Figures

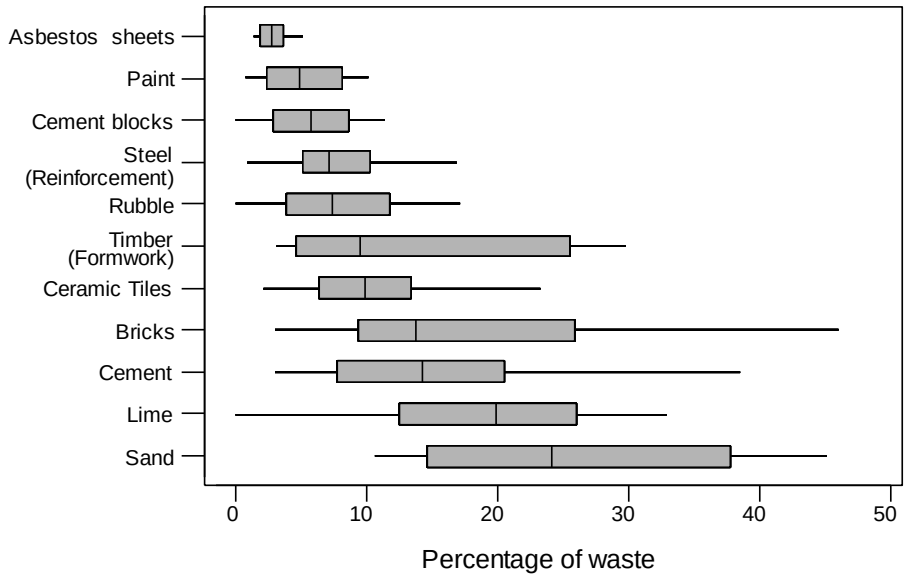

Figure 1: Box plot for wastage of materials

Source: Journal of Built-Environment Sri Lanka

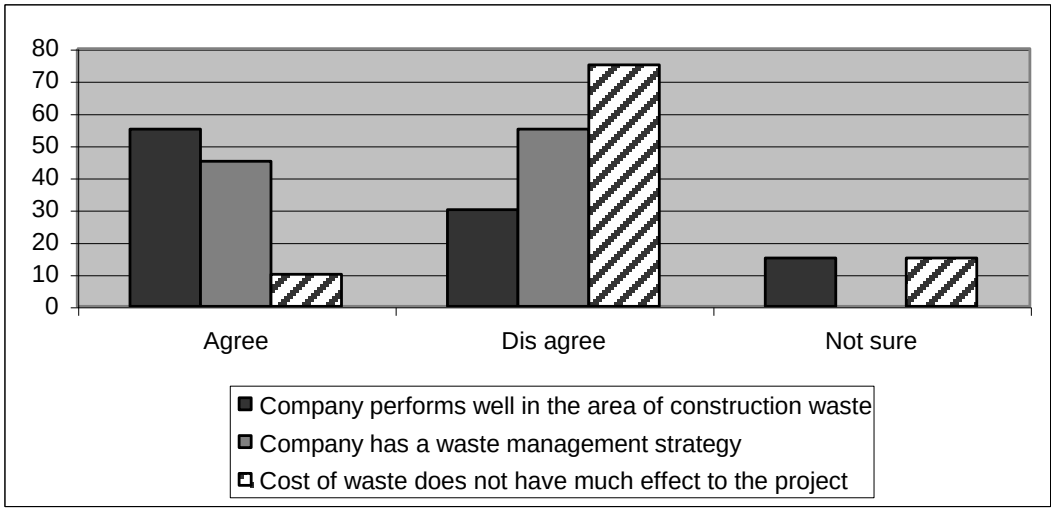

Figure 2: Responses of the estimators regarding the company performance towards waste, knowledge of the existing strategy and the effect of cost of waste

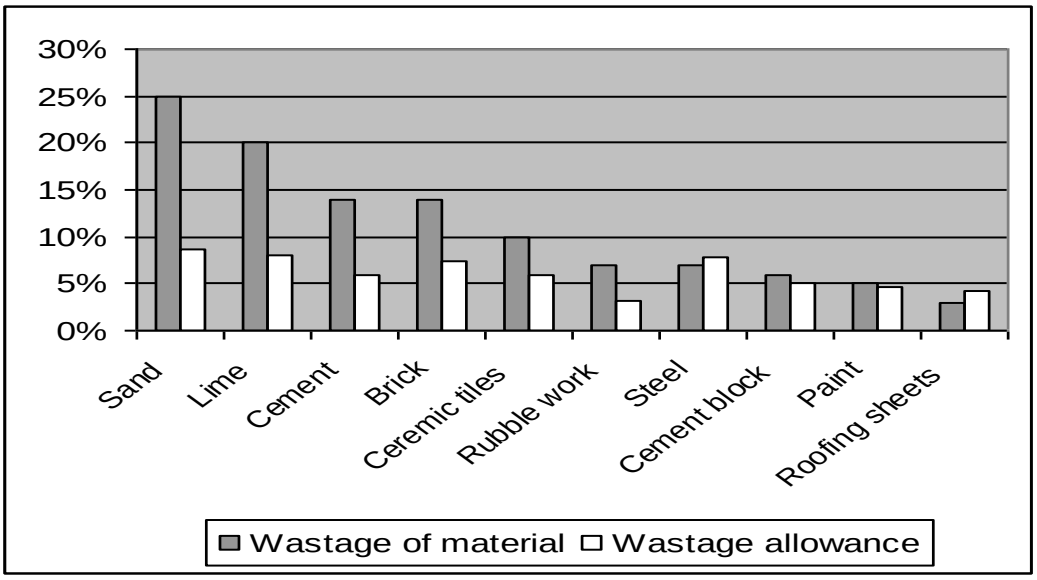

Figure 3: Difference between the actual waste and the wastage allowances made during the pre-construction stage

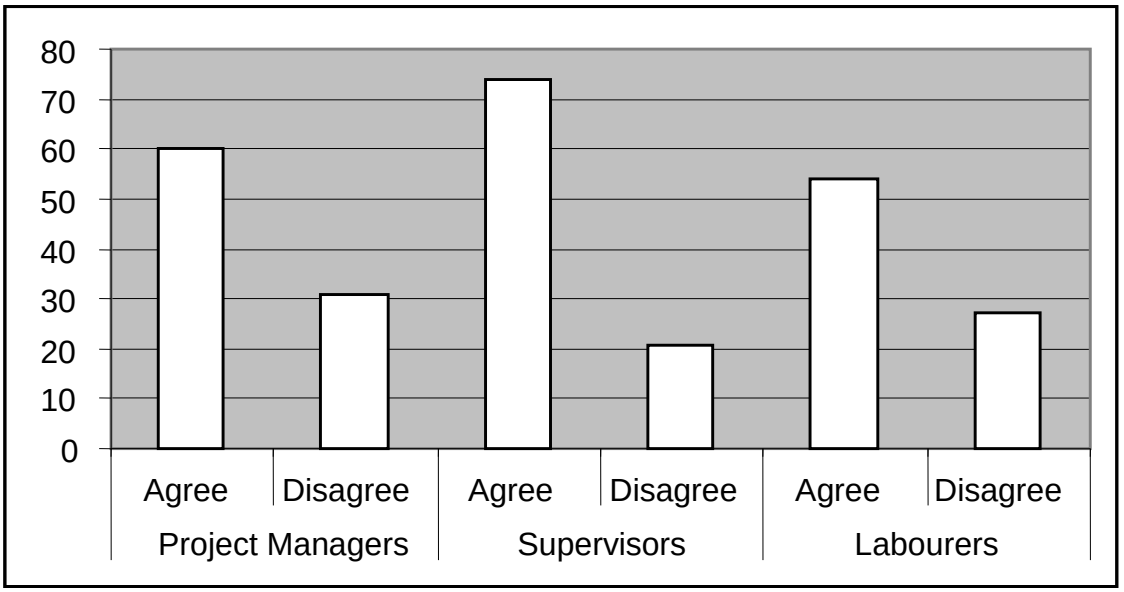

Figure 4: Existence of waste management strategy

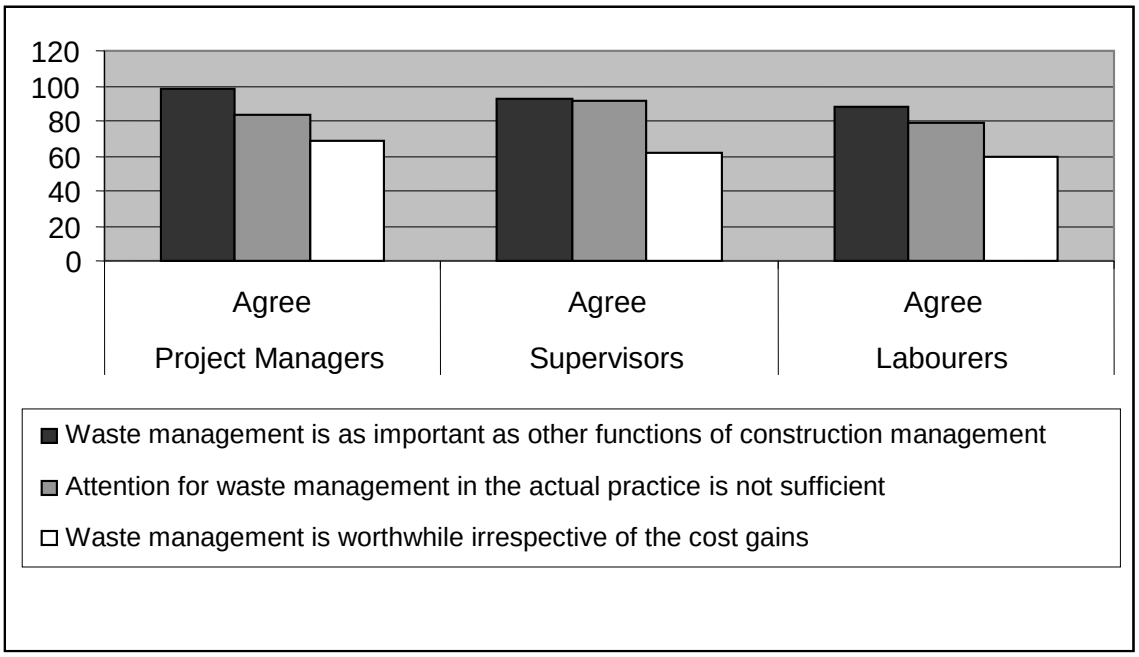

Figure 5: Importance of waste management

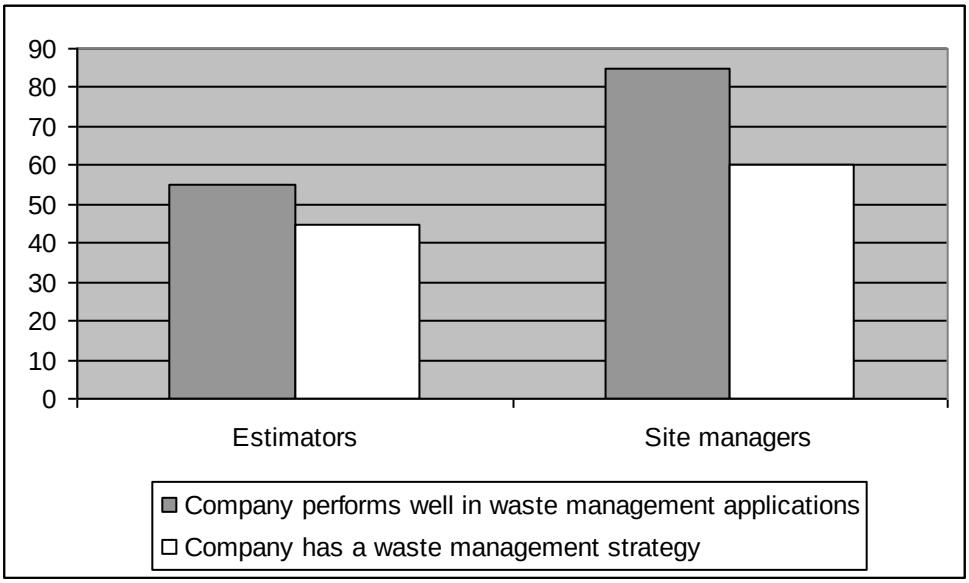

Figure 6: Comparison of perceptions between Estimators and Site managers

Tables

Table I: Sources and causes of construction waste (Ekanayake and Ofori, 2000)

Design	Lack of attention paid to dimensional co-ordination of products Changes made to the design while construction is in progress Designer's inexperience in method and sequence of construction Lack of attendance paid to standard sizes available on the market Designer's unfamiliarity with alternative products Complexity of detailing in the drawings Errors in contract documents Incomplete contract documents at commencement of project Selection of low quality products
Operational	Errors by trade persons or labourers Accidents due to negligence Damage to work done caused by subsequent trades Use of incorrect material, thus requiring replacement Required quantity unclear due to improper planning Delays in passing off information to the contractor on types and sizes of products to be used Equipment malfunctioning Inclement weather
Material Handling	Damages during transportation Inappropriate storage leading to damage or deterioration Materials supplied in loose form Use of whatever material which are closed to working place Unfriendly attitude of project team and labourers Theft
Procurement	Ordering errors Lack of possibilities to order small quantities Purchased products that do not comply with specification

Table II : Components of attitudes

Component	Characteristics
Affect	Emotional reactions
Cognition	Internalised mental representations, beliefs, thoughts
Behaviour	The tendency to respond or overtly act in a particular way

Table III: Sample of the questionnaire survey

Category	Number of questionnaires issued	Number of respondents	% Response
Estimators	24	20	83
Project Managers/Site Managers	55	55	100
Supervisors	107	107	100
Workers	586	586	100

Table IV: Priorities at the pre-construction stage

Factor	Rank
Profit	1
Overhead of the project	2
Location	3
Type of client	4
Contingencies	5
Waste allowance	6

Table V : Barreirs for waste management practices

Barrier	Rank
Attitudes of the workers cannot be changed	1
Difficulty in changing existing work practices	2
There is no stated company policy on waste management	3
Lack of industries norms	4
Time consuming (rather than reusing a broken brick, it is easier to use a new one)	5
There is no incentive to manage waste	6
Requires more personnel	7
It is not perceived as part of the manager's job	8
Waste management is not cost effective	9

Table VI: Priorities of site activities

Activity	Rank
Monitoring the quality of work	1
Monitoring the progress of work	2
Cost control	2
Assessing the resource requirements, procurement and incorporating them in the work	4
Safety management	5
Holding sites meetings to discuss issues and problems	6
Waste management	7