CHAPTER VIII
CONCLUSION

This is the last and final chapter of this thesis. The chapter deals with the major findings and recommendations and major contributions of the study.

8.1 Findings of the Study

Chapter I gives the introduction to the study by putting across the problem of urban solid waste management, its grievous gravity over the globe and urgent need for tackling the same, the objectives and hypotheses of the study, the methodology and limitations of the study, besides other preluding issues in the context of the study.

8.1.1 Gravity of the urban solid waste problem across the global

It is found that the residents, businesses, and institutions in the USA produced about 246 million tonnes of Municipal Solid Waste in 2005, which is approximately 2kg pounds of waste per person per day. 32.2 percent of the waste is recovered or recycled or composted, 13.6 percent is burnt at combustion facilities, and the remaining 54.3 percent is disposed of in landfills.

The 15 Member European Union (EU) produced almost 200 million tonnes of Municipal solid waste in 2004. 100-140 million tonnes of waste is bio-degradable. 65% of waste is sent to landfill, 20% is incinerated, 10% is recycled and 5% is composted.
Among Asian countries, in industrialized cities with higher income levels, the amount of solid waste generated per person is more than 1 kg/day and in developing cities with lower income, the corresponding figure is around 0.5 kg / person/day. Compared to the US residents, the Asian counterparts produce just $\frac{1}{4}$ to $\frac{1}{2}$ of waste generated by the former.

In India, it is found that everyday approximately 0.1 million tonnes of solid waste is generated and per-capita waste generation in major Indian cities ranges from 0.2 kg to 0.6 kg per day. This is just 10 to 30 % of per-capita waste generated in the USA.

In the study area of this research work, Bangalore, it is found that everyday approximately 2,500 tonnes of solid waste (excluding industrial waste and construction and demolition waste) is generated now. The per capita generation of work in Bangalore is put at 0.5 Kg/day. Though the per-capita figure is just 25% of the US per-capita waste generation level, by Indian Standard, Bangalore is one of the high waste generating cities.

The waste generation is causing manifold problems and health hazards. Hence developing alternative solutions is the concern of everyone. In view of the significance of the problem of urban solid waste management and the need for solutions to address the problems this research study was taken up.

8.1.2 Restatement of the Objectives and Hypotheses of the Study

The objectives and hypotheses of the study are restated below:
A. Objectives:

The major objectives of the study are:

vi. To enquire into the types of and trend in the urban solid waste generation.

vii. To study the factors behind the enormity of urban solid waste problem.

viii. To present the aspects of waste collection practices and to suggest ways of improvement.

ix. To enquire into the aspects of segregation of wastes and suggest ways of improvement therein.

x. To study the alternative methods of recycling and disposal and suggest improvement thereto.

B. Hypotheses:

In this study, hypotheses testing is done extensively. The tested hypotheses are:

i. Whether there is any relationship between personal factors like age, level of education, size of the family and total family income with practices of segregation of waste into dry and wet at household (source).

ii. Whether there is any relationship between level of income and levels of generation of dry solid waste.

iii. Whether the different categories of alternatives for recycling and disposal are of same popularity in terms of the mean scores.

iv. Whether there is any relationship between personal factors like age, level of education, size of the family and total family income and with the opinions of the respondents as to ‘population growth’ contributing to the enormity of urban solid waste problem.
v. Whether there is any relationship between personal factors like age, level of education, size of the family and total family income and with the opinions of the respondents as to ‘urban concentration’ contributing to the enormity of urban solid waste problem.

vi. Whether there is any relationship between personal factors like age, level of education, size of the family and total family income and with the opinions of the respondents as to ‘migration’ contributing to the enormity of urban solid waste problem.

vii. Whether there is any relationship between personal factors like age, level of education, size of the family and total family income and with the opinions of the respondents as to ‘per-capita income’ contributing to the enormity of urban solid waste problem.

viii. Whether there is any relationship between personal factors like age, level of education, size of the family and total family income and with the opinions of the respondents as to ‘apathy of government’ contributing to the enormity of urban solid waste problem.

ix. Whether there is any relationship between personal factors like age, level of education, size of the family and total family income and with the opinions of the respondents as to ‘industrialization’ contributing to the enormity of urban solid waste problem.

x. Whether the regression co-efficient of the 4 independent factors, namely, age, education, family size and family income influencing the level of waste generated by households are significant or not.

For testing of hypothesis, 5 % level of significance is used.
8.1.3 Methodology

The study is an explorative piece of intellectual work employing sampling techniques to gauge certain issues and aspects of the problem of urban solid waste management. Statistical analysis and testing are carried out to sculpture out the problem and the solutions therefore.

8.1.4 Revelations of Review of Literature

Chapter II was devoted to review of literature. The review of literature was done under 5 major headings, namely, scale and trend in urban waste generation, factors behind the enormity of urban waste generation, aspects of waste generation and collection, aspects of waste segregation and alternative methods of waste disposal. Striking revelations of the review of literature were: high income level increases waste generation; technology advancement has not reduced waste generation or rather increased the same; zero waste is a waste option and it has shown good results in certain countries. In all 109 reviews were done. A solid source of knowledge was obtained through this literature review.

8.15 Solid Waste Types and Trend in Waste Generation

Chapter III dealt with one of the major aspect of urban solid waste problem, namely the types of urban solid waste and the trend in urban solid waste generation.

A. Type of Solid Waste

Based on source of generation, waste is classified into 3 classes: residential waste, commercial waste and institutional waste; Based on putrescibility waste are either garbage or rubbish. Based on content the waste are put into 5 classes: food waste,
rubbish, ash and residues, demolition and construction waste and special waste.

It is found that the global average share of different sources of waste stream forming municipal solid waste in 2004 was: residential waste 50 %, commercial waste 25 %, industrial waste 12.5 % and institutional waste 12.5 %.

In India, it was found that the domestic waste in 18 major cities in 2003 ranged between 40 and 87 % of the total waste generated, commercial waste between 5 and 30 %, industrial waste upto 25 % (max), market waste between 3 and 26 %, hotel and restaurant waste between 1.6 and 25 %.

In the study area of this research work, Bangalore, in 2004, it was found that, residential waste constituted 54 %, market waste constituted 14 %, waste from hotel & restaurants constituted 20 %, waste from commercial premise constituted 6 %, waste from slums 1%, waste from hospitals 2% and street sweeping, parks & open spaces collectively contributed 3% of total waste.

**B. Trend in Waste Generation**

It is estimated based on linear progression that by 2010 the amount of solid waste generation in India will be approximately 63.62 million tonnes, in 2015 it will rise upto 78.25 million tonnes and by 2020 the amount of solid waste generation will increase upto 92.88 million tonnes.

Similar projection study was done for Bangalore city too. It is estimated that by 2010 the amount of solid waste generation in Bangalore City will be 2641 tonnes per day,
in 2015 it will rise upto 2871 tonnes per day and by 2020 the amount of solid waste generation will be 3101 tonnes per day.

A multiple regression model, is derived to estimate the dependent variable i.e. amount of solid waste generated, taking 4 independent variables (personal factors) viz. age, education, family income and family size of respondents. The equation is derived as

\[ Y = 0.318 + 0.03619 X_1 + 0.003769 X_2 + 0.331 X_3 + 0.461 X_4 \]

wherein \( Y \) = Amount of solid waste generated per day, \( X_1 = \) Age, \( X_2 = \) Education, \( X_3 = \) Family income, \( X_4 = \) Family size. The R\(^2\) value was found as 0.606. Thus the four independent variables explain 60% of the variations in the dependent variables. The two independent variables, namely, family size and family income were found to be highly significantly influencing solid waste generation.

8.1.6. Factors Behind Enormity of Solid Waste Generation

Chapter IV dealt with the factors responsible for the enormity of solid waste generation. 21 factors were selected and classified into high, moderate and low influencing factors based on the views of the respondents. The relationship between the personal profile of respondents and level of influence of selected factors behind the enormity was studied.

Out of 21 factors studied as a cause for the enormity of urban solid waste, four were found as low influencing factors, nine as moderate influencing factors and eight are found as high influencing factors. The high influencing factors are: urban concentration, population growth, migration, poor municipal services,
industrialization, per-capita income, apathy of citizens and lack of political commitment.

It was found by conducting the Mann–Whitney U test, that people oriented factors and non-people oriented factors do not come from the same population. The people oriented factors are more contributing to the enormity of solid waste than non-people oriented factors.

Test of hypothesis is done to find out whether the respondents with different profile have uniform views on the 8 high influencing factors behind the enormity of urban solid waste problems. Table 8.1 gives the details.

Table 8.1 Test of Hypothesis for uniformity of views of respondents an the 8 high influencing factors on the enormity of USW problem.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Factors</th>
<th>Profile of Respondents</th>
<th>Level of Influence on enormity on Urban Solid Waste Problems</th>
<th>Uniformity of views</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Urban Concentration</td>
<td>Age</td>
<td>H₀ – Rejected</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family Income</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family Size</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Population</td>
<td>Age</td>
<td>H₀ – Accepted</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family Income</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family Size</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Migration</td>
<td>Age</td>
<td>H₀ – Accepted</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family Income</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family Size</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Poor Municipal Services</td>
<td>Age</td>
<td>H₀ – Accepted</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family Income</td>
<td>H₀ – Accepted</td>
<td></td>
</tr>
</tbody>
</table>
8.1.7. Sold Waste Collection Pratice

Chapter V is devoted to solid waste collection practices, which is one of the important components of solid waste management services.

**A. Indian Scenario**

It is found that manual method of collection of solid waste accounted for 50% or more of total waste collected in 8 States in India, while truck mode accounted for 50% or more in 14 States of India. Thus the truck mode is widely followed.

Source collection of solid work is done through door-to-door or community bin method.
B. Bangalore Scenario: Collection Aspects

From the study, it is found that 65 percent of households in Bangalore are having the provision for door-to-door waste collection, 26 percent of households have the provision of community bin in their street and 9 percent of households do not have any provision for waste collection at their residence.

It is found that in Bangalore only 51 percent of households are served by sanitary workers on daily basis, 14 percent of households are served irregularly and 35 percent of households are not all served by sanitary workers in the matter of work collection.

57 percent of households reported that waste generated by them are collected by sanitary workers in morning hours. 8 percent of households, the collection was at irregular timings. For 35 percent of households no collection of works at all.

From the study, it is found that in Bangalore 60 percent of households spent upto Rs 20 per month on solid waste disposal, 13 percent of households spent Rs 20 to Rs 40 per month and 27 percent of household do not spend any amount on solid waste disposal.

It is found that 78 percent of respondents agreed that privatization of waste collection rather than collection by municipalities would yield better result, while 16 percent of respondents disagreed.

93 percent of respondents prepared to agree to have a special pick up arrangements for collection of waste from marriage halls, vegetable and meat markets. Majority of
the respondents (71%) came forward to pay more for better solid waste management services. However 87% disagreed to the PAYT (pay-as-you-throw) scheme, if it were proposed, as this involves directly proportional expense with the weight of waste generated.

Different layouts need different collection practices. From the study, it is clear that the best method for waste collection from slum areas as opined by sanitary workers is “door to door collection” as 60 percent of respondents accepted it. For multi-storyed buildings, 65 percent of respondents agreed “community bin” as suitable method for collection of waste followed by community association participation and door-to-door collection methods. For waste collection in high dense and traffic area, 60 percent of respondents agree “community bin” as suitable method.

All sanitary workers felt that improvement in waste management is possible by providing 2-bin system for collection and storage of wet and dry waste. Creation of markets for recycled product will help improving ‘waste recycle’ and hence ‘waste collection’ averred majority of sanitary workers.

C. Bangalore Scenario: Statistical Aspects

Regarding the level of satisfaction, it is found that as to door-to-door waste collection facilities, 48 percent of respondents are highly satisfied, 27 percent of respondents are moderately satisfied and 25 percent of respondents have low level of satisfaction. On the issue of periodicity of collection, 33 percent of respondents are highly satisfied, 28 percent of respondents are moderately satisfied and 39 percent of respondents have low level of satisfaction. 69 percent of respondents have low level
of satisfaction as to 'community bin'. As to the behaviour of sanitary workers (includes rag pickers) only 24 percent of respondents are highly satisfied, 37 percent are moderately satisfied and 39 percent of respondents have low level of satisfaction.

8.1.8 Segregation of Wastes

Chapter VI dealt with segregation and transportation aspects of solid waste. In the context of segregation, various aspects like, difficult stages of segregation, methods of segregation, motivation of citizens and relationship between personal factors and segregation of waste at household levels are studied.

Sorting of waste into recyclables and bio-degradables is carried out at different stages as: at source (home, shop, etc), community bin, centralized storage, processing site and landfill site.

It is found that 69% of respondents strongly felt that it is impossible to segregate domestic solid waste into “wet and dry” classes, 23% of respondents partially agreed and 18% of respondents disagreed in total. 79% of respondents viewed that the provision of two-bin system of storage of “wet and dry” wastes at every house can be effective method for waste segregation at source. 12% of respondents disagreed. 63% of respondents observed that rag pickers be encouraged to become doorstep collectors rather than allowing to pick recyclable solid waste from streets, bin and disposal site.

81% of the respondents agreed that motivation could play a great role for waste segregation at source the rest are not that convinced. As to the suggestion of
imposition of penalties and fines on households for not segregating their domestic waste, none of the respondents had an affirmative opinion.

Education seems to have a positive impact on source segregation. As education level rises, the solid waste segregation also rise and vice versa.

The under-performance of sanitary workers is mainly due to factors like low salary and income, low esteem that public have for workers, lack of motivation and use of outdated and inefficient equipments and tools. 90 percent of the respondents highly agreed that under-performance of sanitary workers is because of low salary wages and income. 75 percent of the respondents checked high level for the factor that usage of outdated and inefficient equipment as a cause for under performance of sanitary workers.

8.1.9 Recycling and Disposal

Chapter VII is devoted to alternative methods of recycling and disposal. 15 alternatives have been evolved and evaluated. These fall into 4 categories, namely, production oriented, legal oriented, social oriented and novel and economic oriented.

A: Recycling

In India, it is found that the major mode of disposal of solid waste in class I cities (a total of 299 including 23 metro cities) was open land dumping which accounted for 94% in 2000. Only 6% of the total solid waste generated has some kind of treatment i.e. 5% by composting and 1% by others.
The waste pickers are an important limb of the waste re-cycle process as they salvage the re-cyclable and re-usable wastes to a significant extent. There were about 6,50,000 waste-pickers involved in the recycling sector in 2002. And their unpaid service enabled saving of 20% by the municipalities. In Bangalore city, there were 16,000 waste pickers involved in sorting of recyclable waste of 317 tonnes of waste per day (12.7 %) in 2002.

A striking disclosure of the study is that the waste collected in 2005, in Bangalore was in excess of the treatment capacity of the Karnataka Compost Development Corporation (KCDC) composting plant (150 tonnes per days), Terra—Firma composting plant (150-200 tonnes per day), M/s Sunrays Compost Enterprises (300 tonnes per day) and few community based compost units.

The study indicated that there are no scientific landfill sites for waste disposal in Bangalore City. The Bangalore Mahanagar Palika along with Karnataka State Pollution Control Board (KSPCB) has identified 9 abandoned quarry sites to be developed as sanitary landfill around the city. Of these 9 proposed sites, the technical experts have selected only 3 sites after assessment of suitability. The construction of scientific landfill is still under process.

In Bangalore, about two-third of the waste generated in 2005 (about 1600 tones per day) was getting dumped in the city outskirts. Further only a miniscule amount of waste, just 0.3% of total is incinerated.
B: Aspects of Development Alternatives of Solid Waste Disposal

The rank order, for the most preferred to the least preferred alternatives for improvement in recycling and disposal of urban solid waste is presented below in table.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Provision of Incentives and reorganization to households for following Zero waste</td>
</tr>
<tr>
<td>2.</td>
<td>Govt. to initiate and develop market for compost manure</td>
</tr>
<tr>
<td>3.</td>
<td>Special attentions to Slum Areas</td>
</tr>
<tr>
<td>3.</td>
<td>Mandatory Community Participation</td>
</tr>
<tr>
<td>5.</td>
<td>Redesign Product and Packaging</td>
</tr>
<tr>
<td>6.</td>
<td>Public Awareness Campaign by Popular Personalities</td>
</tr>
<tr>
<td>7.</td>
<td>Constituting and autonomous Technology mission for SWM</td>
</tr>
<tr>
<td>8.</td>
<td>Provision of subsides to Industries and societies</td>
</tr>
<tr>
<td>9.</td>
<td>Extended Producer Responsibilities</td>
</tr>
<tr>
<td>10.</td>
<td>Adoption of Zero Waste Principles</td>
</tr>
<tr>
<td>11.</td>
<td>Environmental Cost of Product</td>
</tr>
<tr>
<td>13.</td>
<td>New Legislation for reward and penalize of resources</td>
</tr>
<tr>
<td>14.</td>
<td>Increase the price of Plastic bag</td>
</tr>
<tr>
<td>15.</td>
<td>Introduction of Waste Tax</td>
</tr>
</tbody>
</table>
8.2 Recommendations of the study

Recommendations or suggestions that emerge from the study are given under 4 major heads, namely, recommendation for waste generators, recommendation for municipalities/NGOs/CBOs, recommendation for government and recommendation for future researchers.

8.2.1 Recommendation for Waste Generators

Source segregation of the solid waste (disposable organic and plastic recyclable matter) should be highly practiced. To encourage households and commercial units for segregation of waste into dry and wet, they should be provided with two separate bins or other waste collection and storage units with colour distinction.

Households and commercial units should form association and tackle issues of solid waste management problems by community participation.

All waste generators should deposit the solid waste generated by them in the designated place instead of littering in their surroundings.

Waste generators should reduce the use of plastics in their day-to-day activities and use bio-degradable materials like jute bags, bio-degradable bags, etc.

Waste generator should come forward to spare money for dealing with the urban solid waste problems, which will ensure their well being by keeping their surrounding clean and disease free. This is a preventive health management alternative.
8.2.2 Recommendation for Municipalities/NGOs/CBOs

A special attention should be paid to slum and traditionally dirty areas of city. A city is only as clean as its dirtiest area (Surat’s motto). Door to door collection is the best way of waste collection from slum areas.

Motivation of citizen is a must for waste segregation at source. But municipalities alone cannot bring this desired change. It is imperative to have the support of NGOs, CBOs and appropriate government interventions. Public awareness campaign using information, education and communication (I-E-C) techniques can be used.

The best method for waste collection from multi -storyed buildings is through community bin, from slum areas through door-to-door collection and from high density and traffic area through community bin and so on. Appropriate arrangements should be made by the municipalities for the purpose.

A special pick up arrangement should be made for the collection of waste from the marriage halls, function halls, community halls and markets (vegetable and meat). The responsibility of the waste collection from the marriage halls and other function halls should be vested with the party users.

The wages of sanitary workers should be enhanced on par with wages of other unorganized labour force. To avoid the low esteem that public have for sanitary workers, they can be motivated and recognized by issuing identity cards and allowing to form committees.
The community participation in solid waste management should be encouraged. For effective community participation, the active role of NGOs and support of Government is very essential. Community participation has to be generated systematically and scientifically.

8.2.3 Recommendation for Governments

There is a need to strengthen laws and rules to incorporate community waste management participation as a mandatory duty and provide incentives and recognition for the same.

Privatization of solid waste services can yield better result. However the extent of privatization should be selective in case-to-case from city to city and based on local conditions. Proportion of privatization should not be more than 50 %. So the government policy on privatization of solid waste management services should keep this in mind.

Products and packaging of products should be redesigned so as to plan in advance while designing the product and its packaging about the resource consumption, toxicity, waste quantum and compatibility for natural degradation of both the product and packaging material after its usage life. Government can bring legislation in this regard.

Government should initiate and develop the market for compost manure by providing subsidies and concession for farmers for city’s total organic waste. Government should encourage compost manure also. Co-marketing of compost with urea and
fertilizers can be promoted as all fertilizers companies already have an excellent sales and distribution network countrywide.

Adoption of zero waste strategies of waste management is better projected by the government. To achieve this, there should be a provision of incentives and positive recognition for units like households and industries for following zero waste. The Government can make national policy on zero waste.

8.2.4 Recommendation for future Researchers

Further research can explore implementation of zero waste concepts / models / practice in India. Application / Adoption / Impact of different alternatives i.e. Production oriented, Legal oriented, Social oriented and Novel & Economic oriented alternatives in mitigating solid waste problems may be thoroughly.

Future researchers can study the scale, desirability, cost and benefits of outsourcing of municipal solid waste problem.

The transportation economics associated with transportation of urban solid waste to disposal cites may be studied

Life cycle costing to the waste management from generation to disposal can be done for different classes of waste.
8.3 Major Contributions of the Study

The study serves as an input for the policy study on issues of solid waste management.

The multiple regression model of estimation of household level waste generation is considered as the important contribution of this study. The model needs further refinements, of course.

The various factors responsible for the enormity of solid waste were studied and among them the high influencing factors are identified. High influencing factors are urban concentration, population growth, per-capita, industrialization, etc. The policy makers of municipalities should consider the high influencing factors into consideration while addressing solid waste problems.

The different categories of alternatives as a solution for the problem of solid waste management were assessed and evaluated the rating of alternatives. Provision of Incentives and reorganization to households for following Zero waste, Government to initiate and develop market for compost manure, special attentions to slum areas, mandatory community participation and redesign product and packaging emerged as the top 5 alternatives.

8.4 Sum-up

The issues and problems involved in solid waste management have been visualized in a broader perspective. It is unfortunate that despite the harsh implications of solid waste problem, the same has been ignored largely until recently. Abandoned waste is a symbol of failed public service or inner conscious of the concerned. The present
approach on waste management does not address the roots of the problem but merely shifting the problem to another environmental medium. Waste management cannot revolve anymore around collection, transportation and disposal of waste from sanitation and public health points of view only. The need of the hour is to explore sustainable waste management options, which incorporate reduction in the waste, control the products that create undesirable waste and conserve the depleting natural resources. Further ‘Reduce, Recycles and Reuse’ should be the ‘motto’ of every entity individual or institutions. The aim should be on eliminating the waste rather than managing waste. The vision of zero waste must be inculcated in the society as a promising strategy of reducing, if not eliminating, the waste.

As a certain minimum level of waste is unavoidable, immediate initiatives in increasing the recognition of waste as a resource that can not only contribute to the local and national economies but also provide employment and income to a large section of population are needed.

Bangalore, popularly known as the Garden City of India and a hub of India’s leading software companies, multinational companies and public sectors units, must live up to its great heritage and global expectation. Every foreign dignitary and heads of countries when visit India, wish to make a visit to Bangalore to see and learn the success story of the giant software firms like Infosys, Wipro, International technology park limited (ITPL) etc. Hence, an added responsibility to keep the city ‘Spick and Span’ is involved.
Through this study, the causes of the problem have been addressed and alternatives to tackle the problems are also explored. All the stakeholders in solid waste management process (waste generator, municipalities, manufacturers, policy makers, NGOs/CBOs and Sanitary field workers) should imbibe the consciousness of total cleanliness in their deeds, whatever these be.