

An Exploratory Study Of Hygiene, Sanitation And Health Awareness Of People At Some Prominent Public Places In Delhi

** P. S. Raychaudhuri*

*** Aditi Singh*

INTRODUCTION

Health, sanitation and hygiene are interlinked subjects and contribute to the quality of life. Provision of safe drinking water and improved sanitation, health and hygiene education plays a major role in improving the health and overall well-being of people. Delhi, the National Capital Territory, is the largest metropolis by area and the second largest metropolis by population in India. Population of Delhi is rapidly expanding because of large-scale migration or emigration to Delhi for a possible better life. Delhi is expanding, but the sheer volume of people compromises the ability of the city to meet their basic needs. The process of migration or emigration from different places to Delhi accompanied by uncontrolled urbanization has caused environmental degradation; it has manifested in worsening of the hygiene and sanitation condition of Delhi.

Delhi government fails to frame and implement anti - spitting, urination and littering laws at public places like railway station and interstate bus stand. Unhygienic scenes of spitting and urination can easily be seen around while moving at public places, especially at the railway stations and bus stands. The problem is not just limited to these places, but spreads beyond - upto the corners of staircases of high-rise building and waste-paper baskets placed in the offices; one can easily see them colored red. After tobacco manufacturing companies launched easy to carry sachets; keeping the public places clean and tidy became a stupendous task for the workers engaged and assigned with the job of keeping the places clean and tidy.

Indian railway transports millions of people every day through its wide network of trains in India. It is also the largest network in the world. These days, it has been in the news as well, thanks to its turn around as a profit making organization.

One thing however, which needs desperate and immediate attention in Indian railways, is the sanitation level in the trains and railway stations as well. The toilets in Indian railways were made keeping in view that the waste will go on track, which is uninhabited and the heat of sun will sterilize it. Public toilets at railway stations are rarely cleaned properly, which can lead to an outbreak of a disease.

Condition of Delhi interstate bus stands is worse than Delhi railway stations. Urination at the roadside presents such an ugly picture. At every nook and corner of the interstate bus stand, there are ugly red stain marks of spitting and filth of urination. This exploratory study was done at prominent public gathering places in Delhi - Railway stations, Interstate Bus stands and Metro stations.

DATA ANALYSIS ON HYGIENE, SANITATION AND HEALTH AWARENESS GEOGRAPHICAL AREA OF THE STUDY

Public Gathering places

✿ **Railway Stations :** New Delhi Railway station, Old Delhi Railway station and Nizamuddin Railway station.

✿ **Interstate Bus Stands :** Sarai Kale Khan, Kashmiri Gate and Anand Vihar.

✿ **Metro Stations :** Rajiv Chowk, Kashmiri Gate and Yamuna Bank.

**Assistant Professor, Department of Management, Jamia Hamdard University, New Delhi. Email : psray61@hotmail.com*

*** Assistant Manager, Credibility Alliance, New Delhi.*

OBJECTIVES

The primary objective of the study is to check health perception of people about sanitation, hygiene and health awareness at interstate bus terminals, metro stations and railway stations. This has been done by exploring and comparing the hygienic and sanitary conditions at these places.

The secondary objectives are:

- a) To understand the diversity of the population mix at these public places and their frequency of visits, which also indicate the extent of hygienic perception and hence, their use of these places.
- b) To understand the condition of the eatable goods and cleanliness at these public places.
- c) To understand the condition of public toilet facilities at these places.
- d) To understand the condition of drinking water facilities at these places.

METHODOLOGY

SAMPLING PLAN

✿ **Sampling Technique:** Convenient and judgmental sampling along with snowball sampling was used. Some of the sample elements had been selected on the basis of conscious judgment. Further reference for respondents were also obtained from some of them.

✿ **Sample Size:** Sample size of the study is 450.

✿ **Gender Orientation:**

✿ Male - 62.5 % (n=283) and Female - 37.1 % (n=167)

✿ **Data Collection :** The data collection process consists of structured personal interview with people at different places like railway station, interstate bus stand, and metro stations. The sample elements were identified on the basis of judgment and the data was collected by self-administering a structured questionnaire containing close ended and open-ended questions and getting it filled completely, in person. Respondents to the questionnaire were literate. The survey was conducted between March and July 2010.

✿ **Analysis :** The study involved comparison between groups of respondent from urban male and female respondents on various study variables. This necessitated the use of frequencies and graphs at various levels with various study variables. SPSS (ver.15.0) (Statistical Package for Social Sciences) software had been used for data analysis.

SUMMARY OF FINDINGS

✿ Data had been analyzed against objectives framed for the study.

✿ Study findings depict the socio- demographic profile of the respondents at railway stations, interstate bus stands, and metro stations and, their perceptions in general hygiene, sanitation and health awareness knowledge and about available public facilities in this regard.

✿ Results indicate that the unhygienic and sanitation problem is largely due to lack of public awareness about sanitation and hygienic environment and the government has not yet formulated and implemented any strict anti-littering, urination and spitting laws.

✿ **Key Facts :** There are various parameters to judge the existing hygienic conditions of the place, especially at public gathering places. The researchers tried to refine the terms “hygiene” and “sanitation” and tried to figure out the existing condition of the environment. Do we really live in a clean, safe and hygienic environment? Let's see the findings related to the hygienic condition of our present environment.

POPULATION DIVERSITY

Most of the people come to Delhi for work, education, doing business or to visit Delhi. These people either settle in Delhi for a temporary basis or come to Delhi on a daily basis.

People, who come to Delhi on a daily basis, either use their own vehicle or use public transportation. It means there are two type of populations in Delhi - One is migratory and another is the permanent resident of Delhi. The details are presented in Table 1.

Table 1

Population	Interstate Bus Stands	Railway Stations	Metro Stations
Migratory	60%	68 %	14%
Permanent	40%	32%	86%

*Source- generated from data collected by the authors'

In the survey, after interviewing the respondents, it was found that at Delhi railway stations, 68 % (n=102) of the respondents were non-resident (migratory) and 32% (n=48) were permanent residents of Delhi. At interstate bus stands, 60% (n=90) respondents were non-resident (migratory) and 40% (n= 60) respondents were permanent residents of Delhi. At Metro Stations, 14 % (n=21) respondents were non-resident (migratory) and 86 % (n=129) respondents were permanent residents of Delhi.

Most of migratory people visit the interstate bus stand and railway station very frequently and on other hand, permanent residents frequented the Metro stations.

FREQUENCY OF VISITS TO INTER STATE BUS STAND, RAILWAY STATIONS AND AT METRO STATIONS

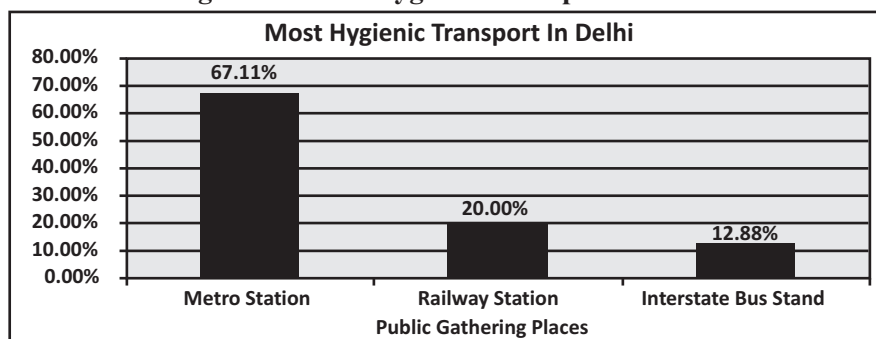
Those who visit the interstate bus stand daily and railway stations very frequently, are mostly from adjoining states of Delhi which are well connected to Delhi. On the other hand, those who visit Metro stations are either natives of Delhi or are those have settled here over the years. The Table 2 presents the results.

Table 2

Frequency of visit	Delhi Interstate Bus Stands	Delhi Railway Stations	Delhi Metro Stations
Daily	34%	24%	66.6%
Once or twice in a week	21.3%	4%	28%
Once or twice in a month	30%	14%	5.3%
Once or twice in a year	14.6%	58%	0

*Source- generated from data collected by the authors'

It has been analyzed that people visit the Delhi interstate bus stand and Delhi metro stations more frequently in comparison to Delhi railway stations. 34% (n=51) of the respondents visited the interstate bus stand and 66.6% (n=100) visit the metro station on a daily basis respectively; on other hand, only 24% (n=36) of the respondents visited the Delhi railway station on a daily basis. Again, 28% (n=42) of the respondents visited the metro stations once or twice in a week and on the other hand, only 21.3% (n=32) and 4% (n=6) of the respondents visited the interstate bus stands and railway stations once or twice in a week respectively. Frequency of visit of people once or twice in a month at interstate bus stand is more than the visit at metro stations and interstate bus stands. 30% (n=22) of the respondents visited the interstate bus stand once or twice in a month, but on the other side, at railway stations and at metro stations, only 14% of the respondents (n=21) and 5.3% (n=8) visited once or twice in a month respectively. When the

Figure 1 : Most Hygienic Transport In Delhi

*Source- generated from data collected by the authors'

respondents obtained data about the respondents' visit once or twice in a year, then the researchers obtained stark figures. At railway stations and at interstate bus stands, 58% (n=87) and 14.6 % (n=22) respondents visited these places once or twice in a year and when the researchers analyzed the other side, frequency of visit to metro stations, once or twice in year, was 0%. It means, the visit to metro stations by the respondents is extremely frequent.

Among them, most of the people have used all three (railway stations, interstate bus stands and metro stations) prominent forms of Delhi's public transportation at some point. They expressed different experiences related to hygiene and sanitation at these places. The Figure 1 shows the views regarding the most hygienic transportation that the respondents found in Delhi. 67.11 % (n=302) respondents were of the opinion that the metro stations were the cleanest and the most hygienic public transport system (barring rare occurrences of littering). There are problems to be addressed and improvements to make, but the overall response has been positive. Whereas, at interstate bus stands and railway stations, the picture is completely opposite. Only 12.88 % (n=58) respondents and 20 % (n=90) respondents responded positively regarding the sanitation facilities available at these places respectively. People mostly responded in affirmative when asked if they will be happy if these facilities were improved to acceptable standards.

It is quite evident that people find Metro stations most clean and hygienic to use. However, people were of opinion that they mostly avoided using sanitation facilities at Interstate Bus Terminals and Railway Stations, unless it became extremely necessary to do so. Hygiene is not only about the usage of water. It is about cleanliness of our environment, proper usage of water, and good condition of food items.

CONDITION OF EATABLE GOODS AT RAILWAY STATIONS, INTERSTATE BUS STANDS AND AT METRO STATIONS

People were mostly skeptical about the quality and hygiene at the food stalls and they usually preferred packaged water to tap water available at public places. However, at Metro stations, people were comfortable in buying eatable items from privately owned shops, even though they are comparatively costlier. On other hand, at railway stations, there are state run outlets as well. People, however, still prefer to go to outlets like '*Comesome, McDonalds*', etc., for food and water. People do not usually feel comfortable with the hygiene standards of IRCTC (Indian Railways) run outlets and stalls.

Table 3

	Interstate Bus stands	Railway Stations	Metro Stations
Hygienic	12.6%	28%	90.6%
Unhygienic	64%	59.3%	0
Can't say	23.3%	12.6%	9.3%

*Source- generated from data collected by the authors'

It can be inferred from the Table 3 that most of the people have faith in packed food and food items from private big brand name vendors. That is why, 90.6% (n=136) of the respondents find food items at metro stations, which house these private vendors, to be the most hygienic. However, at railway stations and bus stands, only 28% (n=42) and 12.6% (n= 19) people found that the items are hygienic respectively. Respondents harbored a negative attitude towards the food items that were sold at interstate bus stands and railway stations. At the interstate bus stands, 64% (n= 96) of the respondents found the condition of food items to be unhygienic. Whereas, at railway stations, 59.3% (n=89) respondents found that the food items that were being sold were in an unhygienic state. And the strangest thing was that none of the respondents' felt that the food items at metro stations were unhygienic to eat! This shows the affinity of people towards packed food items. 23.3% (n=35) and 12.6% (n=19) respondents did not wish to comment upon the condition of food items at interstate bus stands and at railway stations. Only 9.3% (n=9.3) respondents did not comment upon the hygienic condition of food items at metro stations. People who did not give any comments may be interpreted as those who did not purchase food items from public stalls at these places.

In total, 51.1% (n=230) respondents opined that, packed eatable goods were hygienic to eat, 39.3% (n=177) respondents found that eatable goods were not at all hygienic to eat and approximately 0.9% (n=43) people did not wish to comment on this situation.

CONDITION OF PUBLIC TOILETS AT RAILWAY STATIONS, INTERSTATE BUS STANDS AND AT METRO STATIONS

Public toilets at railway stations and interstate bus stands were not at all in an appreciable condition, largely due to lack of public awareness and institutional apathy. There were a significant number of respondents who had never used public toilets, because they were not comfortable with the cleanliness of the place. There are different waiting rooms for every class of traveling tickets at the New Delhi Railway Station. Entry is free to travelers. Use of washrooms has to be usually paid for (₹ 1-2 in government washrooms; and ₹ 5-10 in private washrooms).

When the researchers asked how frequently people use public toilets at these places, the following responses were obtained, which have been presented in Table 4.

Table 4

Condition	Interstate Bus Stands	Railway Stations	Metro Stations
Hygienic	3.3%	53.3%	96.6%
Unhygienic Condition	83.3%	34.6%	0
Can't say	13.3%	12%	3.3%

*Source- generated from data collected by the authors'

After analysis, it was found that public toilets at Metro Stations are the most hygienic toilets among all other transportation systems. 96.6% (n=145) respondents found public toilets at metro stations hygienic to use and, on the contrary, 83.3% (n= 125) respondents found public toilets at Interstate bus stands to be in an unhygienic state. Significantly, there were so many respondents who did not wish to express their views regarding existing hygienic condition of washrooms at these three places. 13.3% (n=20) and 12% (n=18) respondents did not want to comment on the current state of public toilets at interstate bus stands and railway stations. On the other hand, only 3.3% (n= 5) respondents did not want to comment on the condition of public toilets at metro stations . Most likely reason that may be attributed to the respondents who do not wish to give their comments is that they had neither seen nor come across public toilets at these places . Second most common reason for not responding is that people are a bit confused regarding the conditions of public toilets. They find public toilets at these places are unhygienic, but they don't have any issue to use public toilets. Though there are people who prefer using isolated stretches of roads as urinals rather than paying for public toilets. Unfortunately, we do not have a proper mechanism to prevent such a nuisance.

Municipal Corporation of Delhi (MCD) is constructing only 50 luxury pay-and-use public toilets in the capital. The pay-and-use toilet will collect a meager amount of ₹ 1 or ₹ 2 from the users. At certain places, these kind of public toilets have been already opened and these include Gulmohar Park, M-Block market, GK-I, PVR Saket, Ambavata Complex, Mehrauli, Green Park Market, Chirag Delhi, Subzi Mandi, Kotla Mubarakpur, Nehru Enclave, Andrews Ganj, Paschim Vihar, Janakpuri, Taj Enclave Road, Paharganj, R. K . Puram, South Extension Part-I, Ganesh Nagar, Chittaranjan Park and Delhi University. Nevertheless, are people really willing to pay for these facilities? This is the most critical question we have in front of us!

CONDITION OF DRINKING WATER AT RAILWAY STATIONS, INTERSTATE BUS STANDS AND AT METRO STATIONS

Water, air, and earth are three necessities for survival of human species. Day by day, the quality of drinking water at public places is getting degraded. Degradation of drinking water ultimately leads to outbreak of water borne diseases. When we look towards the condition of drinking water, we find that the condition of drinking water is same as in the condition of eatable goods. People have faith in the packed drinking water (Bisleri, Aquafina, etc) and this is the

Table 5

	Interstate Bus stands	Railway Stations	Metro Stations
Hygienic	6.6%	24%	94%
Unhygienic	82%	72.6%	0
Can't say	17%	3.3%	6%

*Source- generated from data collected by the authors'

reason as to why the respondents opined that water at metro stations is hygienic to drink.

As figures are saying, 94% (n=141) of the respondents found drinking water at metro stations to be hygienic, but on the contrary, at railway stations, this figure was 24% (n=36) and at interstate bus stands, it stood at 6.6% (n=10) respectively. 82% (n=123) of the respondents felt that drinking water is unhygienic at railway stations, and interstate bus stands, the figures stands at 72.6% and none of respondents opined that drinking water at metro stations was unhygienic.

In total, 41.5 % (n=187) respondents opined that it was hygienic to drink water at such places. 51.5% (n=232) respondents had contrary views. The respondents said that drinking water was unhygienic, especially at interstate bus stands and at railway stations. At metro stations, there are no water taps for drinking water. Therefore, people have only one option left, which is to buy packaged bottled drinking water from vendors. At interstate bus stands and at railway stations, people are not ready to drink water from the installed water taps. They would drink water from water taps only in the absence of other alternatives. 6.0 % (n=31) respondents at metro stations did not give any comments regarding drinking water.

AWARENESS ABOUT THE COMPLAINT ROOM

There are so many faults and short-comings which have been uncovered in the administration and government work; but are the authorities made aware of the condition of eatable goods, drinking water and public toilets? Do people ever register their complaints at the complaint room? To what extent is the government actually responsible for degradation of basic necessities? The responses have been presented in Table 6.

Table 6

	Interstate Bus Stands	Railway Stations	Metro Stations
Aware	18.6%	35.3%	92.6%
Not Aware	81.6%	64.6%	7.3%

*Source- generated from data collected by the authors'

Most of the people were unaware of how to register a complaint if they notice or experience a shortcoming or absence in facility somewhere at public places. Unfortunately, rarely any action is taken even on the handful of complaints that get registered.

SHOULD GOVERNMENT START TAKING FEES FOR BASIC NECESSITIES?

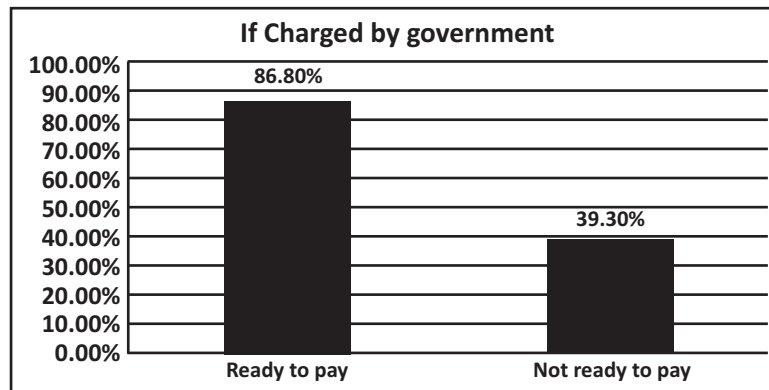
An excuse always used by Government bodies is the lack of finance and resources. So what's the possible solution to this, if it is indeed a problem? Would it be a good idea for the Govt. to charge a small amount of money from travelers to provide them with improved amenities? People are crossing so many issues for these basic necessities. If the government starts charging money for these facilities, are people ready to pay? The responses are presented in Figure 2.

86.80 % (n=350) respondents were ready to pay for good services, but rest of respondents - 39.30% (n=100) were not ready to pay because they feel they are already paying for civic amenities as taxes and that these facilities should be covered under the standard taxes charged by the Government.

AWARENESS ABOUT THE ANTI SPITTING, LITTERING AND URINATION NORMS

People are very much aware about the existence of anti-spitting, littering and urination norms at public places. Unfortunately, these norms are strictly implemented only at the metro stations. They are yet to be framed as laws and implemented strictly. The poor implementation elsewhere leads to people violating these norms as they do not have the fear of getting caught and fined. The Table 7 presents the responses of the respondents. The Delhi government is all set to notify an anti-littering law, which will levy fine on people for offences like spitting, urinating, and littering in the public places. At present, the MCD can only issue fines of up to ₹ 50. MCD has proposed fines for littering, spitting, and urination, which was revised by government. The details about these laws are shown in Table 8.

Figure 2 : Responses Regarding Govt. Charging People For Public Amenities



*Source- generated from data collected by the authors'

Table 7

Interstate Bus stands	Railway Stations	Metro Stations
92.6%	94%	100%

CLEANING UP THE ACT- PROPOSED AND REVISED FINES BY MCD AND DELHI GOVERNMENT

Table 8

	Proposed Fines By MCD	Revised Fines By Delhi Government
Littering on the roads/ street	₹ 200	₹ 500
Urination	₹ 200	₹ 500
Spitting	₹ 200	₹ 250
Bathing	₹ 100	₹ 300
Defecating	₹ 100	₹ 500
Washing utensils/ other projects	₹ 200	₹ 300
Littering by pets	₹ 500	₹ 1,000
Not delivering the construction waste in a segregated manner	₹ 500	₹ 2,000

*Source- Hindustan Times⁽²⁾, (22), (23)

Under the proposed anti-littering law, spitting, defecating and bathing in public places would invite hefty penalties from municipal inspectors, who would penalize people on the spot. The fine would vary between ₹ 200 and ₹ 2,000.

CONCLUSION

✿ The results of the survey demonstrate the current critical situation of sanitation, hygiene and health awareness in Delhi. The figures are not very positive and highlight the very basic problems of an ever-growing city.

✿ Experiences suggest that sanitation facilities alone do not guarantee the improvement of health. This emphasizes the need for a broader approach to the situation where health and hygiene promotion is included as an integral part of sanitation delivery programs.

✿ Level of hygienic and sanitary condition in Delhi is not at all in an acceptable position. People in Delhi are very much aware about the law of anti spitting, littering and urination at public places, but the incidences of spitting, littering and urination at public places are very frequent.

✿ At Delhi railway stations, people are really not ready to use public toilets. Some feel they are not easily accessible and others feel uncomfortable with the cleanliness of the facility. Same thing goes with tap water; people think tap

water is not clean and purified. Only the poor and deprived, who cannot afford bottled water, are forced to use these taps.

✿ Tracks of the trains are in a very bad situation. They are filled with filth and human excreta. Existing sweepers are not enough to sweep the dirt of train tracks and railway stations. Most of the respondents said that the Delhi government should learn some lessons regarding cleanliness, and water & food hygiene from Visakhapatnam and Jabalpur railway stations respectively.

✿ At Interstate Bus Stands, it has been found that there is no first aid facility and nobody cares about the norms regarding smoking and spitting, littering and urination in open. Most of the people find public toilets in a very bad condition. There is no cleanness in public toilets. People suggest that at Interstate bus stands, everything should be privatized. This will improve the condition of interstate bus stands to a large extent.

RECOMMENDATIONS

✿ The findings of this baseline survey have helped the researchers in evolving some recommendations that may provide a direction for the activities in different parts of Delhi.

✿ There should be assurance of regularity in collection and transportation of solid waste from the railway platforms, bins and primary dumping stations. Awareness for reduction of solid waste generation should be increased among the masses.

✿ There should be provision of environmental infrastructure, urban water supply, and sanitation services at public gathering places. It should be ensured that there are affordable and high quality public toilets and drinking water facilities available in close proximity of all major public places such as bus stands, metro stations, railway stations, shopping malls and other places of public gathering.

✿ Participation by media should be increased. Media should cover the existing conditions of railway stations, interstate bus stands and slum areas respectively. This will highlight the issue among the masses and existing conditions of these places can be improved.

✿ Laws regarding unhygienic behavior at public places should be strictly implemented.

✿ India is a fast developing country. The only way a country can sustain its growth is by increasing production. Production in form of goods, processed items and even in the form of intellectual property. Under such a scenario, we can't stop people from migrating to places like Delhi. Trying to stop the migration will prove hazardous and can choke the economy.

✿ Hence, the only viable solution to this is to improve the infrastructure and facilities. And not only improve them to acceptable standards, but also keep on innovating and improving so that they can sustain further growth of the population. Thus, any system or process developed will need to be flexible and expandable for future growth.

✿ Also, there is an immediate need to spread public awareness. Any communicable disease which can spread out of public places, can acquire epidemic proportions in no time and in turn will harm the interests of the nation. Hence, there should be people connect programs such as street plays or *nukkads* and mass advertisements on print and visual media, including hoardings.

The above mentioned recommendations will help in spreading a general consensus and public intelligence on these issues.

BIBLIOGRAPHY

1. Van Wyk, Renay, "A review of health and hygiene promotion as part of sanitation delivery programmes to informal settlements in the City of Cape Town". http://dk.cput.ac.za/cgi/viewcontent.cgi?article=1044&context=td_cput. Viewed on, 2nd January 2010.
2. <http://epaper.hindustantimes.com/PUBLICATIONS/HT/HD/2010/07/13/ArticleHtmls/Littering-will-cost-you-dear-13072010007002.shtml?Mode=1>. Viewed on 29 July 2010.
3. M. Avannavar, Santosh "A conceptual model of people's approach to sanitation". Viewed on 10 January 2010.
4. Department for Transport Contract PPRO 04/06/33, "Individual Behavior Change: Evidence in transport and public health". <http://www.dft.gov.uk/pgr/scienceresearch/social/behaviour-changes/pdf/transport-and-health.pdf>. Viewed on 17th January 2010.
5. Ministry of health and family welfare, "Health programs in India". http://mohfw.nic.in/NRHM/Documents/Advt_RFP_Health_Portal.pdf. Viewed on 25 January 2010.

6. Jha, Dr. P.K., "Sustainable Technologies for on-site human waste and waste water management: Sulabh Experience". <http://www.adb.org/documents/events/2005/sanitation-wastewater-management/paper-jha.pdf>. Viewed on 1st February 2010.
7. A case study, "Sanitation and hygiene in developing countries: identifying and responding to barriers". <http://www.odi.org.uk/resources/download/3061.pdf>. Viewed on 15th February 2010.
8. Water and sanitation program, "Public Toilets in Urban India". http://www.wsp.org/wsp/sites/wsp.org/files/publications/519200874857_SAPublicToiletsFN2008.pdf. 26th February 2010.
9. http://www.who.int/water_sanitation_health/hygiene/en/. Viewed on 28th February 2010.
10. <http://www.delhiscoop.com/story/2010/7/13/13515/7123>. Viewed on 28th February 2010.
11. <http://ibnlive.in.com/news/bangalore-best-indian-city-for-expats/116261-3.html?from=tn>. Viewed on 28th February 2010.
12. <http://www.mercer.com/qualityofliving>. Viewed on 28th February 2010.
13. <http://www.elaw.org/node/1420>. Viewed on 15th March 2010.
14. <http://siteresources.worldbank.org/INDIAEXTN/Resources/295583-1176163782791/ch3.pdf>. Viewed on 15th March 2010.
15. <http://indianpediatrics.net/july2004/july-682-696.htm>. Viewed on 26th March 2010.
16. http://www.tehelka.com/story_main36.asp?filename=cr151207When_The.asp. Viewed on 1st April 2010.
17. <http://www.mernews.com/article/sanitation-and-cleanliness-need-urgent-attention-in-indian-railways/126845.shtml>. Viewed on 1st April 2010.
18. UNICEF India Country Office Child's Environment Programme, "International Learning Exchange In Water, Sanitation and Hygiene". http://www.unicef.org/india/ILE-Report_01-06-07.pdf. Viewed on 18th April 2010.
19. Water, Sanitation and Hygiene, "Sanitation and Hygiene Promotion- Programming Guidance". http://esa.un.org/iys/docs/san_lib_docs/Sani_Hygiene_Promo.pdf. Viewed on 20 April 2010.
20. http://www.cpcb.nic.in/upload/NewItems/NewItem_155_FINAL_RITE_REPORT.pdf. Viewed on 26th April 2010.
21. https://ir.ide.go.jp/dspace/bitstream/2344/841/1/199_tsujita.pdf. Viewed on 26th April 2010.
22. <http://www.anhourago.in/show.aspx?l=5031146> Viewed on July 29, 2010.
23. <http://www.delhiscoop.com/story/2010/7/13/13515/7123> Viewed on July 29, 2010.

(Contd. From Page 7)

- 16) Mullins, L.J. (2007) *Management and Organizational Behaviour*, Pearson Education Limited.
- 17) Quinn, Cooke & Kris (2000) *Shared Services - Mining for Corporate Gold*, Pearson Education Limited.
- 18) Reilly, P. (2000), *HR Shared Services and the Realignment of HR*, Institute for Employment Studies, Report 368.
- 19) Reilly, P. (2007). "Facing up to the Facts", *People Management*, Vol. 13, Issue 9, p. 42-45.
- 20) Schulman, Harmer & Dunleavy (1999) *Shared Services. Adding Value to the Business Units*, John Wiley & Sons.
- 21) Sochor, J. (2007). "Shared Services Week Comes to Central and Eastern Europe for the First Time", *Czech Business & Trade*, Issue 7/8, 2007, p. 9.
- 22) Strack, Caye & et.al. (2007) *The Future of HR in Europe, Key Challenges Through 2015*, The Boston Consulting Group.
- 23) Ulrich, D. (1995). "Shared Services from Vogue to Value", *Human Resource Planning*, Vol. 18, Issue 3, p. 12-23.
- 24) Ulrich, D. (2007). "In the hot seat", *People Management*, Vol. 13, Issue 13, p. 28-32.