
| RESEARCH ARTICLE

Investigating the Drawbacks of Urban Trash in Taloqan City

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| ABSTRACT

According to a WHO report in 2012, five million people have died because of air pollution. It is estimated that air pollution reduces the quality of people's lives and the rate of efficiency; for this reason, the world pays 5 trillion dollars every year, and trash is the most influential reason for air pollution. In this research, which was done in Taloqan city, Takhar province, Afghanistan, we used a quantitative method consisting of a questionnaire paper among Taloqan city people from both male and female genders. We were looking for rules for trash in Taloqan city air pollution and strategies for getting people aware of trash drawbacks and strategies for trash prevention. We attached to the issue was accepted by the most percentage of Taloqan citizens, which trash is the most important factor of air pollution and destroyer the beauty of the city. for notifying people about religious erudite and educational organization teachers is the best option and about strategies for preventing from trash spreading, and it's disadvantage collecting the wastes separately is the most useful way also putting wastebasket among the city, processional work for trash removing and working individually for waste deleting are other ways that we found it in our research according to our research aims.

| KEYWORDS

Environment pollution, Urban Trash, Air Quality, Solid Waste Management, Recycling Strategies, Health Hazards, Clean City Initiatives, Municipal Responsibility.

| ARTICLE INFORMATION

ACCEPTED: 12 May 2025

PUBLISHED: 08 June 2025

DOI: 10.32996/jmcie.2025.6.2.8

1. Introduction

Trash means thrown out; it equals garbage, waste, trash, rubbish, and refuse; these are the words that are used for those useless materials, or you throw them out, and it can be in solid, liquid, and gas conditions [Joya 2020]

Something that is dropped by a person or the person wants to drop it is named trash, and it is a result of generative activities [Quzzatti 2021]

Besides, quzzati expressed that trash has been divided into city/urban waste, wet waste, dry waste, household waste, normal waste, sanitary waste, pharmaceutical waste, industrial waste, agriculture waste, hazardous waste, hospital waste, electronic waste, space waste, nuclear waste and special waste and we are going to speak about city trash and it is the problem that executed the most important negative affections on human civilization and the main predicament of subsistence on the earth [quzzati,]

Some of this trash is construable, which we can count as harmful things to humanity like hazardous, burnable, nuclear, radioactive, and reactive trash. It is an essential need nowadays to research the solutions way to prevent the disadvantages of trash, and we are about to make people aware of it. As someone researched about this issue in the past, they said about trash. For ex-ample, Rochman expressed that trash pollution is a ubiquitous, global problem with well-documented effects on coastal communities and marine ecosystems (UNEP 2014; Rochman et al. 2016).

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Besides, every year, millions of tons of trash, especially plastic, is discarded worldwide, which pollutes our grounds, rivers, and oceans. To cater to this issue of water pollution, the first step is to identify the main elements present in water. Trash is one of the major contributors that is dumped in drainage and freshwater channels of urban areas, from where it finally reaches the rivers. This trash consists of soluble and insoluble trash such as papers, cardboard, food residuals, plastic bottles and bags, etc. The issues that most people understand about the effects of trash pollution and trash reduction are a priority for many communities, making trash a logical focus of community science projects, i.e., science relevant to participants' daily lives. (Journal of Contemporary Water Research 2021)

Garbage, in particular plastic garbage, is concerning because of its persistence in the environment and its power to harm wildlife through entanglement, suffocation, malnutrition (when ingested), internal blockages, and increased exposure to environmental toxins (Teuten et al. 2009; Rochman et al. 2013a; 2013b; Kühn et al. 2015). Trash is sharply being treated as a water pollutant, with rapidly growing awareness of the ubiquity of trash and its detrimental effects on wildlife and humans. (Moore 2008; Koch and Calafat 2009; Hollein et al. 2014;)

Finally, we are supposed to find a new strategy to prevent city trash in Taluqan city and make people aware of the waste disadvantage and how to treat it to have a nice and clean city.

1.1 Questions

The findings that this paragraph presents are these four main questions:

1. What is the role of trash in polluting the city?
2. What can be solutions for preventing urban trash?
3. How can we make people aware of the harms and disadvantages of trash?

We will find answers to the questions during this research.

2. Literature review

First and foremost, we should know about our living place or environment; as Joya said in his book about the definition of environment subsistence, "it is combined from two words environment and subsistence which illustrate where humans live [Joya 2013]

To define subsistence, it has been said all-natural, physical, artificial, chemical, cultural, and social conditions where humans can live are subsistence, and it is divided into two parts: natural subsistence and human subsistence [Fitri and Coworker 2010]. Subsistence pollution is divided into two parts: resolvable pollution like plastic, and rubbers ... and irresolvable pollution, for example, contaminant materials or human wastes, animal and agriculture waste (animal carcass) [Aslami, 2020]. As we know about the definition of subsistence parts, we are going to know about natural subsistence, which is part of the earth which there has not been acted humans that formation [Joya 2013] related to definitions we had about environment subsistence can say about being heedless to an environment that it is caused to get pollution the environment as Joya explained in his written "every unacceptable change in physical, chemical, weather and water nature that is being caused to peril of body and soul health of humans or improvement of them or other vivifcs [Joya 2013]

Most governments have accepted the fact; however, many municipalities are struggling to provide even the most basic services. For example, one to two-thirds of the solid waste produced is not collected (World Resources Institute et al., 1996). Also, the Resumption method is one of the Important ways to create extra energy with lots of benefits in society, and the Importance is increasing day by day. It is the way that energy and natural sources are economized, and the resumption material is used to produce crops instead of staple ones.

The capita is encouraged to spend more, and he generates scum and trashes in producing and spending process, which is getting high from the resumption and renovation level. (Qulipoor, Haqiqatian, Hashemyanfar 2017) Wastes are created by human activities, and it is the way these wastes are handled, stored, collected, and disposed of which can pose risks to the environment and to public health. Where intense human activities concentrate, such as in urban centers, appropriate and safe solid waste management (SWM) is of utmost importance to allow healthy living situations for the population (Zurbrugg, 2002). Lavalley expressed that we can give life quality value for environment quality, and the environment quality of one city is occurring as a whole quality of life. (Lavalley, 2010) Assessment of cleanliness and monitoring of trash areas in urban scenes chiefly rely on the manual survey and photographic record, which makes it a waste task of time and difficult [Hoornweg, Daniel, BhadaTata, et al. 2013]

The understanding of 'urban disorder' from waste, abandoned property, and decay, for example, has been taken as a signal of a

collapse of the local social order [Quercia, O'Hare, Cramer; 2017]. Human intervention and bulky problems often happen during the check-up process. The quality of sanitation work has been affected. Different from pedestrians, vehicles, and other objects, garbage does not have a relatively clear definition. Due to the judgment of garbage always having certain subjectivity, in different situations, it will produce different judgment results. The accuracy of test results will be affected by the diversity of places where garbage appears. With the development of a smart city, we are expected to provide an automatic detection method of urban trash to help alleviate urban trash problems. [Ying Wang¹ and Xu Zhang; 2018]

Quercia with coworkers has been reported from Stendhal, who he knew that there is not only one acknowledgeable visual style: "There are as many shapes of beauty as there are visions of happiness." In this case, we should think about our urban environments as a visual representation of our values (for example, the pursuit of happiness), that is, as the transmute of our ideals into a material form. Next, we will search this rendition of values for the city of London by studying what it is about certain neighborhoods that make them appear to speak of beauty, quiet, and, ultimately, happiness. [Quercia, O'Hare, Cramer; 2017] As Jean-Jacques Dethier researched Indonesian urbanization, he says it is accelerated, and pollution of all kinds has increased. One of the main topics is solid-waste management—the others being air and water quality.

The number of garbage amount in big cities and metropolitan areas is increasing exponentially, contributing to the degradation of environmental quality and domestic waste, and toxic and dangerous pollution cases also increased. Solid trash per capita increases as incomes rise, and in cities, the amount of solid trash expands more than twice as fast as the rate of population growth [Jean-Jacques Dethier, 2017]. Sonia has found the reasons for the weakness in urban places, which are leakage of environment quality air pollution, area pollution, voice pollution, and not paying attention to green spaces (Amjadyan and coworkers, 2021)

In low-income Asian countries, most of the urban solid trash that is collected is dumped on land in a more or less uncontrolled manner. Such incapable waste disposal creates serious environmental problems in that the health of humans and animals is affected by it, and it causes serious economic and other welfare losses. The environmental discredit caused by inadequate disposal of waste can be explained by the contamination of surface and ground water through leachate, soil contamination through direct waste contact or leachate, air pollution by burning of wastes, spreading of diseases by several vectors like birds, insects, and rodents, or uncontrolled release of Methane by without oxygen decomposition of waste [Zurbrügg 2002 Besides, Amjadyan says in her research essay that trash was a significant index from 6 variables in bad environment condition which got 2,42 medium number in scoring (Amjadyan, 2021)

Failing municipal systems is sometimes another direction of pressure from national governments and international agencies to outsource the provision of services to the private sector. "Public-Private Partnerships (PPP)" there is a duration used to describe a variety of relationships between public and private sector actors by the name of "Public-Private Partnerships (PPP)." private companies are interested in providing solid trash management services in many countries, and such partnerships are successively implemented by the responsible authorities. In a Southern Indian city, Chennai is a big port; the French multinational Onyx won a contract with the urban corporation to collect the waste and sweep streets in one area of the city (Jayaraman, 2002) Today, trash has become a major problem in environment life in our society (Firooz jayeyan 2016). Jacques Dethier has said domestic waste and toxic and hazardous pollution cases have increased, and the amount of garbage in big cities and metropolitan areas is increasing exponentially, contributing to a degradation of environmental quality. (Dethier, 2017)

Nowadays, increasing the city waste volume, we know that uncollected waste, which is often also mixed with human and animal excreta, is dumped indiscriminately in the streets and in drains, contributing to flooding, breeding of insect and rodent vectors, and the spread of diseases(Zurbrügg,2002)

3. Methodology

3.1 Research Design

We used quantitative study and statistical methods in this survey to analyze the data. To examine the idea of Taloqan city people about investigating the drawbacks of trash in this nice city, we distributed a questionnaire that contained 30 items.

3.2 Participants

In this probe, 280 participants in Takhar province – Taloqan city were included from male and female genders; interestingly, the percentage of females was 46.6% and showed male participation percentage. In addition, 70.7% of them were college students. Besides, other citizens were included, like school students, craftsmen, and office workers; their share percentage of them are in Table 10. also, the Participants' age interval was between 15 and 31 years old. Amazingly, 50% of them had an age between 15-20, and 45%, 3.4%, and 1.6% of them were occupied in schools, offices, and other work fields. Also, three local languages were spoken by them: Dari, Pashto, and Uzbeki.

Table 1.0: Participants' gender

Gender		Frequency	Percent	Valid Percent
Valid	Male	150	53.6	53.6
	Female	130	46.4	46.4
	Total	280	100.0	100.0

3.3 Data collection instrument

The questionnaire helped us to collect the data from everyone's ideas about the title. This questionnaire was divided into two parts. The first part of the questionnaire should have been filled with the participant's demographic profile (i.e., gender, age, language, employed status). The second part of the questionnaire had 30 items to look into participants' ideas for investigating the drawbacks of Urban trash.

There were four options; participants had to choose one of them to show their agreement or disagreement related to the items (1- agree, 2- strongly agree, 3- disagree, 4- strongly disagree). As well as, the English questionnaire was translated into Dari, owing to people of Afghanistan speaking Dari, and lots of the participants couldn't speak English.

3.4 Data collection procedure

The data were collected from 280 participants from different places like universities, high school learning centers, a few families, and shopkeepers; it took two weeks to make items; after that, the researchers started spreading the questionnaire among the aforementioned people, and also we gave instruction to those person who were doubtful about purpose of filling out the questionnaire after few minutes they gave their responses at the paper as they thought then we collected back the papers from participants finally the data collection procedure had given about three and half weeks to finish.

3.5 Validity and reliability of the questionnaire items

Table2.0: Reliability of the items

Cronbach's Alpha	N of Items
.970	12
Cronbach's Alpha	N of Items
.980	10
Cronbach's Alpha	N of Items
.968	8

3rd street of Sarayesang -Taloqan

3.6 Data accumulation procedure

280 persons were covered from male and female in this probe. Most of them were studying at Takhar University, high schools, and learning centers. However, families and craftsmen have filled out the questionnaire owing to the importance of the title that, is required to pay attention by everyone. The title of this research was liked very much by participants. During 1 week, we collected data from participants. The questionnaire took 9 -12 minutes to fill out accurately.

3.7 Data analysis

After having comments from people about trash and its drawbacks, we went to the analyze step to analyze the data; we used SPSS (statistical package for the social science) software version 24.0. besides, we used the T-test and ANOVA test to determine (the percentage, frequency, mean, gender, language, and age) differences in the attitudes of citizens toward their urban trash problems.

4. Results

4.1 Effects of trash on Urban air pollution

In part one, 10 items were designed to show the participant's attitudes toward the effects of trash on urban air pollution, which shows 63.6 % of citizens strongly agree that trash is caused by surface water and sea pollution, and 73.9 % of them are accept that trash deletes beauty and view of cities also 60.7% of people confirmed which waste can spread diseases over the city, and 49.3 % of participants are accepted that trash can be blocker of streams in the roads edges. Moreover, 54.3% of them agree that planting ability is removed by trash; also, 57.9% accept that regaining trash increases the government earnings, 55.7% of participants agree that burning causes air pollution, and 66.4 percent of people believe which soil type is changing gradually, and 55.7 % percent of them accepted that not paying attention to trash will become a culture in the future and the last percentage 55.7% of participants agree that smelling and image of trash can be nuisance for people.

Table 3.0: Effects of trash on urban air pollution

No	Statements	A	SA	%
1	Trash causes polluted surface water in ditch and seas.	34.6%	63.6%	100%
2	Trash destroys the beauty and view of cities.	23.6%	73.9%	100%
3	Collected trash can cause of diseases spreader.	36.8%	60.7%	100%
4	Trash is blocking the streams of roads in city.	49.3%	45%	100%
5	Burying of trash deletes planting ability from lands.	54.3%	34.3%	100%
6	Trash regaining is way that increases the governments earnings.	57.9%	30.7%	100%
7	Trash burning is caused of air polluting.	55.7%	38.6%	100%
8	The garbage gradually changes the soils type.	31.1%	66.4%	100%
9	Not paying attention to trash will change to culture at the future.	41.1%	55.7%	100%
10	Smelling and landscape of trash is caused of teasing for people.	41.4%	55.7%	100%

4.2 Solutions and different strategies to get people aware of the trash

The participants had several ways to get people aware of the garbage as 56.5% of them selected sticking the brochures on walls over the city, but 60% present of citizens did not agree with the ambulant announcement team to making people aware of trash and its drawbacks it is good to mention that 52.5 % of them strongly agree with notifying people by media like: television, radio and etc. the participants those agreed that religious erudite have much effects to notify people. Also, 47.5 % of the people said that educational teachers can aware better than other strategies more over 58.2 % of participants are accepted processional trash cleaning for notifying people, 58.2 % were not satisfied completely with getting the people aware, but 49.3 % of them agreed which everyone can play his/her role to notify others about garbage and 54.6 % of them are agree with family training and the 56.4% of participants reject the social media shearing method to aware people bout trash.

Table4.0: Strategies and solutions

No	Statements	A	SA	%
11	I think the best way for notifying people is sticking the brochures over the city.	56.4%	32.1%	100%
12	Media notifications is better way to notify people.	43.9%	52.1%	100%
13	Religious erudites are more influential to notify people about the garbage.	45.7%	42.5%	100%
14	I think teachers of educational and higher educational department should teach people about trash.	47.5%	46.1%	100%
15	Ambulant announcement team from educational field should clear about waste to people.	60%	26.1%	100%
16	Processional trash cleaning is another way to notify the citizenship.	39.6%	58.2%	100%
17	Municipality should spread brochures and create ambulant team for announcing about waste.	58.2%	36.4%	100%
18	Everyone has responsibility as a citizenship to notify people about trash.	48.8%	49.3%	100%
19	Teaching among family about waste is resultful way.	41.8%	54.6%	100%
20	Social media sharing is the way to prevent garbage.	56.4%	26.4%	100%

4.3 Strategies for Preventing Urban Trash

As we said about the participants' comments at the bottom, there are some comments in Table 5.0 that show 52.9 % of participants are not happy with being imposed by the government to prevent trash, but 66.8 % of them agreed that working individually can prevent spreading garbage also almost 64 % accepted that putting wastebasket among the city and building special places are a better way to prevent the trash. Besides, approximately 55.5 % of participants selected 27 and 29 items; which municipality should make a fusion company for materials and elect someone to give people notification about preventing trash. It is mentionable that 53.9 % of participants declared their dissatisfaction with burning the materials to prevent urban trash, but 53.6 % of them are content that wastes should be collected separately, for example, wood, metal, and plastic should be singly from each other also more than half of the participants accepted the government fine over citizenship those are not observing the urban rule and 60.7% of people were agree to building sewer system in the city to prevent from sewage or solution waste.

Table 5.0: Strategies for preventing urban trash

No	Statements	A	SA	%
21	Government should force people about preventing waste.	52.9%	36.1%	100%
22	Every citizenship should try to prevent garbage spreading.	32.5%	66.8%	100%
23	Better way for preventing from waste, it is burning.	25.4%	20.7%	100%
24	Separating the wastes is better way to prevent garbage, for example: only wood, only metal, only plastic ... etc.	53.6%	39.6%	100%
25	Putting waste baskets among the city is also another way to prevent garbage.	30.7%	62.9%	100%
26	Special places should build to shop's garbage by government.	35.4%	63.6%	100%
27	Municipality should select someone as responsible to every part of city.	45%	54.3%	100%
28	Government should assess those people they don't observe the citizenry role.	41.1%	51.1%	100%
29	Government should make material fusion company for regain the waste.	37.9%	56.8%	100%
30	Channelization for flood should be built.	36.8%	60.7%	100%

4.3 Participants' demographic profile

4.3.1 Gender

The participants were involved from both genders, male and female; of 280 persons, 150 were male, and remained 130 people other were female.

Table6.0: Participants' descriptive statistics

Participant's Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	150	1.2011	.26037	.02126
Female	130	2.1718	.34794	.03052

4.3.2 Age

We consisted of age options in four categories, and all of the participants were young. First from 15 – 20, second from 21 – 25, third from 26 – 30, and the last one were above 30 years old. The 8th table shows that 50 % of participants were between 15-20, which is equal to 140 persons; the 21-25 old participant frequency was 126, which is 45% in percentage. Also, 10 people were aged between 26 – 30, and 4 people were above 30 old.

Table7.0: Participants' age

Age		Frequency	Percent	Valid Percent
Valid	15 - 20 Years	140	50.0	50.0
	21 - 25 Years	126	45.0	45.0
	26 - 30 Years	10	3.6	3.6
	Above 30	4	1.4	1.4
	Total	280	100.0	100.0

4.3.3 First language of the participants

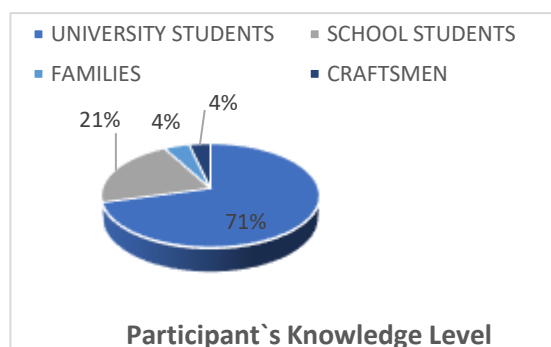
Four languages were spoken by our survey participants, of which the most speakers have been spoken Dari, that is 206 people 73.6 for percentage, and Uzbeki were the second language of 38 participants with 13.6 % percentage, and 29 persons were speaking Pashto.

Table8.0 First language of the participants

First Language		Frequency	Percent	Valid Percent
Valid	Dari	206	73.6	73.6
	Pashto	29	10.4	10.4
	Uzbeki	38	13.6	13.6
	Other	7	2.5	2.5
	Total	280	100.0	100.0

4.3.4 Class level

Fortunately, most amount of our probe participants were literate people. Also, according to Table 10, a large amount of participants were studying in a university, 70.7 %, which equals 198 persons. Also, 21.4% or 60 persons of them were school students, 12 and 10 other people were family and occupied with crafts.

**Table9.0. The class level of the participants**

Class level		Frequency	Percent	Valid Percent
Valid	University Students	198	70.7	70.7
	School Students	60	21.4	21.4
	Craftsmen	12	4.3	4.3
	Other	10	3.6	3.6
	Total	280	100.0	100.0

Table 10.0: ANOVA test to show differences between variables (language, age, and class level)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	56.252	3	18.751	147.508	.000
Within Groups	35.084	276	.127		
Total	91.337	279			

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	80.487	3	26.829	682.500	.000
Within Groups	10.850	276	.039		
Total	91.337	279			

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	53.201	3	17.734	128.342	.000
Within Groups	38.136	276	.138		
Total	91.337	279			

5. Discussion

According to the research's results about 10 top cities in the world in the 2022 year, we compared our research field with 10 top cities' cleanliness reasons that the most Important points were these: they had great management of rubbishes that there is not,

unfortunately. Also, they are regaining the wastes widely in several ways and here have not recognized it yet; otherwise, citizenship helping is another reason for being cleanest, which does not exist among people in Taloqan city, legally force of government has been made first degree cities cleaned and beautiful whereas, in our survey area, any attention has not been paid to removing the trash, they train people widely even in schools and other places which it is confirmed in a low percentage in Taloqan city besides mutual activities between people and government is less in our probe area while it is one of the most critical reason of cleanliness in first 10 top cities in the world.

5. Conclusion

- 1- 73.9 % of them accept that trash deletes the beauty and view of cities.
- 2- 55.7 % percent of them accepted that not paying attention to trash has become a culture today.
- 3- The participants agreed that religious erudites have a great effect on notifying people.
- 4- 47.5 % of the people said that educational teachers could be better aware of the disadvantages of trash.
- 5- 58.2 % of participants accepted processional trash cleaning for notifying people.
- 6- 66.8 % of them agreed that working individually can prevent the spreading of garbage
- 7- 64 % accepted that putting waste baskets in the city and building special places are better ways to prevent trash.
- 8- 53.6 % of them are content that wastes should be collected separately.

As we researched the Taloqan urban system and people's ideas about urban trash, it shows that there is a need for honest work about giving general information about waste; the government has this responsibility, and it can start the path of prevention strategies through citizenship and recommend these options to give information and prevention ways of urban trash.

Acknowledgement

I would like to express my gratitude to my research teachers, Mr Faiz-ul-bari zahid and Mr Sayed Asif Akramy provided me with valuable advice and suggestions to improve my experiment.

I am thankful to my kind big brother, Mohammad Khalid Eysar, for providing me with the resources and facilities needed for my experiment. Their encouragement and motivation pushed me to work hard and strive for excellence.

I am grateful to my parents, specially to my deceased mother, for their unwavering support throughout this project.

Funding: "This research was funded by Ahmad Shoaib Rahimi, MTCN number 883-513-3170," and "The APC was funded by Ahmad Shoaib Rahimi."

Conflicts of Interest: "The author declares no conflict of interest."

ORCID Id: 0009-0009-5628-3250

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