved after outsourcing the cleaning activities of JMP Railway colonies will be calculated as

$$\text{Rs. } 1,78,82,496/- - \text{Rs. } 1,62,30,501/- = \text{Rs. } 16,51,995/-$$

The above calculation reflects an annual savings of Rs.16,51,995/- on outsourcing of cleaning activities of JMP colonies as per norms and rates of Narkeldanga and Moghulbagan colony of Sealdah division.

Though the savings achieved is not of very high magnitude (*i.e. merely 9%*), but the quantum of workload for which the estimate was evaluated for outsourcing (*table 3.7*) includes additional workloads like staircase sweeping & garbage removal and collection of household garbage from door to door and disposal apart from the workloads which are done by existing departmental staff. Certainly, catering of more quantity of cleaning workload would result in better quality of cleaning.

- 3.13 On the other hand, if same quantum of workload [*i.e. items of S. no. 1,2 & 3 (table 3.7)*] is considered for comparative analysis between cost incurred on departmental staff and for outsourcing, the financial savings achieved is calculated as

$$\text{Rs. } 1,78,82,496/- - \text{Rs. } 1,14,54,861/- [\text{annual cost of items of S.no. 1,2 \& 3 (table 3.7)}] = \text{Rs. } 64,27,635/-$$

It is clearly evident from above calculation that if same quantum of workload is considered for comparative analysis, a considerable amount (*i.e. around 36%*) of Railway savings is accomplished.

- 3.14 From para 3.12 and 3.13 it can be concluded that outsourcing of cleaning activities results in both financial savings and also improvement in quality of cleaning.

So, on the basis of analysis and discussions done in above paras, study team recommends for outsourcing of cleaning activities of Jamalpur colonies. For the workloads like spraying mosquito anti-larva, fogging, shrub cutting, collection of water sample for testing and misc. office work study team recommends 8 departmental safaiwalas to be retained under CHI/ JMP Colony (*mentioned in para 3.9*).

Hence, the rest $(48 - 8) = 40$ nos. of posts will be excess after introduction of contractual cleaning work at Jamalpur colonies.

3.15 **Recommendation:** -

Keeping in view of the financial benefits of Railways, it is recommended for outsourcing the cleaning activities of Jamalpur Railway colonies keeping 8 posts of departmental safaiwalas for misc. activities and emergency purpose which would result in surrender of 40 nos. of posts as against the present total Sanctioned Strength of 48 posts.

CHAPTER-IV**4.0 FINANCIAL APPRAISAL:**

- 4.1 As per recommendation made in Para 3.15, after introduction of contractual cleaning work at Jamalpur colonies the total surplus posts works out to **40 posts**.

A statement showing the total annual financial savings on account of surrender of **40** posts is furnished below.

Category & Scale of Pay (Rs.)		Grade Pay (Rs.)	Mean pay (in Rs)	Mean Pay (as per 7th PC) = 2.57 X Mean Pay (as per 6th PC)	D.A (7%) (in Rs)	Total (in Rs)	No. of posts Recommended for Surrender	Monthly savings of total staff (in Rs)	Annual savings. (in lakhs Rs)
(as per 6th Pay Commission)				(as per 7th Pay Commission)					
Safaiwalas	5200-20200/-	1800/-	14500/-	37265/-	2609/-	39874/-	40	15,94,960/-	70.43
TOTAL							40		191.39

Thus, the annual financial savings works out to **Rs. 191.39 lakhs**.