

# Status of Sanitation Workers: A Case Study of Kathmandu Valley

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Received: May 20, 2023

Accepted: July 25, 2023

Published: December 24, 2023

## Abstract

Sanitation refers to the provision of services for the safe disposal of urine and feces. It also refers to the maintenance of hygienic conditions through different services such as garbage collection and waste water disposal. It is necessary to provide a healthy environment for people as well as protect the natural resources. A sanitation worker is a person which is responsible for cleaning and maintaining the environment through sanitation services. This study aims to explore the socio-economic status of sanitation workers and to examine their livelihood means that help their living. For this study, both quantitative and qualitative exploration approaches are applied. The observation, interview as well as case studies are applied to the study. The findings of the study concluded that sanitation occupation is a traditional job for employment and reducing poverty in the civic area but sanitation workers also have to face numerous problems and they've different pitfalls which are nominated as the vulnerable environment of sanitation workers. This study helps the government and non-government agencies to make programs and mitigation measures.

**Key Words:** *status, sanitation workers, livelihood, vulnerable*

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## Introduction

In sociology, sanitation is defined as a scientific study to break the problems of society in relation to sanitation, social privation, water, public health, hygiene, ecology, terrain, poverty, gender equivalency, weal of children and empowering people for sustainable development and attainment of philosophical and spiritual knowledge to lead a happy life and to make a difference in the lives of others". (Pathak, 2013.p. 5).

In Nepal, the sanitation occupation has its roots attached to the estate system and the structure makes sure that the community remains helpless and unnoticeable.

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The arena of employment of the lower gentries remains confined to odd jobs regarded slavish by society. This estate entitled livelihood comes from the social setting that those with lower gentries are “rejects” and may be treated inhumanly. The system has rendered the vast majority of the people oppressed and considered “Untouchables”, deprived of their social, profitable and political rights. Over a century the working conditions of the sanitation workers have nearly unchanged (Tiwari, 2013).

The sanitation workers who have been engaged in scrap collection, sweeping, drainage cleaning, disposing of beast dead bodies, drawing community toilets belong to the Dalit communities. They’ve been facing social distance as well rejection in town lets and metropolises. Utmost of these workers face health-related conditions due to dangerous work conditions. Utmost of the deaths be due to toxic feasts, goods of largely poisonous material, road accidents, transmissible similar as TB, asthma, cough, and infections. The majority of sanitation workers (who face dangerous and poisonous accoutrements and feasts) aren’t handed any defensive gear/ outfit. They also aren’t covered under any health insurance (Agarwal, et.al.n.d.).

Hunt (2006) in his study concluded that waste selectors make a living by dealing paraphernalia they collect from dumpsites, lockers and roadsides. Generally, this waste comes from domestic, artificial and marketable sources. confidante (2009) defined the point of Hinduism, there are four top gentries, there are thousands of sub-castes, also called’ Jatis’ endogamous groups that are farther divided along occupational, insular, indigenous and verbal lines, inclusively all of these are occasionally appertained to as’ estate Hindus’ or those falling with in the estate system. The Dalits are described as varna-Sankara. They’re” outside the system” so, they’re inferior to other gentries and they’re supposed contaminating and thus” untouchable”.

Tacoli (2010) has given emphasis on pastoral collaborative relation to secure livelihood of pastoral and collaborative people and for cooperative and intertwined development. According to him the relation may not be salutary in all circumstances but can also increase inequality and vulnerability of that group with least means. Also papers also deals with employment and land power shift in peri collaborative terrain with illustration from sub-Saharan Africa and Philippines.

Amatya (2017) had studied the changing socio-profitable status of ‘*Chayames*’ at Sawal Bhal (Teku), Kathmandu. The rejects in this community are socio-economically backward due to estate demarcation. On her study, she concluded

that the change in family type, education of the children, assimilating in big culture similar as celebrating Dashain, Tihar which weren't celebrated ahead, as well as, western type of marriages. She set up about 88 percent responders were doing cleaning and broad job which helped them to gain respectable fiscal means. She also concluded maturity of the people had low income, so they had to seek secondary occupation.

Ghale (2018) studied ' Socio-profitable condition of the *Chayames* women A case study from Tilganga Tole of Kathmandu metropolis ward no. 6' has tried to reveal the part of *Chayames* women. She set up that this community though untouchable, is economically stronger in comparison with other untouchable communities because all the grown up member of communities are employed. She set up that there isn't important gender demarcation in that society because ladies are also involved in productive work. She also said that since the private agencies and NGO/ INGOs are also involved in environmental sanitation, durability of traditional job of the *Chayames* community is floated.

Pathak (2019) has studied livelihood strategy of road cobblers of Kathmandu. Cobbling is the customary way of earning livelihood of 'Dalits' (i.e. low estate) in society. Now days, road cobbling in collaborative areas is the livelihood strategy espoused by occupational estate as well as non-occupational estate group to palliate the present terrain of global change. On the base of age wise involvement, this study concludes that road cobbling in collaborative areas is a recently surfaced livelihood strategy for immature generation of Terai. By the nature of work and space used by them, this occupation seems more vulnerable. Seasonality, space and institution, social value and morals, political situation and lack of livelihood means are the most responsible factors to shape their occupational vulnerability.

Poudel (2020) had studied about socio-profitable condition of '*Chayames*' (i.e. sanitation workers estate). Although his studies is concerned only with *Chayames* who live in Kaski (i.e. Lekhnath Metropolitan City), he has anatomized the literal background of this estate. He set up that, on the last of 14th century (of Vikram sambat), King Jayasthiti Malla had divided Newar communities into different gentries according to their occupations. One of those who were classified into sanitation workers gentries were *Chayames*. Their main occupation was to clean the town lets and cosmopolites. And they also remove the skin of dead beasties. In such a way they were known as untouchable estate since they had done such a low position task. In his study area, *Chayames* have espoused fishing as a way of their

living. But immature generation is engaged in other occupations too. Now a days, they (immature generation) also follow the new fashions whereas old generation sticks to their traditions.

In newar society, *Chayames* are involved in different works such as sanitation, fishing, making basket, and to take out the skins of dead animal. Similarly, '*Chayames*' are regarded as sanitation workers castes and their main task is to clean the town and villages. Moreover, they were not allowed to wear cap (*Topi*), shoes, and expensive ornaments and they are also compelled to live near the river bank. During the rule of Malla dynasty king Gunkam Dev Malla in the year 724 A.D, founded Kathmandu city and built a protective wall. People belonging to lower castes like '*Chayames*' '*Kullu*' '*Harahuru*' were not allowed to live inside of the city wall (Regmi,1993). In *Malla* period as *Chayames* were categorized as lower caste, they were given places to settle in marginal lands such as river bank area (Regmi, 1993).

### **Statement of the Problem**

In the whole cycle of solid waste operation, from waste generation to collection-transport-dump to recycling or composting, both occupational groups and civic residents are suffering from kinds of health threat in Kathmandu. The figures of scrap collectors find their livelihood through sorting of secondary accoutrements from the piles of solid wastes. They collect recyclable accoutrements and vend them to noncommercial buyers. These poor waste selectors have high health threat while collecting recyclable accoutrements but are paid low. On contrary to that, noncommercial buyers and reclaim companies are making large gains with lower health threat but are neglecting the health of the scavengers fully. Despite the substantial donation of the scavengers to solid waste operation, they're inadequately defended from injury, infection and abuse. Also, indeed governing body like Kathmandu Metropolitan City isn't admitting the definitive places of these workers in solid waste operation. Kathmandu offers the rich land and strategically secure area.

The changes passed in the system of product and the divisions of labor have turned numerous people's lives upside down. Occupational estate groups are faced with new situation. Some are serving from the changes, others are losing out and some have fully changed their occupations by choice or force. Urbanization and the adding waste problems in the megacity forced the government to employ road sanitation workers on a regular base. Drawing thoroughfares is considered a demeaning

exertion and not numerous people were willing to take these jobs. Therefore, the people from the sanitation workers caste have been handed secure and well-paid jobs working for the government and private companies. They're engaged in jobs that other people vacillate to take (taradiddle, 2014). In the history the responsibility to manage the solid waste was on so called low cast people (*Chayames*). At that time megacity directors hired them to collect solid waste and sweep the thoroughfares. At that time sanitation workers used primitive type of tools which were made of either back bone of buffalos or bamboo "kharpan" (handbasket) to collect the solid waste (Timilsina, 1998).

Due to rapid growth of population and growth of civic area (i.e. construction of houses and expansion of the megacity) in Kathmandu, the product of solid waste is adding. Essence like broken glass and sharp objects mixed in external waste can beget physical injury to these occupational people. All of these are causing serious health problems in on all urbanities of Kathmandu but the pitfalls are loftiest among those who work directly with solid waste operation in the megacity. The work of sanitation workers is to play with dirty, dusts and scrap. In the present environment, sanitation workers works in thoroughfares where heavy contaminating vehicles are plying. The work terrain of sanitation workers and scavengers are likely to beget acute health pitfalls among them. Still, no thorough studies have been carried out so far in this issue. Although "sweeping" is a profession for low professed civic poor people, its income won't be sufficient for them to sustain their life in this civic terrain.

This study intends to fulfill the gap in information as former studies couldn't show the situations of the sanitation workers. This study aims to explore the livelihood situations of sanitation workers of Kathmandu valley.

In this respect, the following research questions are generated:

1. What are the socio-economic status of sanitation workers?
2. What are the livelihood assets that helps them to earn their living?

## **Objectives**

The main aim of this study is to understand the livelihood situations of sanitation workers. To fulfill this aim, the specific objectives of the research are:

- To explore the socio-economic status of sanitation workers.
- To examine their livelihood assets that help their living.

## **Significance of the Study**

Nepal is very poor country. The poverty alleviation plans and programs are mainly concentrated in the rural areas. There are only a few of researches that are related with urban poverty compared with rural poverty. Thus, an attempt has been made to study the living standard of urban people who are socially discriminated and spending their life as sanitation workers. It is essential to search the answers to the issues raised in objectives and research questions.

This study examines the livelihood strategy which the poor people adopt to earn their living in urban environment. This study also examines the effect of the globalization and urbanization at the local level on the group of poor and marginalized people. This study helps to know the effects of institutional change on existing livelihoods strategy of people and types of adaptation they make to cope with it. Sanitation workers and scavengers of Kathmandu are experiencing various health problems and losing numbers of working days. This has reduced daily income on the one hand and has increased daily expense on the other. This situation further pushes these poor to poverty trap. Findings of this study are expected to help in reviewing the waste management policies and practices to reduce health impacts on occupational workers and to improve their livelihood situation.

## **Limitations of the Study**

This study has some boundaries, which cannot be ignored. Because of the limited time and resources, this research could not cover all the sanitation workers of Kathmandu Metropolitan City. Only those sanitation workers who work under Metropolitan City and have registration in office are taken for the research. This study focuses only on the assets and vulnerabilities of sanitation workers. It may not concerned with other aspects of sanitation workers' life. The sample respondents constitute 20 sanitation workers. Sample people has been taken for qualitative information and quantitative information has been taken.

## **Methods**

This study is conducted on both quantitative and qualitative information basically gathered from the study area. In addition, review of existing literature and secondary data on the issue is done to identify the dignity, nature and extent of sanitation workers' problem to be covered by the survey.

## **Study Area**

The area selection for the study is Kathmandu Metropolitan City ward no. 1 Kathmandu, Nepal.

## Research Design

This research has followed descriptive and explorative research design. This research study has focused on accumulating the facts of socio-economic problems. A descriptive method gives description about the problems of sanitation workers in Kathmandu Metropolitan City-11 of Bansighat, Kathmandu with respect to their problems of livelihood and dignity. Explorative research design explores the cause and effect of sanitation workers problems on society in household affairs.

## Universe and Sampling

According to the household survey of 2022 by Kathmandu Metropolitan City-11, the universe of sanitation workers in the study area is unknown. So, the purposive sampling method has been used in order to collect sample data. The sample respondents constitute 20 sanitation workers. Sample people has been taken for qualitative information and quantitative information has been taken. Data collection has been done through purposive sampling method.

## Tools and Techniques

The main objective of field observation is to become familiar with the study area such as geographical situation and social structure. Field observation has been carried out for gathering information about the livelihood situation, health problems etc. Similarly, the careful observation to the study area helped to come closer and work with local people.

A focus group is also used for the identification of research problem and possible solution. After not getting new or interesting information on questionnaire filling researcher has thought to conduct a focus group discussion to find out information related to vulnerability and to the different assets.

## Results and Discussions

In the study researcher met the sanitation workers coming from different areas. Though researcher collected data from sanitation workers from *Chayames* communities, researcher met sanitation worker who are come from outside the study area especially from other wards than Kathmandu Metropolitan City-11.

Following table shows the origin of sanitation workers.

**Table 1: Place of Origin of Respondents**

S.N.	Place of Origin	No of Respondents	Percent
1	Within Kathmandu Metropolitan City-11	16	86.67
2	Outside the Kathmandu Metropolitan City-11	4	13.33
	Total	20	100

Source: Field Survey, 2023.

Table 1 shows that 86.67 percent of sanitation workers who worked under Kathmandu Metropolitan city office are from Kathmandu Metropolitan City-11 and about 13.33% sanitation workers are from outside the Kathmandu Metropolitan city-11. The involvement of local people in this occupation is high, because the number of occupational caste (i.e. *Chayames*) in this profession is high even now. Some of the people who came from outside the Kathmandu Metropolitan city-11 also belong to the occupational caste.

### Age and Sex Distribution

Table 2 shows age wise distribution of sanitation worker's family.

**Table 2: Age and Sex Distribution of Respondents**

S.N.	Age Group	No. of Female	Female Percent (%)	No. of Male	Male Percent (%)	Total	Total Percent (%)
1	15-29	3	21.43	1	16.67	4	20.00
2	30-44	7	50.00	3	50.00	10	50.00
3	45-59	4	28.57	2	33.33	6	30.00
	Total	14	100.00	6	100.00	20	100.00

Source: Field Survey, 2023

Majority (50.00%) of people are aged between (30-44) years. Similarly, most (30.00%) of the people are aged between (45-59) years. Since sanitation working is a productive occupation of urban poor which require physical strength, active and young people are found involved in this profession.



## Education Attainment

**Table 3: Educational Attainment of Sanitation worker**

S.N.	Education Attainment	No. Respondent	Percent
1	Illiterate	11	55
2	Primary	6	30
3	Secondary	3	15
	Total	20	100

Source: Field Survey, 2023.

Table 3 shows that 55 percent Sanitation workers were illiterate and only 15 percent had attended secondary level education whereas 30 percent of the workers have taken the primary level education. It proves that they lag behind in education. I asked them whether they would send their children to school or send to work as sanitation workers. They replied that now days the situation has changed so they will send their future generations to schools and colleges. Their sons and daughters have not felt any type of humiliation. They also send their future generations to private boarding schools. So they expect that their future generation will get better job.

## Food Sufficiency Level

Food sufficiency level is another component for measuring socio-economic condition of the sanitation workers living in Kathmandu Metropolitan city-11. Most of the sanitation workers don't have sufficient land to crop the foods so that they have to buy essential foods from the market. Following table makes it clear.

**Table 4: Food Sufficiency Level**

S.N.	Food Sufficiency level	Households	Percent
1	Less than 3 months	11	55.00
2	3-6 months	4	20.00
3	6-9 months	2	10.00
4	9-12 months	1	5.00
5	Saving	2	10.00
	Total	20	100.00

Source: Field Survey, 2023

From table 4, it is cleared that about 55% sanitation workers didn't have sufficient food which was less than 3 months followed by 20% of the sanitation workers had food for 3 to 6 months. This show due to the lack of land and also the budget many sanitation workers are not cropping.

### **Living Arrangements**

Most of the sanitation workers had their own home in Kathmandu Metropolitan city-11 within traditionally assigned area. About 17 Sanitation workers were found having their own home in Kathmandu Metropolitan city-11 and 3 sanitation workers did not have own house, during field survey. Sanitation workers who didn't have housed live in the rented house with their family. Those Sanitation workers who lived in rent have to pay about Rs. 3500 to Rs. 5000 per month for a single room rent.

In the case of the sanitation workers who are from outside the municipality also live in the same residential areas. In other words, the sanitation worker who were considered as non-local, also live in the *Chayames* communities' area in rented accommodation.

### **Facilities Available at the Residence**

About 78 percent sanitation workers, who were from the Kathmandu Metropolitan city, had their own houses. They were the most polluted areas of the urban area. So, the residential areas of *Chayames* in Kathmandu Metropolitan city-11 were not good at all. Similarly, there was lack of different facilities in their residential areas. Some sanitation worker's residential sides were comparatively better than those who live in galli of Kathmandu Metropolitan city-11. They also faced the problems of other facilities like drinking water and good sanitation facilities.

With regard to the facility of drinking water 70 percent of sanitation worker told that they had their own tap and remaining sanitation workers said that they use public tap. But most of them claimed that although they have got their own tap at their residence, they did not get regular supply of water. It is an irony that sanitation workers are mainly responsible to clean the cities and towns but their residential areas are not so clean. There residential areas do not have proper sanitation facilities. While we walked around their locality, we saw the waste materials littered on the streets and house yards and we felt bad smell of such collected dirt's.

Those sanitation workers who lived in Kathmandu Metropolitan city-11 have got the facilities of electricity and communications. Some of them also had T.V. and

others luxurious materials which show about the influence of urbanization on their life

### **Salary and Allowances of the Workers**

In 1952, the government was forced to give sanitation worker their job on regular basis before that they performed their activities on the basis of daily wage. In Kathmandu Metropolitan city-11 there were 9 people permanent and 11 persons are of daily wages. According to the sanitation workers now they get about ten thousand five hundred rupees per month as salary. They also get Daishain allowance; they get additional money if they work on holidays. They have an off day once a week. Similarly they get casual leave of 6 days, festival leave of 12 days and sick leave of 12 days. Similarly, their salary also varies according to grading. The leaders (i.e. Naika) got Rupees two hundred more in a month than other. From this, it is clear that a sanitation worker's salary in a month varies between Rs 10 thousand to 15 thousand. But at the same time it should be mentioned that those who are not permanent job holder can't get the facilities of holidays and grading. The remaining daily wages sanitation workers can get 1000 rupees per day.

### **Untouchability and Social Status**

Among newars *Chayames*, are regarded as sanitation worker castes and are treated as untouchables. A 55 years old sanitation worker said that in the past they were not allowed to build houses in the inner part of Kathmandu Metropolitan city-11 city. She also said that they could not get good facilities in hotels. If they had tea in hotels they had to wash up the cups. But since the restoration of democracy in 1990, they are not treated as badly as in the past. She also added that they are low caste people so they do not have connection and contact with high caste people and officials. So they do not get an opportunity for good job and are compelled to do this job.

For most *Chayames* it is difficult to establish strong relation with people from other castes. Within Newar community they do not have good relation with so called high caste Newars.

### **Livelihood Assets and Vulnerability**

Availability and extent of livelihood assets are other factors to determine vulnerability context of the sanitation worker. All of them do not have equal access to livelihood assets. It varies from individual to individual. Vulnerability context arises because access to and extent of assets among sanitation workers is not equal.

## **Human Capital and Vulnerability**

In the urban context, people with good skills or adequate educational qualifications have the possibility of earning financial capital. In the case of sanitation workers they did not have higher educational attainment. Equally important is that there was no need of education for this profession. This means they could enter into this job without having good education. Only 14% sanitation workers were found with additional skill like driving and knitting. But they were not using their skill properly. For them there is an option but for most of the sanitation workers this is not the case. As a result, they have to be confined to sweeping job. Having no alternative itself is vulnerability.

## **Social Capital and Vulnerability**

Since ancient time *Chayames* were regarded as low caste or untouchables. So they didn't have good relation with high caste people. They did not have also good position in the society. Since Nepalese society is deeply rooted in the caste hierarchy system, they are also not respected or do not have equal participation on different field as high caste people have.

They had their own organization called Independent Garbage Cleaners Union of Nepal (IGCUN). Under this organizations' umbrella they organized and raised their voice to full fill their requirement. It is also true that some sanitation workers who have good relation with different high caste people have no difficulty to get some work in hotels, Department stores, Hospitals. Though their organization and good relation with others helped them to improve their livelihood options, all sanitation worker did not have access to such social capital.

Here are two case studies are included for the research

### **Case Study-1**

Dil Maya Chayame (Name Changed), 28 years old was born in Kathmandu Metropolitan city-11. She studied up to class five at a local government school. While she was a child, it was very difficult to her family for solve the hand to mouth problem. She could not continue study any further than class five due to economic problem of her family. When she became 20 years old she got a job in Kathmandu Metropolitan city-11 as a sanitation worker with the help of her father. One year later she married with a boy of her own caste from Om Bahal. Her husband also worked in a ward office of Kathmandu Metropolitan city-11 as a sanitation worker.

Although she and her husband were doing the job, it was very difficult for them to run family. She gave birth to two sons and a daughter. Though she did not get good education she wanted to provide good education to their children. But sadly, her husband was drunkard. He always used to spend his income in alcohol and wine. Then dispute arose between husband and wife. She wanted to improve her family standard. On the other hand, her husband could not understand her and could not save his money. Similarly her husband used to beat her rather than to solve the family problem. He used to come home intoxicated. Then she left him and came to her parents' house with her youngest son. Later on when she became 25 years old, she again married with a man of her own caste and she left her son in her parents' house. She became permanent job holder of Kathmandu Metropolitan city-11 in 2068 as a sanitation worker.

It reveals that there the status of sanitation worker is poor in the education as well as in the economic conditions.

### **Case Study-2**

Ram Lal Chayame (Name Changed), 44-years old, has been involved in sanitation occupation in Kathmandu for 10 years. He was mostly tortured by robbers while coming to office. He said that once while he was coming to office in the morning he was robbed by some looters and he lost his watch and money. He describes this incident to municipality official. And one of the officials offered him an old watch. But all of sweepers are not lucky to recover the stolen items.

It shows that sanitation workers besides their poor economic status, they also have to face the problems from the outsiders during their works.

### **Conclusion**

The study concluded that regarding physical means, Kathmandu Metropolitan City-11 has good structure in comparison with other metropolises of the country. So people who live nearer to this metropolitan are also suitable to regulate their job. They all have good electric, communication installations. But in the case of drinking water they don't have good access to pure drinking water, which is also known as the main problem of Kathmandu Metropolitan city-11. But the payment they get is low to sustain their life. So sanitation workers are also involved in different areas (i.e. houses, hospitals, departmental stores) to palliate the profitable problem. Nearly all sanitation workers aren't suitable for saving, instead they're in debt. Nearly, all sanitation workers don't have good education.

So, they're impelled to do sanitation exertion. But now realizing the significance of education utmost of sanitation workers are interested to enroll their children to academy. The study concluded that sanitation workers have to face numerous problems and they've different pitfalls which are nominated as the vulnerability environment of sanitation worker. In the history, it was easy for the *Chayames* to get this job but now it's veritably delicate for them to enter this occupation. Utmost of the sanitation workers are endless job holders. But some sanitation workers are diurnal pay envelope workers. The study concluded that regarding their livelihood means they've poor access to Natural capital due to civic terrain.

At the same time, due to urbanization and adding waste accoutrements they've job openings in other fields besides Kathmandu Metropolitan metropolitan city-11, so they're suitable to make up their fiscal means. All sanitation workers have access to the structure that's available in the city which shows that they've good physical capital except the lack of pure drinking water. The study concluded that sanitation occupation is a traditional job for employment and reducing poverty in the civic area and it's also one of the problems of civic. Organization of the sanitation worker is necessary for its sustainability. This occupation cannot be avoided in growing urbanization. So, the concerned authorities should pay attention to give necessary measures and social security to them.

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