

**KNOWLEDGE, ATTITUDE, AND PRACTICES ON SOLID WASTE MANAGEMENT: A STUDY ON  
AFRICAN STUDENTS IN CHIDAMBARAM TOWN, TAMIL NADU.**

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**Abstract**

Solid waste is a worldwide serious problem; no country can exist without this issue. Our daily activities always and everywhere is followed by the generation of solid waste and its management must be given prominent important so that the negative effect on the living organism as well as the environment, can be trim down. Solid waste management is essential for sustainable development hence it required intensive research these days. Data from 124 African students staying in Chidambaram were investigated about their knowledge, attitude, and practices on solid waste management. In this study, results show that majority of the respondents possess a medium level of knowledge to solid waste management, they have a most favourable attitude towards solid waste management but they have poor practices regarding solid waste management due to the absence of service to the waste management in their resident area.

**Key words:** Waste Management, Environment, African Students.

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**Introduction**

Recently, solid waste becomes an important issue because every country must face this challenge and seeks for the measures to manage it. As pointed out by Kumar and Nandini (2005) solid waste management practices especially the municipal solid waste can differ for developed to developing countries, for urban to rural areas, for residential to commercial and industrial producers. The rise in urbanization and increase of population has led to serious socio-economic impacts on societies and the environment. Amadi and Iwuala (2005) noted that a man has

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drastically altered his immediate environment through his day-to-day activities, in form of pollution and environment degradation.

The concentration activities of the population, industries, businesses, and institutions, lead to the generation of solid waste. As the generation of solid waste increased, in this case, the aspect of its proper management some time is missed. The recent studies showed that major drawbacks concerning wastes management, especially in the developing countries are the ineffective waste collection strategies and the lack of disposal sites (Reyes et al., 2013). While most people are aware of the negative impacts of mismanaged wastes on the health as well as on the environment, their negative attitude coupled with insufficient environmental knowledge among individuals usually corresponds to poor practices towards maintaining good environment (Licy et al., 2013).

The main cause of environmental degradation is improper management in the disposal of solid waste. Generally, there is no permanent solution for environmental problems, only we can reduce and control waste generation by proper awareness and practices. The management of solid waste requires all the necessary information like the knowledge, attitude, and practice toward solid waste management. As noted by Tartiu (2011) on his study about the Evaluation of attitudes and knowledge regarding municipal waste among students he noted that the students must be the first to have awareness of environmental problems so that their role must be played effectively. Therefore, this study was conducted to capture the level of knowledge, attitude, and practices of African students staying in Chidambaram town on solid waste management.

### **Study area and methodology of the study**

Chidambaran is both town and municipality in Cuddalore district, Tamil Nadu state, India. Chidambaram town produces solid waste and waste dump-yard is situated near Ommakulam area and out of 3km from Chidambaram town.

The Students from Africa started to come in Chidambaram in the year of 2007 and the strength was about 3, the next year 2008 it was about 148. The Students are from different countries in the continent of Africa such as Rwanda, Burundi, Kenya, Uganda, Tanzania, and Democratic Republic of Cong (DRC), Somalia, Zimbabwe, Ghana, Nigeria, and Ethiopia. The student's strength has steadily in increasing trend and at present, the strength of the African

students is about 400.

This study is based on the primary data as well as the secondary data; primary data is collected from African students. Purposively and conveniently, 124 respondents were selected among African students living in Chidambaram Municipality. This study attempts to identify the knowledge, attitude, and practices of African students living in Chidambaram town on solid waste management. The secondary data is collected from journals and articles published. The respondents were well informed about the purpose of the study and about the questionnaire by the investigator prior to data collection. After collecting data, the next step data were edited and tabulated before analysis. SPSS is very useful for this study and descriptive statistics i.e. percentage, mean were used to describe studied variables.

**Results and discussion**

Table-1.Major characteristics of the respondents

S.No	Variables	Category	Frequency	Percentage
1.	Gender	Male	70	56.4
		Female	54	43.6
2.	Age	Below 20	13	10.4
		20-25	89	71.8
		Above 25	22	17.8
3.	Faculty	Arts	65	52.4
		Science	42	33.8
		Agriculture	1	0.8
		Engineering	16	13

Source: Computed from primary data

Table-2 .Knowledge, attitude, and practice of the respondents

S.No	Variables	Category	Frequency	Percentage
1.	Knowledge	Low level	7	5.6
		Medium level	90	72.6
		High level	27	21.8
2.	Attitude	Most favourable	99	80
		Favourable	22	17.8
		Less favourable	3	2.2
3.	Practices	Poor	112	93.3
		Moderate	12	6.7
		Good	-	-

Source: Computed from primary data

Table-3 .Reasons for poor practices regarding solid waste management

S.No	variable	Frequency	coefficient
1.	Poor management by municipality	24	19.4
2.	Absence of solid waste management service	94	75.8
3.	None care	6	4.8

Source: Computed from primary data

Table.1 of study gives the major characters of African students in Chidambaram tow, all of them are studying in Annamalai University, and it shows that 56.6 percent of the respondents are male and 42.6 are female. The male is more than female because some countries are not willing to send the female to study abroad. The majority 71.8 percent of the respondents are in the age group of 20-25, in the below 20 years old we have 10.4 percent of the respondents and 17.8 percent of the respondents are in the above 25 years age group. For the faculty wise of the respondents, in the faculty of Arts we have 52.4 percent of the respondents, in the faculty of Science we have 33.8 percent of the respondents, and 0.8 percent of the respondents belong to the faculty of agriculture.

The main objective of this study is to assess the revel of knowledge, attitude, and practices towards solid waste management. Table-2 shows that the knowledge level is classified into 3 categories of possessing knowledge i.e. low level, medium level, and high level. It was found that majority of the respondents 72.6 percent possessed the medium knowledge, 21.8 percent of respondents possessed a high level of knowledge while 5.6 of the respondents are classified in the group of having a low level of knowledge regarding waste management.

The responses of the respondents regarding attitude towards solid waste management were classified into most favourable, favourable, and less favourable. It is shown that the majority of the respondents 80 percent have most favourable attitude, 17.8 percent of the respondents were having favourable attitude, and the 2.2 percent of the respondents were having less favourable attitude towards solid waste management (table-2)

Table -2 also shows the responses to the practices of the respondents towards solid waste management. The results revealed that majority 93.3 percent of the respondents have poor practices for solid waste management, 6.7 percent of the respondents showed that they have moderate practices toward solid waste management. The raisons for this poor practices

toward solid waste management are attributed to that there is absence of solid waste management service in their residence area, poor management of solid waste by municipality and some people don't care about waste management (Table-3).

### **Conclusion**

The majority of the respondents have the medium knowledge and most favourable about solid waste management but their practices are poor for the solid waste management. The main reason for this poor practices regarding solid waste management in this area is that there is the absence of solid waste management service in the resident area. In this connection, the study suggested that municipality must take more effort to enhance the services related to sanitation including managing of solid waste generated on a household level.

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