

Waste Pickers Perceptions among Households in Cosmo City, South Africa

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ABSTRACT

The study was conducted in Cosmo City, South Africa. In Cosmo City the low, middle and high income communities live together and share common social resources like schools, churches, shopping centres and recreational facilities. A sample of 500 households was selected randomly from a total population of 12 300 households, with a response rate of 81% (404 households). The specific objectives were to establish the relationship between household's willingness to separate waste from source and household's perceptions about waste pickers.

The results showed that most households who are not willing to separate waste from source tend to support the incorporation of waste pickers into the waste management system, believe that incorporation of waste pickers will create jobs and support the regulation of waste pickers. The same trend was also noticed for households who were willing to separate waste from source. The design of municipal recycling programs and policies should take the local context into consideration including perceptions of all stakeholders, informal waste pickers and households.

Keywords: Waste management, Solid waste, Waste separation at source, Disposal, Storage, Landfill, Household waste and recycling

INTRODUCTION

Municipal solid waste is a major challenge facing developing countries [1]. Amount of waste generated by developing countries is increasing as a result of urbanisation and economic growth [2]. In Africa and other developing countries waste is disposed of in poorly managed landfills, controlled and uncontrolled dumpsites increasing environmental health risks [3]. Households have a major role to play in reducing the amount of waste sent to landfills [4]. Recycling is accepted by developing and developed countries as one of the best solution in municipal solid waste management [5]. Households influence the quality and amount of recyclable material recovery [1]. Separation of waste at source can reduce contamination of recyclable waste material. Households are the key role players in ensuring that waste is separated at source and their willingness to participate in source separation of waste should be encouraged by municipalities and local regulatory authorities [6,7].

A study by Czajkowski et al. [8], in municipality of Podkowa Lesna (Poland) on willingness of households to sort waste from source showed that households were willing to sort waste from source. Desire for Promotion of green external image and concern about poor quality of recyclable material from separation by third parties were identified as motivation for separation at source. Successful waste separation from source is influenced by infrastructure and convenience [9]. Willingness of households to separate waste from source was found to be 80% in the city of Bulawayo, Lusaka and Mombasa [3].

The study of Bhaskar and Chikarmane [10] highlighted the important role played by environmental activists in recycling awareness. Municipal organizations and households were engaged through campaigns and studies to raise awareness about the important role played by informal waste pickers. Waste pickers play a crucial role linking households and recyclers. Waste pickers were recognized in policy circles as workers providing a crucial service. In developing countries waste pickers are wide spread selling recyclable materials they collect to earn money for

supporting their families. Common barriers to successful formalization of informal waste pickers are based on poor or absence of legislation, policy and regulations. Social acceptance is another barrier, working as an informal waste picker is seen as dirty, associated with low social status and undesirable [7,11]. Formalization of waste pickers could lead to loss of income for waste pickers who will not be employed due to budget constraints [12]. Incorporation of waste pickers requires social acceptance, political will, and management skills and must be relevant to local context [13]. Municipalities must formalize the recognition of waste pickers and informal recycling sector by providing access to finance and resources. Hiltunen [14] reported that in Nairobi Kenya informal waste pickers are not incorporated in the waste management system though municipalities claim to have incorporated them. Successful incorporation of waste pickers is influenced by empowerment of formalized waste pickers and this depends on how the implementation program and support from all stakeholders [7,15].

MATERIALS AND METHODS

The study was conducted in Cosmo City, South Africa. In Cosmo City the low, middle and high income communities live together and share common social resources like schools, churches, shopping centres and recreational facilities. The specific objectives were to establish the relationship between household’s willingness to separate waste from source and household’s perceptions about formalization of waste pickers. Secondary literature analysis, field observation and questionnaire survey were used to collect data. Quantitative data was collected by means of a questionnaire survey, from a sample implementing a standardized questionnaire. Questionnaires started with an opening statement to address the why, what and how of the study and assurance of confidentiality.

A sample of 500 households was selected randomly from a total population of 12,300 households, with a response rate of 81% (404 households). Quantitative data was captured and analyzed with the aid of a statistical analysis software EPI INFO version 7.

RESULTS AND DISCUSSION

The findings are summarized in following Table 1 and the variables are graphically represented in Figure 1. From Table 1 and Figure 1 it can be noticed that the results are consistent for the incorporation of waste pickers into the waste management system, Job creation and Regulation of waste pickers. Most households who are not willing to separate waste from source tend to support the incorporation of waste pickers into the waste management system, believe that incorporation of waste pickers will create jobs and support the regulation of waste pickers. The same trend is also noticed for households who are willing to separate waste from source. The observed trend in the three categories discussed earlier changed when basic salary for waste pickers was suggested. Most households who were not willing to separate waste at source did not support provision of basic salary for waste pickers. Although most households who were willing to separate waste from source supported provision of basic salary for waste pickers the number of households opposed to the provision increased compared to the other three categories (incorporation of waste pickers, job creation and regulation of waste pickers).

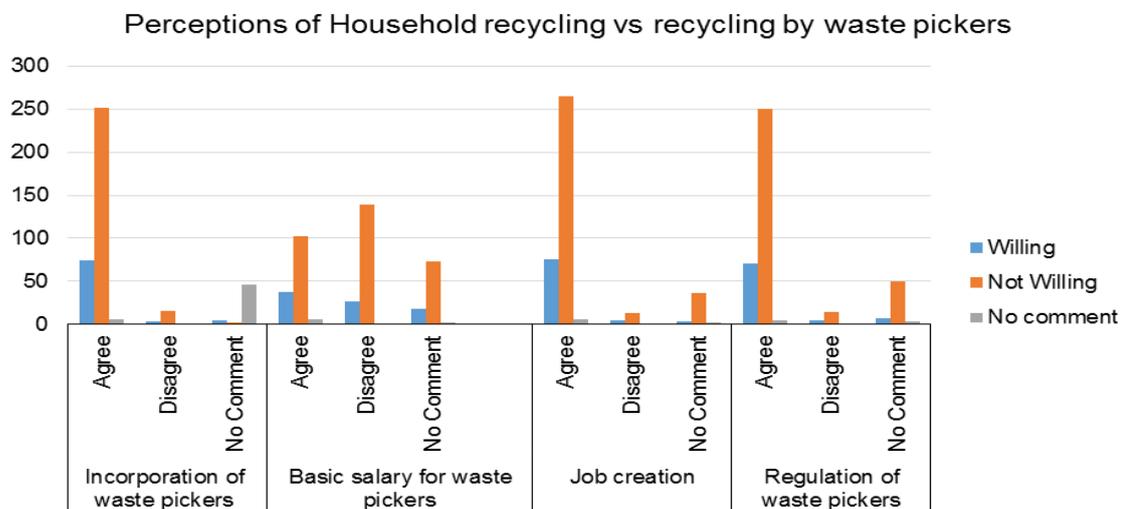


Figure 1: Perceptions of household recycling vs. recycling by waste pickers

			Willingness of Households to separate waste from source			
			Willing	Not Willing	No comment	Total
Perceptions of households on Waste pickers	Incorporation of waste pickers into the waste management system	Agree	74 (18%)	252 (62%)	6 (1%)	332 (82%)
		Disagree	3 (1%)	16 (4%)	0 (0%)	19 (5%)
		No Comment	5 (1%)	2 (0%)	46 (11%)	53 (13%)
		Total	82 (20%)	270 (67%)	52 (13%)	404 (100%)
	Basic salary for waste pickers	Agree	38 (9%)	102 (25%)	6 (1%)	146 (36%)
		Disagree	26 (6%)	139 (34%)	0 (0%)	165 (41%)
		No Comment	18 (4%)	73 (18%)	2 (0%)	93 (23%)
		Total	82 (20%)	314 (78%)	8 (2%)	404 (100%)
	Job creation	Agree	75 (19%)	265 (66%)	6 (1%)	346 (86%)
		Disagree	4 (1%)	13 (3%)	0 (0%)	17 (4%)
		No Comment	3 (1%)	36 (9%)	2 (0%)	41 (10%)
		Total	82 (20%)	314 (78%)	8 (2%)	404 (100%)
	Regulation of waste pickers	Agree	70 (17%)	250 (62%)	5 (1%)	325 (80%)
		Disagree	5 (1%)	14 (3%)	0 (0%)	19 (5%)
		No Comment	7 (2%)	50 (12%)	3 (1%)	60 (15%)
		Total	82 (20%)	314 (78%)	8 (2%)	404 (100%)

Table 1: Household recycling vs. recycling by waste pickers

CONCLUSION

Households are key role players in quality recyclable waste recovery. The amount of recyclable waste recovered is reduced by contamination of waste by wet waste. Separation of waste into dry and wet from source can increase the recovery of recyclable waste. Implementation of separation at source program will help reduce the amount of waste sent to landfills and incineration facilities. Informal waste pickers are playing major role in most of developed and developing countries. The initiatives of informal waste pickers have provided them with a source of income and helped by creating a link between recycling companies and households. The results show that households are in support of informal waste pickers and success of any recycling program depends on the coordination of informal waste pickers and households for maximum recovery of recyclables. Households who are not willing to separate waste for various personal reason showed support for informal waste pickers. The design of municipal recycling programs and policies should take the local context into consideration including perceptions of all stakeholders, informal waste pickers and households. Informal waste pickers working conditions can be improved if their operations can be regulated and formalized. Informal waste pickers provide an important service and should be incorporated in the formal waste management system. Separation of waste from source can promote recycling of waste and reduce amount of waste sent to landfills.

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