

EASTERN RAILWAY

WORK STUDY REPORT

ON

**REVIEW OF WORKLOAD VIS-A-VIS STAFF STRENGTH OF
'SAFAIWALA' UNDER MEDICAL DEPARTMENT AT RANAGHAT**

(STUDY NO. WSER –21/19-20)

Date of Submission: 04/03/2020

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BY

GM'S EFFICIENCY CELL

EASTERN RAILWAY

KOLKATA

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TERMS OF REFERENCE

- I. To assess the quantum of workload catered by the unit under supervision of Health & Malaria Inspector / Ranaghat (H&MI/RHA).
- II. To examine the deployment of 'SAFAIWALA' under H&MI/RHA against present workload catered by departmental staff.
- III. To assess the actual requirement of 'SAFAIWALA' needed by the said unit, considering the 'Yardstick' of Medical Department published on 28-02-2014.

SUMMARY OF RECOMMENDATION

Sl. No.	Recommendation	Para ref.
1.	The Study Team recommends that <u>10 posts</u> of 'Safaiwala' to be declared as surplus &subsequently surrendered from the existing Sanctioned (26 Posts) Strength of Safaiwala under Medical Department at Ranaghat.	2.25.0.

EXECUTIVE SUMMARY

Study Name & No.:	REVIEW OF WORKLOAD VIS-A-VIS STAFF STRENGTH OF 'SAFAIWALA' UNDER MEDICAL DEPARTMENT AT RANAGHAT. (STUDY NO. WSER - 21/19-20)
Year of conducting the study:	2019-20
Terms of reference:	<p>I. To assess the quantum of workload catered by the unit under supervision of Health & Malaria Inspector / Ranaghat (H&MI/RHA).</p> <p>II. To examine the deployment of 'SAFAIWALA' under H&MI/RHA against present workload catered by departmental staff.</p> <p>III. To assess the actual requirement of 'SAFAIWALA' needed by the said unit, considering the 'Yardstick' of Medical Department published by CMD / E.Rly. dated 28-02-2014.</p> <p>.</p>
Methodology:	<ul style="list-style-type: none"> • Collection of data. • Discussion with concerned Medical Officers and H&MI (Gr.I)/R. • Study of existing workload and manpower. • Critical analysis of existing workload and assess the actual requirement of manpower.
Existing Sanctioned Strength	26
Existing Men on Roll	16
Vacant post	10
Proposed Surrender	10

CHAPTER- I

1.0.0. INTRODUCTION:

- 1.1.0.** The commitments of Indian 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 inside the train compartments, Latrine & Lavatories, Kitchens, etc.
- 1.2.0.** The term 'Sanitation' means maintaining a clean environment so that the beneficiaries are able to stay in a neat and hygienic environment.
- 1.3.0.** Various measures were already undertaken to maintain the Railway Stations, Colonies and all service buildings, in a hygienic and uncontaminated manner.
- 1.4.0.** Keeping the objective in view, special emphasis is laid on the Waste Management i.e. collection and disposal of refuse, sewage and garbage 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.
- 1.5.0.** Cleanliness in stations includes maintaining cleanliness in circulating area, outside the station building and on platforms, concourse area, waiting rooms, retiring rooms, toilets, tracks adjacent to platforms, foot over bridges, drains, sewer inside the station premises in addition to a proper waste management system.
- 1.6.0.** For providing a clean and hygienic environment to the passengers in Railway premises, the Railways need adequate infrastructure as well as amenities commensurate with the quantum of passenger traffic handled at stations.
- 1.7.0.** Railway Board laid down guidelines prescribing a quantitative scale of minimum essential amenities for each category of station. These amenities were to be augmented at a higher scale based on actual passenger traffic handled and were called 'recommended amenities'. Some of these amenities have a direct bearing on cleanliness of stations such as drinking water, seating arrangements, waiting halls, toilets and urinals.
- 1.8.0.** Railway stations are maintained either departmentally through departmental '**SAFAIWALA**' or through 'Outsourced Contractual Agencies'. Effective manpower management and contracts are therefore, essential.
- 1.9.0.** 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.

- 1.10.0.** The subject work study has been undertaken to review the quality of sanitation services at Ranaghat Rly. Station along with adjoining Rly. Colony premises under Medical department, keeping in view the financial criterion.
- 1.11.0.** The quality service could be possible only by optimizing the utilization of available workforce without & with electrically operated Mechanised Safai (Cleaning) devices for Sanitation/Safai work, as the case may be. Nowadays, it is easier to maintain the platform and surroundings clean and hygienic with the introduction of Mechanical devices (mostly electrically operated) for cleaning operation.
- 1.12.0.** As the subject work study is 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.
- 1.13.0.** The subject study is also undertaken to review the situation, consequent upon the use of Mechanised cleaning devices by which the quality of cleaning has increased drastically along with remarkable financial savings.
- 1.14.0.** Keeping the above ideas into consideration, the study team has concentrated on the existing pattern of working and existing deployment of Safaiwalas according to their work point.

CHAPTER-II

2.0.0. EXISTING SCENERIO & CRITICAL ANALYSIS:

2.1.0. Ranaghat (RHA) Rly. Station is one of the busy Rly. Junction in Sealdah Division. This station manages passenger load of good nos. of Passenger/Local / Mail /Express Trains, round the clock.

2.2.0. Ranaghat Rly. Station Premises, including Platforms, concourses, FOB, Service buildings, etc. are within the jurisdiction of Health & Malaria Inspector / Ranaghat [H&MI/RHA] under ACMS/E.Rly./RHA. H&MI/RHA is responsible to look after the Sanitation& Conservancy work at Ranaghat Station and its adjoining Railway colonies, as mentioned above.

2.3.0. The particulars of staff position i.e. Sanctioned strength, Men-On-Roll & Vacancies of 'SAFAIWALA' at Ranaghat (Conservancy and Health Unit) under ACMS/RHA is tabulated below -

(Annexure - A)

Table - 1

Sl. No.	Designation		Staff Strength		
			Sanctioned Strength	Men-On-Roll	Vacancy
1.	Safaiwala	Conservancy	26	16	10
		Health Unit	02	02	NIL

2.4.0. A major part of the Workload, related to 'Sanitation' & 'Conservancy' at Ranaghat Colony Area & Ranaghat Station Premises, has already been outsourced. Workload of the said areas are catered by labourers of contractual agency, in place of Departmental Staff under the direct supervision of H&MI (Gr.I)/Ranaghat.

2.5.0. In this connection, an Agreement has been signed between Railway authority and one Non-Rly. agency vide no. H/San/Agt/RHA Stn. & Col/18, dated 20/06/18, for a period of 2 years i.e. 730 days w.e.f. 02-05-2018.

2.6.0. As per the above 'Agreement', the name of work along-with the associated work schedule, locations, etc. are as follows –

“Daily mechanized & manual cleaning of all the 06 Platform Surfaces, offices in Service building, Waiting hall, Concourse, Circulating area, Water booth, Urinals, RRI Cabin, RPF Barrack, Running Room Pillar & Wall base up to main height and Service Building & Track drain, FOB, Tracks within platform area, daily and alternate day rag picking and removal and disposal of all accumulated garbage from nominated vat at Ranaghat Colony Area & Ranaghat Station premises”.

A) Work Order No. : H/San/WO-RHA/18, dated 25.04.2018.

B) Period of Contract : 2 years i.e. 730 days w.e.f. 02-05-2018

C) Value of Contract : Rs. 1,47,33,392.00.

D) Nos. of Working Shifts : 03 Shifts i.e. Morning, Evening & Night Shifts.

E) Job allotment in Morning Shift : Schedule - A

1. Rag Picking.
2. Dry cleaning of Platform Track.
3. Dry Cleaning of Track drain.
4. Dry Cleaning of Platform surface & Concourse areas.
5. Dry & Wet Cleaning of Service Building.
6. Dry Cleaning of Foot Over Bridge.
7. Dry & Wet Cleaning of Pillar Base, Water Booth, Urinal, Toilet, Tiled Seats, Wash Basin, Granite, etc.
8. Disposal of Garbage by Lorry.
9. Dry cleaning of Circulating area and approach or cab road area.
10. Thorough wet cleaning of Toilet Pan, Urinal Basin, hand Basin.

F) Job allotment in Evening Shift : Schedule - B

1. Dry Cleaning of Platform Tracks.
2. Dry Cleaning of Platform surface & Concourse.
3. Dry & wet Cleaning of Service Building.
4. Dry Cleaning of Foot Over Bridge.
5. Dry cleaning of Circulating area and approach or cab road area.
6. Dry Cleaning of Platform surface & Concourse areas.
7. Dry & Wet Cleaning of Pillar Base, Water Booth, Urinal, Toilet, Tiled Seats, Wash Basin, Granite, etc.

G) Job allotment in Night Shift : Schedule – C

1. Cleaning of Platform Tracks.
2. Dry Cleaning of Platform surface & Concourse.
3. Dry Cleaning of Foot Over Bridge.
4. Dry cleaning of Circulating area and approach or cab road area.
5. Dry & wet Cleaning of Service Building.
6. Dry & Wet Cleaning of Pillar Base, Water Booth, Urinal, Toilet, Tiled Seats, Wash Basin, Granite, etc.

H) Cob-Webs Cleaning : Schedule – D

Thorough Dry Cleaning of all cob-webs of ceiling of Service Building & Platform Sheds

I) Placing of Dustbins on Platform surface, Waiting Hall and Concourse area:
Schedule – E

Placing of dustbins with poly bags at each strategic point on platform surface, Concourse areas, Waiting Hall.

Changing / replacement of garbage filled poly bags with new one time to time.

J) Cleaning of Sewer line : Schedule – F

Thorough mechanized cleaning of sewer line starting from GRP Gate on PF No.1 and extended up to PF No. 3 of RHA Station once in three months.

2.7.0. Regular work of Conservancy & Sanitation wing / Ranaghat is to maintain cleanliness of colony area; road sweeping, house drain cleaning, garbage removal, sweeping of surroundings, etc. The aforesaid sanitation related jobs are catered by Departmental Safaiwalas under the supervision of H&MI / Ranaghat.

2.8.0. The working shift of Departmental Safaiwala is from 06-00 Hrs. to 14-00 Hrs. (Monday to Saturday & Sunday is the weekly 'OFF' day).

2.9.0. In Ranaghat, there exists the under mentioned Railway Colonies viz. -

A. East Colony.

B. Sagun Bagan Colony.

C. Goods Colony.

D. New CRE Colony.

E. Old CRE Colony.

Each of the above Railway Colonies have different categories of Railway Quarters like Type-I, Type-II, Type-III & Type-IV. The Railway colonies have concreted roads, drains, Garbage accumulation Vats, etc. H & MI (Gr.I) / RHA supervises sweeping & cleaning work of said Railway Colonies with the deployment of 'Safaiwalas' under him.

2.10.0. The Type-wise particulars of quarters in the above Rly. Colonies mentioned in para 2.9.0., in terms of Occupation, Vacancy, etc. is tabulated below:

Particulars of Railway Quarters under SSE / Works / Ranaghat as on 23/01/2020 in terms of Occupancy, Vacancy:

Table - 2 (Occupation)

Sl. No.	Location	Type - I	Type - II	Type - II	Type - IV	Total
		(In Nos.)				
1.	East Colony	106	68	07	05	186
2.	Sagun Bagan Colony.	48	Nil	Nil	Nil	48
3.	Goods Colony.	02	19	Nil	Nil	21
4.	New CRE Colony.	16	125	Nil	Nil	141
5.	Old CRE Colony.	08	Nil	Nil	Nil	08
Total →						404

Table – 3 (Vacation)

Sl. No.	Location	Type - I	Type - II	Type - II	Type - IV	Total
		(In Nos.)				
1.	East Colony	78	06	03	02	89
2.	Sagun Bagan Colony.	61	Nil	Nil	Nil	61
3.	Goods Colony.	Nil	Nil	Nil	Nil	Nil
4.	New CRE Colony.	201	21	Nil	Nil	222
5.	Old CRE Colony.	82	Nil	Nil	Nil	82
Total →						454

Table – 4 (Colony – Wise Rly. Quarters Occupation & Vacancy Percentage)

Sl. No.	Location	Total Nos. of Quarters	Total nos. of Occupied Quarters	% of Occupation	Total nos. of Vacant Quarters	% of Vacant Quarters
1.	East Colony.	275	186	67.64	89	32.36
2.	Sagun Bagan Colony.	109	48	44.04	61	55.96
3.	Goods Colony.	21	21	100.00	NIL	0.00
4.	New CRE Colony.	363	141	38.84	222	61.16
5.	Old CRE Colony.	90	8	8.89	82	91.11
Total →		858	404	Avg. = 47.09%	454	Avg. = 52.91%

2.11.0. As per the Office records of SSE/W/RHA, there exist 37 Nos. of Service Buildings in Ranaghat, besides the aforesaid Railway Quarters in Railway Colonies.

2.12.0. In the course of conducting the present work study, SSE/W/RHA conveyed undermentioned particulars about the Ranaghat Railway Colony, from his office records.

The areas of Road in 'Square feet', Length of Single House Drains, Main Drains in 'Running Feet', Nos. of Stair case of multi-storeyed Service Buildings & total nos. of 'Septic Tank', Aqua Privy, etc.

- 2.13.0.** The study team considers the facts & figures regarding the different aspects stated above. The available facts & figures related to the work load catered by Medical Department under direct supervision of H&MI/RHA are tabulated below :-

Table - 5

Sl. No.	Nature of Works	Volume of Work	Remarks
1.	Sweeping of Colony Roads.	64,000.00 Sq. ft.	
2.	Cleaning the Surroundings of Houses and Roads.	12,800.00Sq. ft.	Study Team considers vol. of work as 20% of Colony Roads, based on observ., as the data is unavailable with SSE/W/RHA.
3.	Cleaning of Single House Drains.	12,000.00 Running ft.	
4.	Cleaning of Main Drains.	3,000.00 Running ft.	
5.	Sweeping of Stair Cases of Multistoried Buildings.	17 Nos. Stair Cases.	
6.	Nos. of Septic Tanks and Aqua Privies, etc.	256 Nos.	
7.	Anti-larval & Anti-Insecticidal Spraying Work.	12,000.00 Running ft. House Drains + 858 Rly. Quarters + 37 Service Buildings.	
8.	Dealing of Water Sample, Letter Delivery Work, Health Unit medicines collection from BRSH, Stores collections from HWH & HLR Store Depot, etc.		
9.	Dealing the situation like VIP movement, assistance to RHA H. U., special booking in Sunday, etc.		

- 2.14.0.** On query, it is learnt that H&MI/RHA kept a 'Complaint Register' wherein drain jam complains are recorded. The other complaints are mainly lodged over phone, personal contact, etc. On redressal of complaint, complainant is informed.
- 2.15.0.** Study team refers the 'Yardstick' of Medical Department / Eastern Railway (Published on 28th February 2014) to evaluate the requirement of 'Safaiwala' at the unit of H&MI/Ranaghat under ACMS/RHA.
- 2.16.0.** Accordingly, in the Chapter-II (Page No. Yardstick/7) and vide **Para 1.1**, the said latest 'Yardstick For Colonies', OUTPUT OF SAFAIWALAS in manual cleaning were formulated. Extract of the same is mentioned below.

1.1 For Colonies:

1.1.1 For sweeping roads:

- (a) For sweeping 105000 sq.ft. of road only 01 Safaiwala in 8 hourly shift.
- (b) For cleaning the surroundings of houses and road 90,000 sq.ft. per Safaiwala per shift of 8 hr.
- (c) For sweeping road with broken surface 87,500 sq.ft. per Safaiwala in a shift of 8 hr.
- (d) Garbage collected from sweeping of 15,000 sq.ft. of road and surrounding can be removed and deposited in dustbins per 30 min.

1.1.2 Cleaning of drains:

- (a) For cleaning small house drains – one Safaiwala will take 7 min per 150 R-ft.
- (b) For cleaning main drain – One Safaiwala will take 14 min per 150 R-ft.
- (c) For removal and disposal of accumulated silt from 150 R-ft length of drain a sweeper will take 12.5 min.

1.1.3 Sweeping of staircases of multi-storied building:

- (a) For sweeping of the one staircase for a 4 storied building a Safaiwala will take 14 min.
- (b) For sweeping of one staircase of a 2 storied building a Safaiwala will take 7 min.

1.1.4 Cleaning of Latrines:

- (a) Service Latrines – for cleaning one service latrine a Safaiwala will take 5 min. This includes activities involved e.g. removal of night soil, walking to the dumping place and back. Manual scavenging has been banned at present as per extent rule.
- (b) For cleaning one community latrine with 10 seats a Safaiwala will take 7.5 min.

- 1.1.5** A special gang of 2 Safaiwalas should be formed to attend blockage of underground drains, septic tanks and sanitary latrine.

- 2.17.0.** The sanctioned strength of safaiwala for Sanitary cleaning, conservancy work of Rly. Colonies are principally evaluated on the basis of occupation of 'Railway Quarters in Colonies, etc.' The study team, in this respect, considers the occupation of Rly. Quarters during 23.01.2020, in Ranaghat Railway Colonies duly certified by Sr. SE (Works) / Ranaghat.
- 2.18.0.** The position pertaining to colony-wise Occupation, Vacation, etc. of Railway Quarters at Ranaghat Railway Colonies are summarized and tabulated in Table No. 2 to Table No. 4. However, the Overall average percentage of Occupation, is 47.09% \approx 47 %. The Overall percentage of vacancy i.e. Non - Occupation is 52.91% \approx 53%.
- 2.19.0.** Thus, conservancy & sanitary workload obviously reduced from the ideal situation of 100% Railway Quarters occupancy to present situation of 47% occupancy at Ranaghat Railway Colony.
- 2.20.0.** Considering the present scenario, discussed above, study team taken a very lenient view. Thus, Manpower is evaluated directly on the basis of aforesaid yard stick as well as 100% area of colony roads, roads surrounding to houses, length of house drains, main drains, nos. of staircases, as available from the office records of SSE(W)/RHA. Thus, evaluation is conducted, considering 100% occupancy at RHA Railway colonies.
- 2.21.0.** In case of 'Anti-larval & Anti-Insecticidal Spraying Work' & 'Dealing of Water Sample & food Sample' vide SI No. 7 of the Table - 5, there are no such 'Yardstick'. So, the present practice of manpower deployment, as per the order of competent authority is kept un-altered.

Table - 6

Sl. No.	Nature of Activities	Volume of Work [As certified by SSE(W)/ RHA]	Present Yardstick (As on 28th Feb. 2014)	Yardstick Ref.	Total nos. of evaluated Manpower (Nos. of Safaiwalarequired) (In Nos.)	
1.	Sweeping of Colony Roads.	64,000.00 Sq. ft.	1,05,000 sq.ft. of road only 01 Safaiwala in 8 hourly shift.	Para. 1.1.1 (a)	64,000.00 / 1,05,000 = 0.61	1.00
2.	Cleaning the Surroundings of Houses and Roads	12,800.00 Sq. ft.	90,000 sq.ft. per Safaiwala per shift of 8 hr.	Para. 1.1.1 (a)	12,800.00 / 90,000 = 0.14	1.00
3.	Cleaning of Single House Drains	12,000.00 Running ft.	01 Safaiwalawill take 7 min per 150 R-ft. i.e.10285.71 R-ft per shift of 8 hr.	Para. 1.1.2 (a)	12,000.00 / 10,285.71 = 1.17	2.00
4.	Cleaning of Main Drains	3,000.00 Running ft.	01 Safaiwalawill take 14 min per 150 R-ft. i.e. 5142.86 R-ft per shift of 8 hr.	Para. 1.1.2 (b)	3,000.00 / 5142.86 = 0.58	1.00
5.	Sweeping of Stair Cases of	17 Stair Cases	01 staircase of a 2 storied building a Safaiwala will take 7 min i.e. 68.57 staircases	Para. 1.1.3 (b)	17 / 68.57 = 0.23	1.00

2.22.0.

	Multistoried Buildings		per shift of 8 hr.			
l	6.	Special Gangs for attending of Blockage of underground drains, Septic Tanks and Sanitary Latrines.		Para. 1.1.5	2.00	2.00
t	7.	Anti-larval & Anti-Insecticidal Spraying Work of House Drains, Rly. Quarters, Service Buildings			2.00	2.00
c	8.	Dealing of Water Sample, Letter Delivery Work, Health Unit medicines collection from BRSH, Stores collections from HWH & HLR Store Depot, etc.			2.00	2.00
a	9.	Dealing the situation like VIP movement, assistance to RHA H. U., spl. booking in Sunday, etc.			2.00	2.00
n						
b						
e		Total				14.00

viewed from the above table that **bare requirement** of Safaiwalas is 14.00 to carry out Sanitary & Conservancy work under the supervision of H&MI/RHA. This is in accordance to the existing workload vis-à-vis required man power analysis. The Actual Requirement of Safaiwalas is calculated as under:

Table - 10

Bare Requirement of Safaiwalas	:	14.00
Leave Reserve (LR) @ 12.5%	:	12.5% of 14.00 = 1.75 ≈ 2.00
Actual Requirement of Safaiwalas	:	(14.00 + 2.00) i.e. 16.00

2.23.0. So, the **actual requirement** of Safaiwala to carry out existing Sanitary & Conservancy workload catered by Departmental Safaiwalas under the supervision of H&MI/RHA are 16.00, as analyzed through Yardstick and assessment based on observation by study team.

2.24.0. From the above, it reflects that (26 - 16) i.e. 10 posts of safaiwala are surplus in this wing against sanctioned strength of 26 posts.

2.25.0. **RECOMMENDATION:** The Study Team recommends that 10 posts of 'Safaiwala' to be declared as surplus & subsequently surrendered from the existing 26 Sanctioned Strength of Conservancy Safaiwala under H&MI (Gr-I) / Ranaghat

CHAPTER-III

3.0.0. FINANCIAL APPRAISAL

3.1.0. As per recommendation made in Para 2.25.0., 10 posts of Safaiwala of Medical Department at the unit of H&MI/ RHA under ACMS/Ranaghat to be made surplus and financial savings thus achieved will be as under:

Category /Scale of pay	Mean pay	GP	DA @ 17 %	Total Pay/staff/ month	Proposed surplus	Monthly savings	Annual savings
	(Figs. In Rupees)						
Safaiwala / Rs. 5200 -20,200/-	12,700.00	1,800.00	2465.00	16,965.00	10 (Nine)	1,69,650.00	20,35,800.00

3.2.0. Thus, the annual financial savings against surplus of 10 (Nine) posts of Safaiwala having Pay Scale Rs. 5200-20,200/-, G.P. Rs. 1800.00, worked out as **Rs. 20.35 lakhs (Approx.)**