





ACCESS OF THE MUNICIPALITY CLEANING WORKERS TO LIVELIHOOD ESSENTIALS AND THE RELATIONSHIP DISCOMFITURE WITH MAINSTREAM POPULATION: A STUDY OF GOPALGANJ TOWN

Tulika Podder¹, Shamima Nasreen², Shammy Islam³, Dr. M. Zulfiquar Ali Islam⁴

To cite the article: Tulika Podder1, Shamima Nasreen2, Shammy Islam3, and Dr. M. Zulfiquar Ali Islam4 (2023). ACCESS OF THE MUNICIPALITY CLEANING WORKERS TO LIVELIHOOD ESSENTIALS AND THE RELATIONSHIP DISCOMFITURE WITH MAINSTREAM POPULATION: A STUDY OF GOPALGANJ TOWN, South Asian Journal of Development Research, 3(2): 108-134.

Link to this article: http://aiipub.com/journals/sajdr-231124-10012/

Article QR



Journal QR



ACCESS OF THE MUNICIPALITY CLEANING WORKERS TO LIVELIHOOD ESSENTIALS AND THE RELATIONSHIP DISCOMFITURE WITH MAINSTREAM POPULATION: A STUDY OF GOPALGANJ TOWN

Tulika Podder^{1,} Shamima Nasreen^{2,} Shammy Islam^{3,} Dr. M. Zulfiquar Ali Islam⁴

ARTICLE INFO

Article Type: Review Received: 02, Oct. 2023. Accepted: 03, Dec. 2023. Published: 12, Dec. 2023.

Keywords:

Cleaning workers, Livelihood, Livelihood essentials, Discomfiture, Mainstream population.

ABSTRACT

The present paper primarily focuses on the access of the municipality cleaning workers to livelihood essentials and the relationship discomfiture with mainstream population at Gopalgani Town. Waste workers protect the environment by making materials available for reuse or to be reprocessed and enabling valuable materials to go back into the global recycling stream. This paper is very constructive in sorting out the major dimensions of livelihood conditions and the social networking status of municipality cleaning workers as minority group in this locality and also enthusiastically tries to reveal the dominant causes of why they are belonging to deprived and underprivileged sections of the society and are subjected to acquire inadequate paid livelihoods essentials and legal privileges. Concurrently, this study is wedded to analyze their social exclusion from other social groups because of living in an isolated area and belonging to schedule segment of population. The present study is primarily based on empirical data gathered through survey methods, direct interviewing with the purposively chosen municipality cleaning workers of Gopalgani Town, case studies, FGDs, observation and informal interviews with stakeholders. Both the qualitative and quantitative interpretation of social reality is considered to be reciprocally focused here. Based on the findings, a number of suggestive policy measures with strong networking to eradicate discomfiture relationship and cultural barriers that the planners and implementers may consider for the future development of cleaning workers' livelihood conditions and to create stimulating socio-cultural and legal milieu of proper networking with mainstream population in Bangladesh society are embedded in end of the paper.

¹ Assistant Professor, Department of Sociology, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100, +88 01884868016, tulikapodder02gmail.com

² Assistant Professor, Department of Sociology, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100, +88 01720329976, snm.mily@gmail.com

³Assistant Professor, Department of Sociology, Begum Rokeya University, Rangpur, +88 01744574904, shammyislam99999@gmail.com

⁴Professor, Department of Sociology, University of Rajshahi, Rajshahi, +88 01715359715, drzulfiquarai@gmail.com

INTRODUCTION

Waste management is one of the most difficult and visible environmental problems that urban communities and local governments in low-income countries face around the globe today (Claudel 2010) and the rapidly growing problem with solid waste (SW) affects urban residents such as Gopalganj Town who are exposed to ineffective solid waste management systems (SWMS), as solid waste can pose a serious health hazard to people and public health. Waste that is not disposed effectively can spread communicable diseases, attract disease vectors, spread harmful substances and pollute the soil, water and air (Claudel 2010; in Cheng & Urpelainen 2015). Waste workers provide a vital and essential part of waste management systems in developing countries including Bangladesh. They improve the quality and cleanliness of public spaces in urban areas and help prevent the spread of communicable diseases and therefore improve public health. They extend the life cycle of landfills by decreasing the amount of waste disposed in them and are important economic actors as they provide vast quantities of important material for the recycling market that would otherwise be unutilized. Waste workers also protect the environment by making materials available for reuse or to be reprocessed and enabling valuable materials to go back into the global recycling stream (Adama 2014; Dias 2016).

The present paper primarily focuses on the access of the municipality cleaning workers to livelihood essentials and the relationship discomfiture with mainstream population at Gopalganj Town. Their dignity and labor rights are violated, and few countries have any guidelines that explicitly protect sanitation workers. They remain invisible to many (Corteel and Le Lay 2012; Day 2019; Espinosa, Saffron, and Abizaid 2018; Nagle 2013) and despite carrying a disproportionate burden of health risks common to many workers of the informal economy, sanitation workers often do not have affordable and proper access to preventive and remedial health care or social protection (ILO 2013). Sanitation workers often suffer because of weak legal protection and lack of enforcement of existing rules. The numerous operational activities along the sanitation chain—emptying and conveyance of fecal sludge, sewer maintenance, treatment, and end use/disposal (WHO 2018)—have often been invisible or at least disregarded in regulatory frameworks. The present study will try to identify the influence of waste management workers in their family and the changes caused due to participation of waste workers into income generating activities and to protect the environment in Gopalganj town.

The present study attempts to analyze the health risks, health problems and livelihood conditions of municipality cleaning workers of Gopalganj town with a view to simplify the socio-economic, demographic and environmental background of municipality cleaning workers of Gopalganj town because waste work is overridden by the social, economic, and environmental deprivations and also involves gender issues. To explore the personal hygiene, health status, health problems and health care of cleaning workers in relation to their occupation and to identify the statistical relationships and significance between the selected variables of the health status of the workers. The contributions of cleaning workers in changing environment structures over the past decades are well known. With the processes of industrialization, modernization, and the recent trends of globalization, the structural features and the functional implications have started changing in Gopalganj Town. This is increasingly taking place in the urban areas of Gopalganj City and among the well-educated classes.

RATIONALE OF THE STUDY

The lack of studies on cleaning workers in urban areas of Bangladesh is one of the main reasons for selecting the present problem. The study will provide important insights into our understanding of

contribution of cleaning workers in changing environmental structure of Gopalganj Town. Especially it will be possible to analytical and appropriate aim of understanding the changes in social structure by cleaning workers. The study will help to find out the contribution of cleaning workers in waste management, environmental development, economy, decision making, social security, family standard etc. in Gopalganj Town (*cf.* Amour. Laverdure. Devault. And Manseau. 2007).

Standards of waste handling practice in industrialized countries have reduced occupational health problems and environmental impacts significantly. Contrary to that, the situation of developing countries is completely different than those of developed ones. The covered landfill site was more than three decades old method of waste disposal in industrial country. Since the last two decades, developed countries established sanitary landfills and started to use sophisticated machineries while handling waste to reduce health problems and environmental risk. Nevertheless, survival economies still cannot dump waste in controlled landfills and most of handling practices are labor intensive. In the whole cycle of solid waste management, from waste generation to collection, transport, dump to recycling or composting workers are suffering from varieties of health risk in Gopalganj town.

This study builds a milestone for the women in our society and many women will come forward to establish women's rights, education, dignity and equal rights for cleaning workers and they will move forward in the social sector for changing their family structure, community sentiment and social structure. The findings of the present study will thus be useful for policy-makers of national planning, and development workers at village level and also for international development agencies in developing insights into their program contents. The present study would serve as a baseline for further studies. It would bear a great deal of importance in labor rights research providing new facts in this horizon of knowledge. And since the study deals with the present problem from the lens of sociology, inequality and its findings would be a valuable introduction to help develop a general theory in this area of study in Bangladesh. It will provide a number of policy measures for eliminating and/or reducing child maltreatment.

Objectives of the study

The study has the following objectives:

- To know the socioeconomic profile of the cleaning workers;
- To sort out the major dimensions of livelihood conditions and the social networking status of municipality cleaning workers;
- To reveal the dominant causes of why they are belonging to deprived and underprivileged sections of the society;
- To analyse the social exclusion from other social groups because of living in an isolated area and belonging to schedule segment of population.

Conceptual Clarification:

Cleaning Workers

A cleaning worker in this study has been defined as a person who is responsible for cleaning, washing, maintaining and operating domestic, street, open spaces, collect solid waste, open drains, public toilets, educational and commercial premises at any step of the sanitation chain of different government, non-government, autonomous and private organization of Gopalganj municipality in Gopalganj district. They are also called as manual scavengers. Some organizations use the term specifically for municipal solid waste collectors, whereas others exclude the workers involved in management of solid waste (rubbish, trash) sector from its definition (Sperandeo, 2020).

Mainstream Population:

In general, mainstream is defined as the popularly accepted trends, ideas, principles and values that are accepted by the majority of people. In this present research, the term mainstream population designates the diversity and cultural exchange in an expanding and evolving population which is considered as a driving force of Gopalganj municipality in Gopalganj district such as job holders in reputed organizations; politicians, bureaucratic members; autonomous, government and non-government officers and others who are not engaged with the cleaning works etc.

Municipality

A municipality is a political subdivision of a state within which a municipal corporation has been established to provide general local government for a specific population concentration in a defined area. In this study municipality has been considered as only one populated place such as a city, town or other district possessing corporate existence and usually its own local government and a community under *municipal* jurisdiction. To fulfill the objectives of the present study Gopalganj municipality under Gopalganj district has been selected. A photo of Gopalganj municipality has been mapped out:



Source: https://mapsus.net/BD/gopalganj-municipality-154139

Livelihood Essentials

In this research the concept livelihood refers to a means of support and/or contribution to the survival of cleaning workers households in securing their socio, familial, social and economic needs and livelihood essentials have been described here which comprise as the capabilities, assets (including both material and social resources) and activities required for a means of living. Moreover some intangible and intangible livelihood essentials which are not visible and convertible into monetary and numerical measurements but these are important to establish social networking system in preventing discomfiture and social exclusion system from society in addition to create cooperative, amicable and creditable relations with the mainstream population.

Relationship Discomfiture

The word discomfiture has been used here to highlight the presence of negative elements for engaging cleaning jobs in core *relationships to* the state of being disconcerted, disconnected, confusion, embarrassment and frustration of hopes or plans *between the cleaning workers and the mainstream population* of the municipality in Gopalganj municipality. By this term this study also focuses the fact that the mainstream populations are not so connected with the cleaning workers that is why very often they are deprived and underprivileged from their socio-economical needs which cause social exclusion because of living in an isolated area and belonging to schedule segment of population.

RESEARCH METHODOLOGY

Both the qualitative interpretation and quantitative measurement of social reality have been considered to reciprocally focusing here based on empirical data gathered through survey methods, direct interviewing with the purposively chosen cleaning workers who are engaged in different sectors for cleaning municipality of Gopalganj district town. Purposive sampling procedure have been used

and this formula $n = \frac{N}{1+N(e)^2}$ has been used to calculate sample size 101. In this study cleaning workers in different organization such as GOs (Government Organization), NGOs (Non-Government Organization), autonomous organizations and private organizations have been taken as unit of analysis. The present study has been adopted two principal techniques of social survey method—questionnaire and interviewing — for collecting the primary and empirical data. In addition to social survey, the research has been collected data through conducting focus group discussions (FGDs), observation, and case studies of selected respondents. And informal interviews with the Gopalganj district town leaders, other stakeholders and community members has been incorporated in this research for gathering more empirical data.

To conduct this research 6 case studies and 3 FGDs have been conducted in Gopalganj district town for collecting qualitative data. Besides, observation and KIIs (Key Informants Interviews) have been also used for qualitative data collection. And considerable informal interviews with the Gopalganj District town leaders, other stakeholders and community members have been incorporated in this research for gathering more empirical data that have been strengthened the accuracy of primary data collected from the respondents. During the period of fieldwork, by being presence at the workplaces of the female professionals it has been possible for researcher to keenly observe the physical environment, health care facilities, availability of health care services for emergencies, their engagement in different tasks of working routine, and so on.

The collected data throughout the fieldwork carried out have been analyzed in descriptive and qualitative manner. The study has been aptly intended to establish the analytical and critical evaluation of the collected data. All data were entered into SPSS for Windows (version v20, 32 bit; SPSS Inc, Chicago) and in addition to the qualitative data; the quantitative data has been classified in simple and cross tables. These tables are prepared in order to show frequencies and percentages. A good number of photographic presentations also are added to make what happened in the social reality of the cleaning workers in getting livelihood essentials and to continue good relationships with the mainstream population in Gopalganj by analyzing the unit of this study, the primary and empirical sources of data has been exclusively utilized. In refuting and/or arguing with others' findings, the present study has been cited and/or utilized information and/or findings of relevant studies.

The precise nature of the Project:

The cleaning workers in Gopalganj Town of Bangladesh have a great contribution in waste management but, they have to face multifarious challenges in maintaining their livelihood and they are deprived from various social chances. The purpose of this study is to examine and analyze the vulnerabilities, livelihood assets and livelihood outcomes of the sanitation workers involved in waste management in Gopalganj Town, to determine if they can attain a sustainable livelihood, it will be both qualitative and quantitative in nature and in some cases quantitative measurement will be associated as well. It will be based on empirical data.

Map 1
Study area in Gopalganj City of Bangladesh



Source:https://www.google.com/search?client=firefox-b-d&q=map+gopalganj

The techniques have been followed for completing objectives:

The	techniques have been for	llowed for completing object	ctives:	
SL No.	Objectives	Methods/Tools/ Techniques	Target Group/Source	Analytical Issue
1	To know the socioeconomic profile of the cleaning workers;	Social Survey: Questionnaire, and Interview	Cleaning workersParents	 Socioeconomic Conditions of Cleaning workers
2	To sort out the major dimensions of livelihood conditions and the social networking status of municipality cleaning worker	 Focus Group Discussions (FGDs) Interview Case Studies, Key Informant Interview (KII) 	 Cleaning workers Parents Community People 	
3	To reveal the dominant causes of why they are belonging to deprived and underprivileged sections of the society	 Focus Group Discussions (FGDs) Interview Case Studies, Key Informant Interview (KII) 	 Cleaning workers Parents Community People Other Stakeholders 	 Extent, forms and causes behind the deprivation and underprivileged
4	to analyse the social exclusion from other social groups because of living in an isolated area and belonging to schedule segment of population	Key Informant Interview (KII)	 Cleaning workers Community People Other Stakeholders 	 Policy implications

Contribution to knowledge / field /national development:

This study will build a milestone for the cleaning workers in our society and many of them will come forward to establish cleaners' rights, education, dignity and equal rights for cleaning workers and they will move forward in the social sector for changing their family structure, community sentiment and social structure. The findings of the present study would thus be useful for policy-makers of national planning, and development workers at village level, national and also for international development agencies in developing insights into their program contents. The present study would serve as a baseline for further studies. It would bear a great deal of importance in labor rights research providing new facts in this horizon of knowledge. And since the study deals with the present problem from the lens of sociology, inequality and its findings would be a valuable introduction to help develop a general theory in this area of study in Bangladesh. It will provide a number of policy measures for eliminating and/or reducing social exclusion, deprivation and underprivileged maltreatment.

Expected Outcome of the Project:

The present study will try to identify the influence of waste management workers in their family and the changes caused due to participation of waste workers into income generating activities and to protect the environment in Gopalganj town.

REVIEW OF RELATED LITERATURE

Lekare and Carl (2019) examined on the sanitation workers who work with solid waste management and analyzed their ability to create a sustainable livelihood based on livelihood assets and strategies. In this study they have found the fact that sanitation workers employed four livelihood strategies, however, only two of these were sustainable and contributed towards a positive livelihood outcome besides, they categorized multiple stresses such as low wages, inability to save money, unsafe work conditions, exposure to bacteria and other contaminants and no access to social services. In addition to they have identified the shocks which were as work-related injuries resulting in extended time off work, wages being paid out late and sudden illness but their focus was not specifically both on their livelihood essentials and relationship discomfiture too.

Borba*et al.* (2007) emphasized on the importance of safe sanitation to health improvements, poverty alleviation and environmental protection, sanitation still has a low profile when compared to water supply. They also upheld the situation that sanitation is highly deficient in most poor regions of the world, and needs to be put on the agenda in a more challenging manner. The main concern of this paper was on the importance of safe sanitation for the livelihoods of poor families which addressed what actually poor sanitation means for their resources, including their income and expenditure in cash and kind, and for the environments in which they live and work but no to the access of the cleaning workers to livelihood essentials and relationship discomfiture with the mainstream population.

WBG (2019) have concentrated their view on the health, safety and dignity of the sanitation workers and identified the direct contact with hazardous biological and chemical agents in dangerous environments that is why they face stigma and social discrimination resulting from the nature of their work. Their insights were especially on the challenges and risks faced by sanitation workers that they have categorized are in four dimensions: occupational and environmental health and safety, legal and institutional issues, financial insecurity, and social issues but, in their study they have not paid specific attention on the relationships discomfiture and the dominant causes of their deprivation and social exclusions.

Gomathi and Kamala (2020) have examined that the sanitary workers are not concentrating on their

own health and nutritional status due to lake of awareness. They have also focused their view on enhancing the knowledge of workers regarding prevention of health problems, protection from health issues and promotion of their health. In relation to this fact workers should get adequate facilities in the working area. In this study they have recommended some measures that sanitary workers must be provided with personal protective equipment and insisted to use it properly besides, regular medical check-up, vaccination and follow up are very important to protect the sanitary workers. So, from this literature it is certain that their main attention was only the health status of the sanitary workers and they have failed to analyze the access to livelihood essentials of the cleaning workers.

Peal and Chilala (2021) have given the main objective of this short study to scope out options for how the importance of sanitation workers could be highlighted, and how their integration with an established method for city-level sanitation assessments might help, such as the shit flow diagram (SFD) process. They also presented some options for how to carry out quantification and profiling through assessments of workers at city level. The report also contains the suggested scope for a sanitation worker assessment, the dimensions to be assessed, questionnaires that could be used to generate data on these different dimensions, and possible options for presentation of both quantitative and qualitative data. Though they have given their concentration on sanitation workers but their view is very much dissimilar with the present study where livelihood essential access and relationships with other population have taken the main coagulation.

Aguiar and Andrew (2006) have explained the intensification of employment and reductions in wages are transforming cleaning work, such work is also being impacted in other ways. In particular, they have mentioned whereas cleaning has long been taken to be fairly unskilled work there has been a noticeable move to professionalize the industry. In their study they have shown the Cleaners working conditions in relation to the global economy. They believe that certainly, the international labor movement is making efforts to counter the effects of neoliberalism. However, the transformed context within which cleaners' unions must operate relative to even a few years ago is making organizing much more difficult and forcing unions to devise new strategies. So, at last it can be said that this study have been conducted on the neoliberalism to highlight the conditions of the cleaning works in global economy but present study focused the access to get assets and privileges that they desire from the society exceptionally.

ILO (2017) upheld the hidden world of sanitation workers by describing the real fact that unless human waste is properly dealt with, every single gram will pose a significant health risk to us and our planet. They have also mentioned in their study that by ensuring proper contact with human waste ends when people leave the toilet is one of the most important jobs in society, and yet around the world sanitation workers remain mostly unseen and unappreciated. Access to decent toilets that properly manage waste is a human right and also forms part of Sustainable Development Goal (SDG) 6. They suggest about living without safely managed sanitation threatens the health, education and livelihoods of billions of people. In their study they have opined that everyone, everywhere has the right to sanitation, but progress on achieving this promise encapsulated by SDG 6 is slow. From this study it is obvious that this study emphasized on the sanitation status only not the sanitation or cleaning workers livelihood.

Results and Discussions

Socio-economic Profile of the Cleaning Workers in Gopalganj Municipality:

In social research, socio-demographic characteristics of the respondents have significant role to play in expressing and giving the responses about the problem. Keeping this in mind, a set of socio-demographic characteristics namely age, sex, religion, educational qualification, marital status, and occupation of the respondents have been examined and presented in table-1.

For the present study total 101 respondents ranging from age 10 to 56 were interviewed. The highest representation of data is found from the age group of 31-35 years which consists of 25.7% of the total respondents. The age group of 46-50 years comprises lowest number of respondents (2%). Both male and female respondents were interviewed. The ratio of male and female respondents is 65:36.

Table 1 Socio-economic Profile of the Cleaning Workers

Variable	Characteristics	Frequency	Percentage
	10-15	1	1.0
	16-20	1	1.0
	21-25	25	24.8
	26-30	8	7.9
Age	31-35	26	25.7
	36-40	12	11.9
	41-45	11	10.9
	46-50	2	2.0
	51+	15	14.9
C C	Male	65	64.4
Sex	Female	36	35.6
D 11 1	Muslim	44	43.6
Religion	Hindu	57	56.4
	Illiterate	33	32.7
	Primary	36	35.6
T-1	JSC	27	26.7
Education	SSC	2	2.0
	HSC	2	2.0
	Others	1	1.0
	Married	83	82.2
	Unmarried	13	12.9
Marital Status	Divorce	3	3.0
	Widow	1	1.0
	Widower	1	1.0
	Government	33	32.7
Type of Occupation	Non-government	18	17.8
	Daily Basis	50	49.5

Religion plays a vital role while choosing this occupation. In this study researchers found that more than half of the respondents are Hindu.

Here in this study the number of married respondents is 82.2%, which is highest among all other categories. Only 2 respondents were found widow/widower. Educational attainment of the respondents represents that 35.6% have completed their primary education, which is almost 1/3 of the

total respondents. The second highest category is illiterate which consists 32.7% of the total respondents. For this study the researchers classify the occupation into three category- Government, Non-government and Daily Basis worker. Half of the municipalities cleaning workers work as daily basis, while government and non-government workers constitute 32.7 % and 17.8% of the total respondents respectively.

Relation among Respondents' Sex, Educational Qualification and Deprivation of Getting Basic Essentials:

Following table (2) is showing the relationships among respondents' sex educational qualifications and their feeling of deprivation as a member of a society in Gopalganj municipality. Though education is the backbone of the nation but from field survey it is obvious that the cleaning workers are not so high qualified in the context of their educational qualifications. The study attests the fact that the 1st majority totals 36 among 101 cleaning workers are secured primary education.

Table 2
Relation among Respondents' Sex, Educational Qualification and Deprivation of Getting Basic Essentials

				Deprived of	of getting basic		
Educatio	n			essentials	from society	Total	Majority
				Yes	No		
			Frequency	17	5	22	
	C	Male	% within Sex	77.3%	22.7%	100.0%	
T1124 4	Sex		Frequency	4	7	11	2 nd
Illiterat e		Female	% within Sex	36.4%	63.6%	100.0%	
			Frequency	21	12	33	
	Total		% within Sex	63.6%	36.4%	100.0%	
	Sex	Male	Frequency	12	10	22	1 st
			% within Sex	54.5%	45.5%	100.0%	
ъ.		Female	Frequency	9	5	14	
Primar y			% within Sex	64.3%	35.7%	100.0%	
	Total		Frequency	21	15	36	1
			% within Sex	58.3%	41.7%	100.0%	
			Frequency	8	10	18	
		Male	% within Sex	44.4%	55.6%	100.0%	
TCC	Sex		Frequency	5	4	9	3 rd
JSC		Female	% within Sex	55.6%	44.4%	100.0%	3ra
	TD 4 1	1	Frequency	13	14	27	
	Total		% within	48.1%	51.9%	100.0%	1

			Sex				
			Frequency	2		2	
SSC	Sex	Male	% within Sex	100.0%		100.0%	4 th
SSC			Frequency	2		2	4
	Total		% within Sex	100.0%		100.0%	
			Frequency	1	0	1	
	Sex	Male	% within Sex	100.0%	0.0%	100.0%	
	Sex		Frequency	0	1	1	
HSC		Female	% within Sex	0.0%	100.0%	100.0%	4 th
	Total		Frequency	1	1	2	
			% within Sex	50.0%	50.0%	100.0%	
	Sex		Frequency	1		1	
0.1		Female	% within Sex	100.0%		100.0%	5 th
Others	Total		Frequency	1		1	5 th
			% within Sex	100.0%		100.0%	
			Frequency	40	25	65	
	Corr	Male	% within Sex	61.5%	38.5%	100.0%	
Grand	Sex		Frequency	19	17	36	
Total		Female	% within Sex	52.8%	47.2%	100.0%	
			Frequency	59	42	101	
	Total		% within Sex	58.4%	41.6%	100.0%	

The study shows that 58.30% of the cleaners are deprived of getting essentials and another 41.70% do not feel deprivation in getting access among them 45.5% and 35.7% are male and female respectively (Table 2).2nd majority 33 of 101 respondents are illiterate which signifies the lower educational background of the respondents and among them 63.6% of the respondents do not get access to enjoy basic essentials and 36.4% feel that they have access among them 22 of 101 are male and 11 of 101 respondents are female (Table 2). Besides, 3rd majority 27 of 101 respondents have completed JSC, 4th majority 2 of 101 respondents secured SSC and HSC and 5th majority only 1 of 101 respondents have passed HSC examination (Table 2).

This study has find the fact that total 58.4% of the cleaning workers in Gopalganj municipality are deprived of getting basic access of livelihood essentials among them 61.5% are male and 52.8% are female in addition to another 41.60% of the respondents among them 38.5% are male and 47.2 are female who feel that they get chance in accessing basic essentials that is why they are not deprived

and they manage their essentials by adopting their livelihood strategies.

Housing Patterns of the municipality cleaning workers

During fieldwork, it was observed that most of the respondents reside in adha-pacca (34.7%) and pacca (28.7%) houses, whereas 32.7% of them live in *kacca* houses. Besides, bricks (40.6%) and corrugated iron sheets (29.7%) were used for most of the houses' walls, where CIS (48.5%) and bricks or tins (19.8%, respectively) were placed as the top priority for constructing roofs (Table 3).

Table 3 Housing patterns of the respondents

Variable	Characteristics	Frequency	Percentage
	Pacca	29	28.7
Housing Structure	Kacca	33	32.7
Housing Structure	Adha-pacca	35	34.7
	Others	4	4.0
	Mud	9	8.9
	Thatch	2	2.0
Housing Material	Tile	1	1.0
Used for roof	Corrugated Iron Sheet	49	48.5
	Bricks	20	19.8
	Tin	20	19.8
	Branches	3	3.0
	Wood	7	6.9
Housing material	Mud	4	4.0
Housing material	Thatch	5	5.0
used for wall	CIS	30	29.7
	Both Bricks and CIS Bamboo	41	40.6
	Tin	11	10.9

Source: Field Survey, 2022N=101

Types of furniture and household appliance the municipality cleaning workersuse

The necessity of furniture is omnipresent in every single house. Without furniture, a household remains incomplete. Hence, it is not an exception in the case of respondents' homes taken for this study. Necessary furniture like beds, tables, chairs, etc., was evident in most households. Besides, there was some other costly furniture like sofa, almirah, showcase, dressing table are available in a significant number of households. In case of household appliance it is found that 31.3% of the respondents have television and only 28.3% have refrigerator (Table 4).

Table 4
List of furniture and household appliance the respondents use

Furniture	Items	Response	Per cent of Cases
Furniture	Bed	94	94.9%
	Wardrobe	32	32.3%
	Dressing Table	27	27.3%
	Almirah	25	25.3%
	Table	41	41.4%
	Chair	42	42.4%

	Showcase	31	31.3%
	Shelf	16	16.2%
	Cloth Hanger Stand	24	24.2%
	Sofa	4	4.0%
Household Appliance	TV	31	31.3%
	Fridge	28	28.3%

Note: Multiple responses considered (N=101), Source field survey, 2022

Occupational Status and Deprivation of Getting Basic Essentials:

The physical environment, geographical location, and type of infrastructures, socioeconomic condition, knowledge, awareness and skill constantly make the individuals, households and the communities vulnerable to resist with the socio-economical environment. Occupation is one of the most prominent indicators in socio-economical context to highlight the position and analyze the dignity of a community in a society.

Table 5
Relation between Respondents' Occupational Status and Deprivation of Getting Basic Essentials

Types of Occupati	Types of Occupation					Total	Majority
					No		
			Frequency	14	9	23	
Government	Sex	Male	% within Sex	60.9%	39.1%	100.0%	
and	Sex		Frequency	4	6	10	
Autonomous Cleaners		Female	% within Sex	40.0%	60.0%	100.0%	2 nd
Cleaners			Frequency	18	15	33	
	Total		% within Sex	54.5%	45.5%	100.0%	
			Frequency	6	3	9	
	Sex	Male	% within Sex	66.7%	33.3%	100.0%	
Non government	sex	Female	Frequency	7	2	9	
Non-government Cleaners			% within Sex	77.8%	22.2%	100.0%	3 rd
			Frequency	13	5	18	
	Tota	l	% within Sex	72.2%	27.8%	100.0%	
Master Role in			Frequency	20	13	33	
DailyBasis	Sex	Male	% within Sex	60.6%	39.4%	100.0%	1 st
Wages Cleaners		Female	Frequency	8	9	17	
Cicalicis		remale	% within	47.1%	52.9%	100.0%	

			Sex				
			Frequency	28	22	50	
	Tota	1	% within	56.0%	44.0%	100.0%	
		1	Sex				
			Frequency	40	25	65	
	Cov	Sex Female	% within	61.5%	38.5%	100.0%	
			Sex		30.5 / 0	100.0 /0	
	Sex		Frequency	19	17	36	
Total			% within	52.8%	47.2%	100.0%	
			Sex			100.0 / 0	
	Total		Frequency	59	42	101	
			% within	58.4%	41.6%	100.0%	
			Sex		41.0%	100.076	

The present study attests the relationship between occupational status and the cleaning workers' feeling of deprivation in Gopalganj municipality where this study has upheld the fact that 1st majority almost half of the total respondents 50 of 101 where 17 and 33 are female and male respectively who are daily wages basis cleaners besides, among them 52.8% are deprived of getting basic essentials and 47.20% have access in getting basic essentials (Table 5).

The present study also has upheld the condition that more than half of the total populations in this study 59 of 101 respondents are deprived of getting access and another 42 of 101 respondents have their access among them 2nd majority 18 of 59 and 3rd majority 13 of 59 respondents have to face deprivation and 2nd majority 15 of 42 and 3rd majority 5 of 42 respondents do not face deprivation in getting access to basic livelihood essentials. The study also highlights the fact in the basis of occupational status daily wages or, master role cleaning workers are more deprived than government and non-government cleaners. So, from the above discussion it is clear picture of social reality that occupational status of the respondents cleaning workers both male and female not only cause deprivation but also cause barriers in getting access to livelihood essentials along with another social facilities or social rewards from the society and from the mainstream population of Gopalgani municipality.

Monthly Income and Expenditure of the Respondents

Most of the respondents' (44.6%) monthly incomes were ranged from BDT 5000-10000 taka. 10000-15000 taka are 22.8% of respondents' monthly income. 17.8% earned less than 5000 takas among the total respondents, whereas only 2% earned more than 25000 takas (Figure 1).

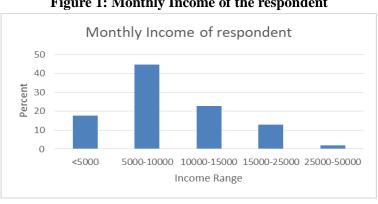


Figure 1: Monthly Income of the respondent

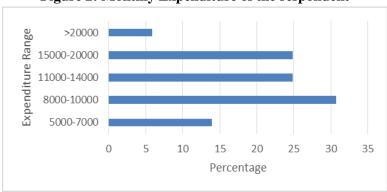


Figure 2: Monthly Expenditure of the respondent

Case

Total

Jayanta Jomaddar, 23 years old is a cleaning workers and working as a daily basis wages as per day 200 TK in BDT. His father has died, his mother also a cleaning workers (sweeper) in an autonomous organization who use to wash 175 toilets in residential halls in BSMRSTU and his family consists of 4 members. He is illiterate and both with his and his mother's lower income he sustains his family. Two of his sisters are students and he maintains their educational expenses.



Photo of Jayanta (23) is a Master role daily basis cleaning worker

100.0

From this research it is noticed that most of the respondents' expenditure exceeds their income. Most of the respondents' monthly expenditure fells in the range 8000-10000. Expenditure range 11000-14000 and 15000-20000 shares almost equal number of the respondents (Figure 2).

Job Duration of the respondents

Most of the respondents (52.5%) are working for less than five years on a short-time basis. 29% of the respondents work for five to ten years, whereas only 18.8% work for more than ten years, respectively.

Table 6

Job Duration of the respondent

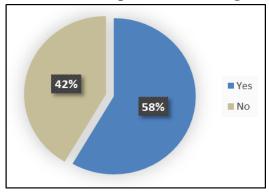
Job Duration of the resp	but attori of the respondent					
Range (Years)	Frequency	Percentage				
1-5	53	52.5				
5-10	29	28.7				
10-15	7	6.9				
15-20	3	3.0				
>20	9	8.9				

Distribution of the respondents according to their Access to basic needs

101

This study reveals that 58% of the respondents get access to basic needs, whereas a significant number (42%) opined that they could not get access to the necessities.

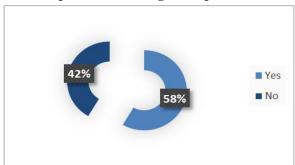
Figure 3: Percentage distribution of the respondents according to their access to basic needs



Respondents' feelings of social deprivation

A person's feeling of deprivation is conditional to their regular access to basic needs, which further reflects on their daily income and expenditure. This study found a significant number of respondents (58%) with feelings of deprivation.

Table 7
Respondents' feelings of deprivation



Causes of Social Deprivation

Lack of education (71.1%) and absence of property/wealth (56.6%) have been the principal causes of most of the respondents' social deprivation, which further keeps them in the underprivileged section of the social stratum. Socially and historically scheduled caste (31.6%) and minority groups (32.9%) who are socially excluded are reserved for the municipality cleaning jobs (i.e., scavenging and sweeping). In this case, parental occupations (19.7%) are primarily assigned to their children's lives (Table 8).

Table 8

Causes of deprivation and belonging to the underprivileged section of the society

Cause of deprivation	Response	Per cent of cases
Belonging to scheduled caste	24	31.6%
Belonging to a minority group	25	32.9%
Lack of education	54	71.1%
Lack of property	43	56.6%
Lack of power	8	10.5%
Parental occupation	15	19.7%
Underestimating their job	26	34.2%
Lack of loan facility	5	6.6%

* Multiple responses considered (N=101)

Most often, municipality cleaning workers are socially underestimated for their jobs. This study also found the aforementioned factors as the principal causes of the respondents' social deprivation and belonging to the underprivileged section of the society.

Difficulties to Communicate with Mainstream Society

The majority of the respondents (62%) have pronounced that they do not face any difficulty while communicating with mainstream society, whereas 14% of the respondents opined that they feel it difficult to communicate with the mainstream population. Conversely, a significant portion of them (25%) replied they do not need to communicate with the mainstream population (Table 9).

Table 9
Feel difficulties communicating with the mainstream population

	K-F	
Feel difficulties	Percentage	
Yes	14	
No	62	
Do not need to communicate	25	

Cleaning Equipment and Products Used by the Respondents

It is revealed that buckets, brooms, brushes, shovels and wheel barrows as the leading cleaning equipment and detergent, harpic, bleaching powder, vixol/phenyl as necessary cleaning products are used by the municipality cleaning workers. However, there have found an absence or ignorance of health safety concerns as sanitized, and safety equipment was rare and in case absent in the answers of the respondents (Table 10).

Table 10 Cleaning equipment and cleaning products used by the respondents

	Items	Percentage of cases
	Mop	6.1%
	Bucket	70.4%
	Broom	77.6%
	Brush	72.4%
	Shovel	68.4%
	Wheelbarrow	13.3%
Cleaning Equipment	Gloves	2.0%
	Bin	5.1%
	Pump Machine	3.1%
	Spray Machine	0.4%
	Van	02%
	Trolley Car	05.2%
	Grubber	10%
	Balti	38%

Detergent Harpic	57.1%
Harpic	74.50/
F	74.5%
Lijol	57.1%
Bleaching powder	62.2%
Vixol / phenyl	17%
Nyakra(Indigenous Name)	3.2%
Hishow((Indigenous Name)	2.8%
Vim Liquid	3%
Kotamade with bamboo	10%
	Bleaching powder Vixol / phenyl Nyakra(Indigenous Name) Hishow((Indigenous Name) Vim Liquid

^{*} Multiple responses considered (N=101)

















Photo of Ayan (39) is a cleaning worker

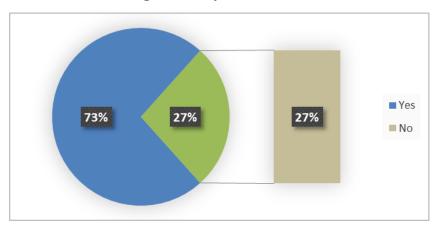
Photo of Prakash (33) is a cleaning worker

Aforementioned Photos are of Respondents with their Cleaning Materials

Respondents' Familiarity with Cleaning Machinery

Almost three-fourths of the total respondents were opined that they are familiar with the cleaning machinery. On the contrary, 27% of them replied that they were unfamiliar with the cleaning machinery.

Figure 4
Familiar with cleaning machinery



Work Shift of the Respondents

39.6% of municipality-cleaning workers perform their duty in the early morning, whereas around 9% work late at night. Besides, 18.8% usually work in the morning and night times. Conversely, 32.7% of them have to work at different times of the day.

Table 11

Work shift of the respondents

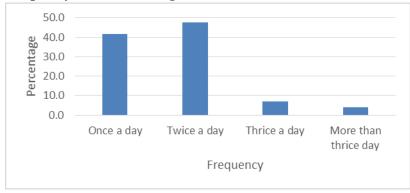
Shift	Percentage
Early Morning	39.6
Late Night	8.9
Both	18.8
Different times of the day	32.7

Frequency of tools cleaning

47.5% of municipality-cleaning workers clean their tools twice a day, whereas 41.6% usually wash

the tools once a day. The frequency of cleaning tools thrice or more than a day is rare among the respondents.

Figure 5
Frequency of tools cleaning



Reason for Doing this Job

When the respondents were asked to state the reason for doing the job, 51.6% of them claimed the lack of education, 34.4% did this job as they did not find any better position, 33.3% were assigned this job by ascription, and 26.9% were forced to do the job to maintain their livelihoods.

Table 12

Reason for doing this job

Reason	Per cent of cases	
Parental occupation	33.3%	
Lack of education	51.6%	
did not get a better job	34.4%	
To maintain Livelihood	26.9%	

Causes of Not Choosing another Job and Perception of Comfort

The lack of education was also reported as the main hindrance to not switching to another job..

Table 13

Causes of not choosing another job

Causes	Percentage of cases	
Parental occupation	28.1%	
Lack of education	68.5%	
did not get a better job	47.2%	

Table 14

Respondents' perceived comfortable with this job

Feel Comfortable	Percentage
Yes	73.3
No	26.7

Scarcity of employment was cited as the second cause, and the assignment of parental occupation was recorded as the third principal cause of not choosing another career. Around three-fourths of the total respondents opined they feel comfortable with their present job status, whereas 26.7% of them were unhappy with their job status.

Case

Kajuli Jomaddar is a cleaning worker (sweeper) has been working for 6-7 years in this area. Her family members are three in numbers. She has one girl and one boy child. Her monthly income is around 5000 TK in BDT and her income is in daily basis around 200 TK only. She is not interested in doing another job without it because she thinks that this is the only income source for her and she also respects her work mostly. Due to lower income range she has to face many challenges in maintaining her family and besides, her communication with mainstream population is very less.



Photo of Kajuli (36) is a sweeper

Social mobility and the cleaning workers perception on their next generation's occupation

Although most of the respondents answered that they feel comfortable with the present job, but the majority of the cleaning workers (88.1%) do not want to see their next generation to do the same job. They wish their children will be educated and get white collar job. On the other hand 11.9% of respondents do not want to uplift their status. They think that their next generation should do the same work because it is ascribed.

Table 15
Cleaning workers perception on their next generation's occupation

Yes/No	Percentage
Yes	11.9
No	88.1

Respondents' Opinion about Getting Government Facility

When the respondents were asked whether they get government facilities or not, many of them (65.3%) expressed their grievance that they do not get any government facility, whereas 34.7% opined that they get different government facilities.

Table 16
Respondents' Opinion about Getting Government Facility

Yes/No	Percentage	
Yes	34.7	
No	65.3	

Access to livelihood Essentials and Problems in Getting Access:

In this study with a focus on livelihoods, assets (also referred to as resources, capital, or means) represent a crucial dimension that influences cleaning workers ability to secure a livelihood. The present study highlights the fact that the socio-economical and demographic position of the municipality cleaning workers in Gopalganj is not sustainable and satisfactory in this modern era and

besides, lack of access to land, governmental help, water facilities, health and hygienic conditions, cleaning instruments uses capacities and educational qualifications often leads them to poverty which cause deprivation in getting access to livelihood essentials for daily sustainability and secure confrontation level.

Table 17
Access to livelihood Essentials and Problems in Getting Access

	Municipality Cleaning Workers									
Access to livelihood Essentials and Problems in Getting Access		Government & Autonomous		Master Role in Daily Basis Wages		Non-govern ment		Total		
	n	%	n	%	n	%	n	%	Maj	
Lack of modern equipment for cleaning	2	05.71	24	68.57	9	25.7 1	35	34.65	1st Majority	
Fail to access livelihood essentials	5	16.12	13	41.94	13	41.9 4	31	30.69	2 nd	
Low wages	9	30.00	13	43.33	8	26.6 7	30	29.70	3 th	
Lack of support from neighbors and relatives	2	08.00	13	52.00	10	40.0	25	24.75	4 th	
Lack of electronic equipments for entertainment	6	31.58	7	36.84	6	31.5	19	18.81	5 th	
Lack of financial capacity	3	17.64	11	64.71	3	17.6 5	17	16.83	6 th	
No vocational opportunity	4	25.00	9	56.25	3	18.7	16	15.84	7 th	
Less relationship with mainstream population	2	14.29	5	35.71	7	50.0	14	13.86	8 th	
Negligence on job	2	33.33	3	50.00	1	16.6 7	06	5.94	9 th	
Have to suffer from instrumental accident	1	25.00	1	25.00	2	50.0	04	03.96	10 ^t	
High workload	2	50.00	1	25.00	1	25.0	04	03.96	10 ^t	
Contractual wages system	1	25.00	2	50.00	1	25.0	04	03.96	10 ^t	
Lack of combination between desire and capacity	1	33.33	1	33.33	1	33.3	03	2.97	11 ^t	
Frustration for permanent ship	0	0	1	33.33	2	66.6	03	02.97	11 ^t	
Financial crisis in the last day of every month	0	0	0	0	2	100	02	01.98	12 ^t	
Physical weakness	0	0	1	50.00	1	50.0	02	01.98	12 ^t	
Problems in getting job without	0	0	1	100	0	0	01	0.99	13 ^t	

bribe									h
Hard trying for fulfilling basic needs	0	0	1	100	0	0	01	01.98	13 ^t
Aging problem	0	0	0	0	1	100	01	01.98	13 ^t
Problem in getting quality food items	0	0	0	0	1	100	01	01.98	13 ^t
Part time work for financial support	0	0	0	0	1	100	01	01.98	13 ^t
Get parental help from offspring	0	0	1	100	0	0	01	01.98	13 ^t
Lack of social Safety and dignity	0	0	1	100	0	0	01	01.98	13 ^t
Lack of health environment for living	0	0	0	0	1	100	01	01.98	13 ^t
Have to face problem in doing job for little child	0	0	0	0	1	100	01	01.98	13 ^t

Note: Multiple responses considered (Source: Field survey 2022)

Above mentioned table attests the fact that 1st majority 334.65 percent of the respondents (n=35 of 101) do not get access in using modern equipment's for cleaning that is why they have to pay much time and labor for cleaning works and which may cause health and hygienic problems not only for him but also for the members of his family (Table 17). The above mentioned table suggests that the cleaning workers in Gopalganj municipality do not have sufficient access to livelihood essentials and they always face problems for getting facilities too. The field reality attests the fact that very often they fail to access livelihood essentials for lower income range, do not get support from neighbors and relatives, no additional financial capacity, less access to electronic equipment's for entertainment, social Safety and dignity, Have to face problem in doing job for little child especially this is for women cleaners etc have been mention in this table (Table 17).

Deprivation of Getting Access to Networking and Livelihood Essentials

As a process, exclusion can be considered as the rupture between individuals, groups and societies as the unit of social environment. Deprivation may cause exclusion when the underprivileged community people as like as cleaning workers in this study respondents cannot enjoy shared opportunities and are in a position of relative deprivation as compared to the rest of the society. In other words, both the process of exclusion and its result are about differentiated and unequal relations between the excluded and mainstream society. The study has revealed the social reality that 1st majority 95.79 percent (n=91 of 95) of the respondents are facing problem in getting medical facilities. In relation to this fact another 2nd majority 94.74 %, 3rd majority 88.42%, 4th majority 87.37%, 5th majority 85.26% are facing problem in getting governmental help, attending social programs, belonging in lower caste, attending neighbors and relatives programs, for untouchable thinking respectively (Table 18).

Table 18
Deprivation of Getting Access to Networking and Livelihood Essentials

Deprivation	of	Getting	Access	to	Municipality	Cleaning	Workers	in	Facing	
Networking a	nd Li	ivelihood E	Essentials		Problem					

	Facing	g Proble	m	Facing	g No Pro	blem	
	n	%	Majo	n	%	Majo	
			rity			rity	
No access in getting equal rights and	51	53.68	8 th	44	46.31	3 rd	95
opportunity							
Untouchable	81	85.26	5 th	14	14.74	6 th	95
Problem arise for belonging in lower caste	83	87.37	4 th	12	12.63	7 th	95
Insufficient economic conditions	78	82.11	6 th	17	17.89	5 th	95
Attending social programs	84	88.42	3 rd	11	11.58	6 th	95
Attending neighbors and relatives programs	83	87.37	4 th	12	12.63	7 th	95
Deprivation of getting educational facilities	77	81.05	7 th	18	18.95	4 th	95
Deprivation of getting medical facilities	91	95.79	1 st	04	04.21	9 th	95
Deprivation of getting banking facilities	44	46.32	9 th	51	53.68	2 nd	95
Deprivation of getting access in sports	35	36.32	10 th		63.16	1 st	95
				60			
Less access in getting government help	90	94.74	2 nd	05	05.26	8 th	95
No opinion		•	•	•	•	•	06
Grand Total							101

Source: Field survey 2022

The study also reveals the social fact that 1st majority do not face problem in getting access in sports. They have no access in getting equal rights and opportunity as a member of municipality like other mainstream populations and sometimes they have to face untouchable conditions when they used to work in households which clearly signifies the lower networking and friendly relations between mainstream population and cleaning workers besides, many more problems arise for them only for belonging in lower caste (Table). In addition to from the above mentioned table it is clear that more than half of the total respondents do not get access in attending social programs, getting educational facilities, getting banking facilities and getting government help.

Case

Shiba Jomaddar is 14 years old Hindu boy living in Gopalganj and he consists of five (5) family members. His parents both are sweeper in Gopalganj municipality and their monthly income is less than equal 10000 TK in BDT which is insufficient to fulfill their children's socio-economical needs. After securing his primary education he started to work as a cleaners like his parents to support their family. Due to belonging in cleaning works their communication with the mainstream population is not so cooperative which cause high deprivation of getting access in sports. They do



Photo of Shiba (14) is deprived of getting access to sports

not get chance to attend all of the social programs without their community people because of less facilities in getting access as a cleaning workers and lower level living standard.

So, from this table analysis it is a disappointing fact the present study has found that the social networking status is much unexpected in this modern period and most of the respondents are deprived in getting access to livelihood essentials. To solve these problems stakeholders should raise their hands and come forward.

Conclusion and Policy Recommendations:

Waste management is one of the most important to secure health and sanitation system of a country mostly in Bangladesh. Though waste management is visible environmental problems in every country, urban communities and local governments in Bangladesh face challenges to sustain health and hygienic system around the globe today. The cleaning workers are the basic unit of our society who are considered as an essential unit for any community but the reality is that most of the cleaning workers are facing problems in their networking process with the mainstream people besides, organizational facilities and government facilities are very low for the betterment of the cleaners in Bangladesh. Social exclusion cause multiple problems in communication and regency and untouchable situation may arise unexpected manner in this modern era and by removing this condition a humble society can be created which will ensure the safety, security, rights and dignity of the cleaning workers in Bangladesh. This study finds the trend of traditional profession, access to livelihood essentials, relationship discomfiture of cleaning workers and causes behind the living in isolated area as a segment in Bangladesh. Though the Constitution prohibits discrimination by the state on the ground of religion, race, sex or place of birth in article 28(1) and in 28(4) special measures by the state for advancement of any backward section of the citizen, in fact scenario is too far from the declaration.

REFERENCES

Adama, O. (2014). Marginalization and Integration within the Informal Urban Economy: The Case of Child

Waste Pickers in Kaduna, Nigeria. International Development Planning Review, 36(2), pp. 155-180.

Amour, N. S., Laverdure, J., Devault, A. and Manseau, S. (2007). The Difficulty of Balancing Work and

Family Life: Impact on the Physical and Mental Health of Quebec Families. Library and Achieves, Canada.

Claudel, N. (2010). Solid waste workers and livelihood strategies in Greater Port-au-Prince, Haiti. *Waste*

Management, 30(6) 2010, pp 1138-1148.

Cheng, C.andUrpelainen, J. (2015). Who should take the garbage out? Public Opinion on Waste Management in Dar es Salaam, Tanzania. *Habitat International*, 46, pp. 111-118.

Dias, S. M. (2016). Waste Pickers and Cities. Environment and Urbanization, 28(2), pp 375–390.

Gomathi P, Kamala K. (2020) Threatening health impacts and challenging life of sanitary workers. *J. Evolution Med. Dent. Sci.* 9(41):3055-3061, DOI: 10.14260/jemds/2020/669, eISSN - 2278-4802, pISSN - 2278-4748.

Corteel, D. and Stéphane L. L. (2012). Les Travailleurs des déchets. Toulouse: Érés Clinique du Travail.

Day, Meagan. (2019). an Ode to Sanitation Workers. Jacobin, April 22. https://www.jacobinmag.com/2019/04/an-ode-to-sanitation-workers.

Espinosa, T., Dean, S. and Olga A. (2018). *Trabajadores invisibles dentro Del servicio de limpia de la Ciudad de México*. Women inInformal Employment: Globalizing and Organizing, Manchester, UK.http://www.wiego.org/sites/default/files/publications/files/WIEGO_Booklet_Tabajadores_invisibles_dentro_del_servicio_de_limpia_de_la_CDMX.

Nagle, R. (2013). Picking up: On the Streets and Behind the Trucks with the Sanitation Workers of New

York City. New York: Farrar, Straus and Giroux.

ILO (International Labour Organization). (2012). Advocacy Meeting with Trade Unions on Manual Scavenging. New Delhi, India, August 23. https://www.ilo.org/newdelhi/whatwedo/eventsandmeetings/WCMS 186253/lang--en/index.htm.

ILO (International Labour Organization). (2017). the Hidden World of Sanitation Workers. A Media Briefing, Water Aid/CS Sharada Prasad/SafaiKarmachariKavalu Samiti.

Luis L M Aguiar and Andrew Herod. (2006). the Dirty Work of Neoliberalism: Cleaners in the Global Economy, 38(3), ISBN-10: 1-4051-5636-8 & ISBN-13: 978-1-4051-5636-3, Blackwell Publishing Ltd, Swanston Street, Carlton, Victoria 3053, Australia.

Plotnick, R. D., Garfinkel, I., Gaylin, D. S., McLanahan, S. S., & Ku, I. (2006). The Impact of Child Support

Enforcement Policy on Nonmarital Childbearing. *Journal of Policy Analysis and Management*, 26(1), 79-98.

Sperandeo, L., Srinivasan, S. (2020). <u>The Heroes behind Sanitation - An insight into faecal sludge management workers in Zambia</u>. BORDA, Deutsche Gesellschaft für International e Zusammenarbeit (GIZ) GmbH, Bonn, Germany.

WHO (World Health Organization). (2016). Sanitation Safety Planning: Manual for Safe Use and Disposal

Of Wastewater, Greywater and Excreta. France: WHO.



This work is licensed under a Creative Commons Attribution 4.0 International License.