

Mismanagement of Solid Waste & its Impact on the Environment of Peshawar City

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Accepted: July 5, 2012 Published: August 09, 2012

Doi:10.5296/ijld.v2i4.2213 URL: <http://dx.doi.org/10.5296/ijld.v2i4.2213>

Abstract

The purpose of the study is to investigate reasons, types and workable for the disposal of wastes in Peshawar city with special emphasis on Municipal Corporation, Peshawar Development Authority (PDA) and local govt. The focus of the study is to ensure proper management of solid waste and cleanliness of the targeted areas. The data was collected through pre-designed questionnaire and interview schedule. The major sources of demographic data are census, sample surveys, demographic yearbook, statistical handbook, national and international publications. (Alam: 2006). Board, Karkhano and Hayat Abad Phase III were the targeted area of the study. A sample of size 300 was selected out of 37,839 population in three target areas i.e. Board 96 out of 12,164, Hayat Abad Phase III 121 out of 15,281, and Karkhano 83 out of 10,394 through proportion allocation method of sampling.

The results of the study indicated that Local government has no proper planning, for the disposal of solid waste. The residents have no awareness for the proper disposal of the solid wastes. Population is directly proportion to the increase in solid wastes mismanagement, more over Afghan Refugees has accelerated the solid waste mismanagement in the area.

Keywords: Solids Wastes, Awareness, presence of Afghan Refugees, proper planning, disposal of solid waste

1. INTRODUCTION/ BACK GROUND

1.1 Critical Nature:

Solid waste is the product of human activity. The composition and properties of the waste reflects the full diversity of man action. These may be from domestic, commercial, industrial, agricultural, engineering or from municipal sources. In primitive societies human and animals used the resources of the earth and in turn have produced waste in different forms. In the early time waste disposal was not a serious problem as human population was living in small and isolated packets with vast stretches of land around them, having the capacity of absorbing their waste. But rapid population growth has increased the problem of solid waste disposal and management. In urban areas the problems has adopted serious nature. Due to increase in population people are migrating from rural areas to urban to seek their lively hood, in return then is huge increase in population.

The management of solid waste has grown into a far bigger problem worldwide during the past few decades. The nature, magnitude and generation rate of solid waste vary in different parts of the world and even in parts of the same country. The rapid increase in its volume has adverse effects on the quality of environment and human health particularly in the developing countries and especially their poor sections.

As a developing nation Pakistan is well aware of the danger of environmental Solid domestic waste is typically dumped in the low-lying land in Pakistan, and not even with the benefit of modern sanitary landfill methods. The result is that as there is no recycling system in our country so it disturbs our sanitary system to great extent and made the life miserable for a common man.

Environmental pollution has started receiving some attention in the recent year in Pakistan. In recognition of pollution control and protecting the environment a council called "Pakistan Environmental protection Council (PEPC), with the President as its Chairman was formed in 1982. This was in addition to creation of Environmental Protection Agencies (EPAs) at provincial level. The council met in May 1993 for finalizing the National Environmental Quality Control Standards (NEQS), which prescribe the maximum possible limits for the discharge of pollutants into the environment. Environmental problems include air pollution, water pollution and solid waste disposal (EPA annual report.,2001).

1.2 Historical Trends:

The industrial revolution have been caused new enviromental problems. Therefore,In the industrialized countries basic health and environmental problems have been solved by the storage and collection of solid wastes. However, the developing countries are not unaware of the importance of avoiding the environmental pollutio. However due to the existence of all these measures, the ratio and tempo of pollution has declined, but new challenges comes due to changes in the environment and create new problems for sentimental scientists. On one hand environmental pollution raises and on the other hands measures to control them is in progress.

The crux of the study is to assess the tangible position in both the arrangements. New technology on one hand controls the environmental conditions, but creates new challenges in nature, which is a matter of great concern for scientists.

By applying creative and innovative approaches most problems created by wastes, actually hold the key to the sense of discarded materials or the solution to their own or some other problems or resources use or environmental degradation. The collecting garb These include proper planning, generation of resources to emerges and waste material is an historical activity which is in vogue since long. These include proper planning generation of resources to meet the costs of carrying out the activity in the cost effective method, for waste disposal.

2. METHOD & PROCEDURE

2.1 Sampling: Proportion allocation method of sampling was used to select the respondents in both the categories i.e. staff and community members. The community sample size was 300, out of 37,839 in three target area i.e. Board Bazar, Karkhano Market and Hayat Abad Phase III. The staff sample size was 60 officer, 20 technical Peshawar Development Authority (PDA) Municipal Corporation (MC) , and Local Govt.(LG).

3. DATA PRESENTATION:

Table3.1 shows how often PDA / MC workers collect solid waste in your area

Specification	Frequency	Percent
After 24hours	85	28.2
After 12hours	54	17.9
Nil	161	53.5
Total	300	99.7

According to the table that 85, being 28.2 %, of the respondents, were of the view that wastes are collected once a day, 54 being 17.9 % after 12 hours respectively. 161 being 53.5 % were told that wastes are not being collected by any govt. agencies.

Table 3.2 shows the response of the public complaints

Specification	Frequency	Percent
Yes	94	31.2
No	206	68.4
Total	300	99.7

The data shows that 94 being 31.2 % of the respondents,, told that their complaints are being responded while 206; being 68.4 % said that no response is there from the LG/PDA

Table 3.3 Is about the regularity of the sweeper and cleaning the streets

Specification	Frequency	Percent
Yes	60	19.9

No	240	79.7
Total	300	99.7

The above table shows that 240, 79.7%, of the respondents, say that sweepers do not come, only 60, being 19.9 % are of the view that the sweepers come.

Table 3.4 Shows the data about in time coming of the MC/PDA vehicles for the collection of the solid wastes

Specification	Frequency	Percent
Yes	52	17.3
No	248	82.4
Total	300	99.7

Table # 4 shows that 248 being 82.4 %, of the respondents, said that the vehicles of PDA/MCA/LG were not coming to collect solid waste and 52, being 17.3 % said that vehicles of PDA/MC/LG come daily to collect the solid waste in time.

Table 3.5 shows the monitoring to check of MC/PDA workers

Specification	Frequency	Percent
Yes	47	15.6
No	253	84.1
Total	300	99.7

According to the table 47, being 15.6 %, of the respondents, said that the administrator checks the activities while 253, being 84.1 % said that there is no checking.

Table 3.6 shows the response of the authorities on the complaints of the public

Specification	Frequency	Percent
Yes	76	25.2
No	224	74.4
Total	300	99.7

This table shows that 76, being 25.6 %, of the respondents, said that authorities take action on complaints and 224, being 74.4 % said that there is no action.

Table 3.7 shows the responsibilities for the mismanagement of the solid wastes

Specification	Frequency	Percent
PDA/CM/local govt.	136	45.2
Community	25	8.3
Total	161	53.5

This data shows that, 136 being 45.2%, of the respondents, held PDA / MC responsible for solid waste mismanagement while 25, being 8.3% specified that community is responsible for solid waste mismanagement.

Table 3.8 shows the effects of solid waste on the citizens

Specification	Frequency	Percent
Pollution in water	181	60.1
Trouble in public ways	68	22.6
Un-hygienic condition/bad smell	51	16.9
Total	300	99.7

This table indicates that 181 being, 60.1%, of the respondents, specified water pollution, 68, being 22.1 % specified the trouble in public ways and 51 being 16.9 % specified unhygienic condition/ bad smell.

Table 3.9 shows that how Local govt. can create awareness among masses.

Specification	Freq	%
Seminar/ Workshops/ conferences	34	11.3
Focus group discussion	75	24.9
Training to stake holders, local Landers and popular public	9	3.0
Media	2	.7
any other	1	.3
Total	122	40.5

The data shows that 34, being 11.3 %, of the respondents, indicated that public will be made aware through seminar/ workshops/ conferences, 75, being 24.9 % suggested group discussion, 9, being 3.0 % opined for the training of the stake holders, local Landers and popular public and 2, being .2 % indicated Media and only 1,being .3 % proposed other activates.

Table 3.10 shows the data on daily basis collection of the solid wastes

Specification	Frequency	Percent
Yes	270	89.7
No	30	10.3
Total	300	100

In the tables 270 being 89.7 % suggested daily-based collection of solid waste for proper solid waste management, while 30, being 10.3 % did not agree with this idea.

4. CONCLUSION:

From the analysis of the data it is concluded that majority of the containers for wastes of the respondents are at a great distance that is why they are throwing solid waste near door and streets. Maximum respondents specified that there is no proper system for the collection of solid wastes. Most of the respondents were of the view that solid wastes are collected by private arrangements and not by the PDA workers. PDA is collecting solid waste once a month which is not sufficient. Most of the respondents are not satisfied from the workers of the

PDA/LG. and mentioned that the sweepers are not coming regularly on daily basis, and not coming on proper time for the solid waste collection.

It is a fact that proper cleanliness, sanitation and planning of the residential area are very important. It has also been told by majority that workers of the PDA/LG collect solid waste once a month but do not collect the wastes as a whole and so waste is dump in open space and resulting environmental problems. Majority of the respondents replied that they have submitted complaints about the problems PDA/LG but of no use. A large number of the respondents highlighted that the concerned department do not pay attention to our complaints therefore the people do not submit their complaints to the concerned department. Most of the people are well aware about the side effects of the mismanagement of the solid wastes as a result of which many problems are created in the targeted areas. Irregularity is another problem on the part of the sweepers so for long time solid wastes are dump in open space, which produced environmental pollution.

Majority of the respondents complained that the vehicles of the PDA/MC/LG do not come daily for solid waste collection. Most of the respondents are of the view that administrator of PDA/MC/LG do not check the activities of their workers. Therefore they will be held responsible for the improper disposal of the solid wastes.

5. Suggestions/ Recommendations:

On the basis of the study finding and results the following suggests recommendations are extended to accelerate/proper management of solid waste by the concern authorities.

1. Awareness among the masses:

Public awareness could be created through seminars, symposium and informal organization. Writing of articles regarding environmental problems in the press and debates and lectures on radio and television will provide lot regarding management of solid waste and other environmental problems. Opportunities should be provided to environmental experts on radio and TV. Govt should encourage mass media on priority basis.

2. Annual proper planning of authorities:

It should be necessary for the environmental protection agency and their attachment department to prepare annul planning for the minimization of solid waste and also prepare a plan for management of solid waste in this city.

3. Proper management, supervision/ monitoring:

Environmental court should be set up and appointment of environmental magistrates should be made so that they may decide the case regarding environmental problems. Board of inspection should be set up so that it may make visit of the industries and to oversee the industrial effluents and waste.

4. Proper disposal of solid waste:

Use modern technology for disposal of solid waste. Modern machines should be used for recycling and producing electricity from solid waste.

5. Control urbanization:

Urbanization is very big problems of our country this should be control by govt. and other concerned departments. It should have proper planning and monitoring.

Migration of the people must be controlled rural to urban. It should be provide basic facilities in rural area should be provided to minimize migration of people to urban.

6. Reputation of Afghan Refugees:

Afghan refugees should be limited to one specific place. They throw solid waste everywhere in the city i.e. street, sewage line etc, which create a lot of environmental problems.

Acknowledgement

The research is financed by University of Karachi under Postgraduate students Scholarships. Thanks for Prof. **Prof: Dr.Syed Jamil Hassan Kazmi** Department of Geography University of Karachi

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