

Product: Donkey pulled cart for Solid waste collection

Background:

The donkey pulled carts are widely used for household solid waste collection and transportation in Hawassa. Both legal and illegal private collectors are using a wooden cart. But, because of long term services and poor material selection, most of carts are get damaged and significant amount of dirt is spilled out to the environment while transporting wastes. Since the carts are also designed without a cover, wastes are blowout by wind. In some cases, the heavy weight of the cart itself is also found to a problem for effective collection; it doesn't allow the collector to handle expected amount of waste it or affect the donkey's welfare if they load it without considering the overall weight.

Therefore, this call is intended to invite bidders for a well designed cart (light in weight, covered, and reasonable waste holding capacity) which will assist the effective and efficient collection of household wastes through private SW collection and recycling associations.

Product description

Overall description:

The overall weight of the cart should be less than 200 kg

The cart should have a net effective volume of more than 2 m³

The cart should have a cover, inlet and outlet for the solid waste

The cart should have portable unloading mechanism

The height of the cart (up to the chassis) should be 1.2m.

The cart should have a seat for a single operator in one corner.

The cart trunk should be painted with blue gloss waterproof paint with the GIZ and NatuReS Logos (attached below)

Description of parts:

Part	Type of material	Dimension(length, diameter, Area or volume)	Remark
Chassis (Cart bed floor)	Treated Wood (boiled in preservative)	Length: 180cm Width: 150cm	Light weight material (e.g. boiled wood) is highly recommended to decrease the overall weight and service years
Estanga (ከታገጋ)	Treated Wood (boiled in preservative)	Maximum diameter of Ø5cm length:350cm	Dense and water proof type of material (treated wood) is recommended

Wheel (ሼረኬ)	Modified car wheel	Rim diameter= 14 inch Cross section width=150 mm	R14 minibus tire with modification as shown on the photos
Cart box/ trunk (ዶቆሻሻ ማደዥ ቋት)	Primary option: high quality Fiberglass with metal frame	Length: 180cm Width: 150cm Height: 70cm-100cm Metal frame: Angle iron 50*50 size and 5mmtickness	Tensile strength > 55MPa Compression strength>140 MPa Specific gravity> 1.28

Sample products





LOGOS



german
cooperation

DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



NatuReS

NATURAL RESOURCES STEWARDSHIP PROGRAMME

Joint solutions for resilient economic growth