









JCCI International Seminar 2025 - Approaches to Improve Waste Management in Fragile States -

THE CLEAN CITIES PROJECT IN SUDAN Community-led Waste Collection Initiatives in Sudan

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CONTENTS

- 1. Outline of the Clean Cities Project in Sudan (Technical Cooperation Project (TCP))
- 2. Grant aid project
- 3. Community-led waste collection initiative in the TCP



1-1. Objectives

(1) Type of the Assistance Technical Cooperation Project (TCP)

(2) Overall Goal

Solid waste management services in the target states is improved.

(3) Project Purpose

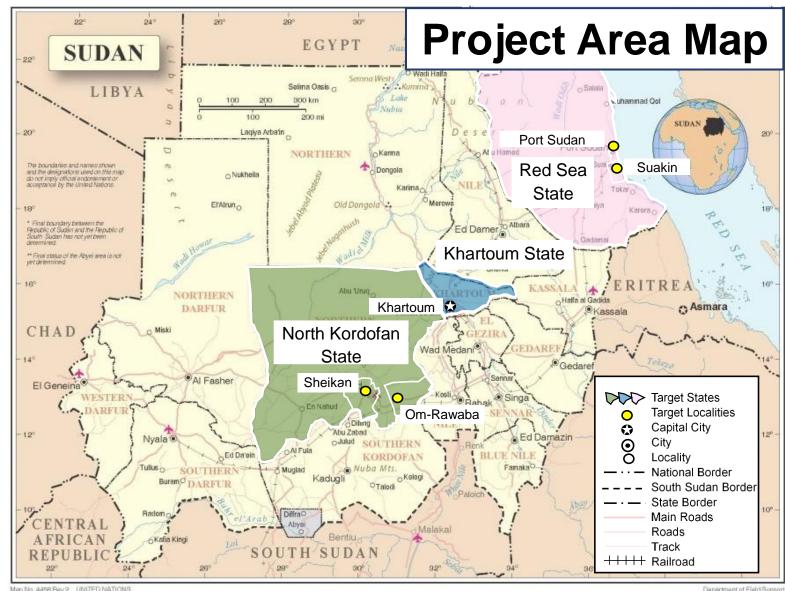
Management capacity of Cleaning Corporation in the target states is improved.



March 2012

1-2. Project Area

- a. Khartoum State
 - 7 Localities
- b. North Kordofan State
 - Sheikan Locality
 - Om-rawaba Locality
- c. Red Sea State
 - Port Sudan Locality
 - Suakin Locality



Department of Field Support Cartographic Section

1-3. Outputs

	Responsible Organizations	
OUTPUT 1	The current status and challenges of waste management in the target areas are identified.	HCENR/KCC/ NKCC/RSCC
OUTPUT 2	KCC's waste management and planning capacity is strengthened.	KCC
OUTPUT 3	NKCC's waste management capacity is strengthened.	NKCC
OUTPUT 4	RSCC's waste management capacity is strengthened.	RSCC
OUTPUT 5	Preparation for development of the national direction of Solid Waste Management is made based on the data and information collected from all the states.	HCENR
KCC: Khartoum NKCC: North Ko	r Council for Environment and Natural Resources Cleaning Cooperation ordofan Cleaning Corporation Cleaning Corporation	5

1-4. Period of the Project

4 years (April 2021 – April 2025)

Phase-3: Implementation/Monitoring phase Nov. 2024 – April 2025

Phase-2: Implementation phase May 2022 – Oct. 2024

Phase-1: Detailed Design phase April 2021 – April 2022







We are here

2. GRANT AID PROJECT

Delivery Schedule of Grant Aid Equipment

State/Locality Item			Red Sea	State	North K	Total	
			Port Sudan	Suakin	Sheikan	Um-rawaba	IOLAI
1-1. Compactor truck (12m ³)		-	13	1	23	4	41
1-2. Container	Vehicle	-	9	1	6	1	17
carrier (Lift type/8m ³)	Container	-	18	2	12	2	34
2. Transfer /ehicle 2-1. Tractor head (32ton)		15	-	-	-	-	15
2-2. Container t type / 75m ³)	trailer (Open	15	-	-	-	-	15
3-1. Bulldozer (21ton)	-	1	-	1	-	2
3-2. Excavator	(0.8m ³)	_	1	-	-	-	1
3-3. Wheel load	ler (2.0m ³)	-	-	1	-	1	2
3-4. Wheel load	ler (3.0m ³)	_	-	-	1	-	1
3-5. Dump truc	k (9.0m³)	_	1	-	1	-	2
Handover		April 2024	October 2024		Under transportation in domestic		-
	 1-1. Compactor 1-2. Container carrier (Lift type/8m³) 2-1. Tractor heat 2-2. Container to type / 75m³) 3-1. Bulldozer (3-2. Excavator to 3-3. Wheel load 3-4. Wheel load 	1-1. Compactor truck (12m ³) 1-2. Container carrier (Lift type/8m ³) Vehicle Container 2-1. Tractor head (32ton) 2-2. Container trailer (Open type / 75m ³)	1-1. Compactor truck (12m³)-1-2. Container carrier (Lift type/8m³)Vehicle-2-1. Container type/8m³)Container-2-1. Tractor head (32ton)152-2. Container trailer (Open type / 75m³)153-1. Bulldozer (21ton)-3-2. Excavator (0.8m³)-3-3. Wheel loader (2.0m³)-3-4. Wheel loader (3.0m³)-3-5. Dump truck (9.0m³)-	StateKnartoum State1-1. Compactor truck (12m3)-131-2. Container carrier (Lift type/8m3)Vehicle-2-2. Container trailer (Open type / 75m3)15-2-2. Container trailer (Open type / 75m3)15-3-1. Bulldozer (21ton)-13-2. Excavator (0.8m3)-13-3. Wheel loader (2.0m3)3-4. Wheel loader (3.0m3)-13-5. Dump truck (9.0m3)-1	State Port Sudan Suakin 1-1. Compactor truck (12m ³) - 13 1 1-2. Container carrier (Lift type/8m ³) Vehicle - 9 1 1-2. Container carrier (Lift type/8m ³) Vehicle - 9 1 Container - 18 2 2-1. Tractor head (32ton) 15 - - 2-2. Container trailer (Open type / 75m ³) 15 - - 3-1. Bulldozer (21ton) - 1 - 3-2. Excavator (0.8m ³) - 1 - 3-3. Wheel loader (2.0m ³) - - 1 3-4. Wheel loader (3.0m ³) - - - 3-5. Dump truck (9.0m ³) - 1 -	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

3-1. Waste collection (Sheikan, North Kordofan State)

Existing vehicles collect for Market waste : 8 out of 18 in operation. PP vehicles collect for household waste : 3 Vehicles in operationon



Waste Collection Operation and Management Plan for Sheikan Locality, North Kordofan State



October, 2024 NKCC and JICA Project Team

The Clean Cities Project in Sudan

Waste Collection Operation and Management Manual for Sheikan Locality, North Kordofan State

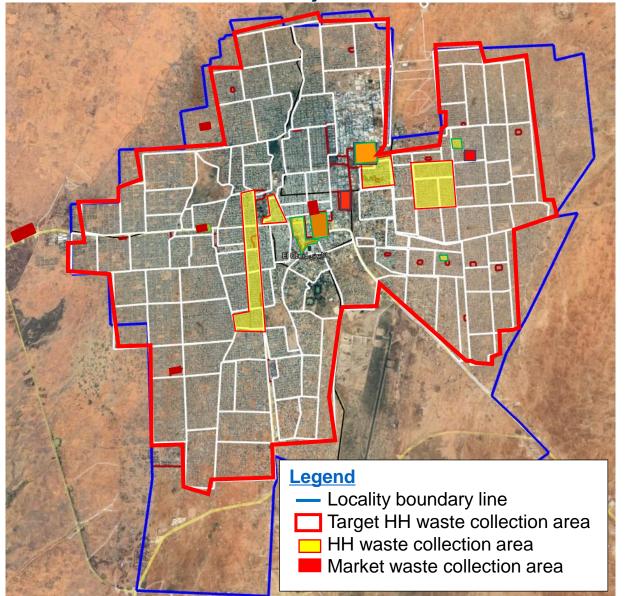


October, 2024 NKCC and JICA Project Team

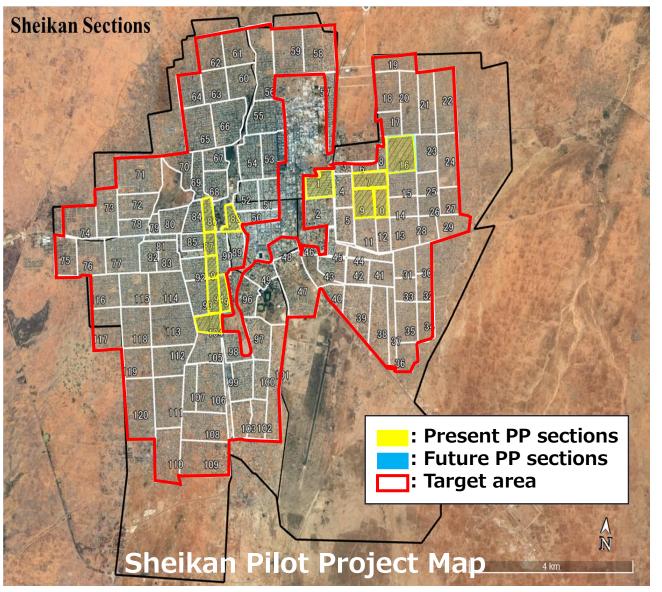








3-2. User Fee Collection Pilot Project for Household Waste (Sheikan)



Locality NamePresent PP sitesFuture PP sites①Section 1②②Section 9③③Section 10④④Section 94⑤⑤Section 86⑤Sheikan⑥Section 87	User Fee Collection PP Implementation Section									
 2 Section 9 3 Section 10 4 Section 94 5 Section 86 	Locality Name	Present PP sites	Future PP sites							
 (120 Sections) (7) Section 88 (8) Section 91 (9) Section 7 (10) Section 104 (11) Section 16 (12) Section 94 	Sheikan (120 Sections)	 2 Section 9 3 Section 10 4 Section 94 5 Section 86 6 Section 87 7 Section 88 8 Section 91 9 Section 7 10 Section 104 11 Section 16 								





Fix-place and fix-time collection

3-3. Preparation flow of Fee Collection Pilot Project (PP)

expenditure



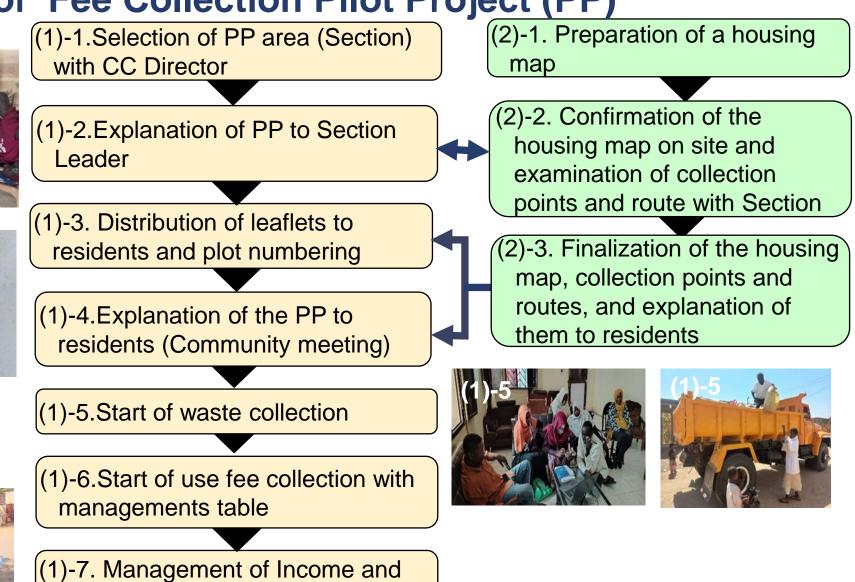












3-4. Third Country Training to South Sudan













3-4. Third Country Training to Sudan



2016 year South Sudan C/P visit to Sudan through JICA Project

2017 year Mr. Gosai of HCENR visit to South Sudan and support to conduct waste quality and quantity survey



3-5. Third Country Training to Bangladesh

• Community participatory waste collection

- Management of landfill sites
- Vehicle maintenance



Lecture in Ward Cleaning Office



Management of Weighbridge data



Preventive maintenance



Community Meeting



Gas monitoring at landfill site



Washing Grant Aid vehicles







3-6. Clean-up Campaign held in Collaboration with the Community



















3-7. Public Awareness for User Fee Collection



Section leader meetings



Distribution Leaflet with explanation of PP

3-8. User Fee Collection Rate in Sheikan

From October to December 2024

Locality	Section	# of HH	Use fe	Average		
Locality	Section		Oct.	Nov.	Dec.	Average
	S94	371	99% (369)	98% (366)	95% (355)	97%
	S1	502	95% (477)	81% (409)	87% (435)	88%
Sheikan	S9	369	—	96% (355)	91% (336)	94%
	S10	337	—	89% (301)	96% (322)	93%
	S86	262	—	—	95% (248)	95%
	S87	249	—	—	99% (147)	99%
	S88	198	—	—	87% (173)	87%
	S91	169	<u> </u>	<u> </u>	92% (155)	92%
Average		97%	91%	93%	93%	

(): The figures inside indicate the number of households with user fee paid

3-9. User Fee Collection Amount in Sheikan

From October to December 2024

Locality	Section	Amount o	Total		
Locality	Section	Oct.	Nov.	Dec.	(SDG)
	S94	1,107,000	1,089,000	1,065,000	3,261,000
	S1	1,383,000	1,227,000	1,305,000	3,915,000
	S9	—	1,065,000	1,008,000	2,073,000
Shoikan	S10	—	903,000	996,000	1,899,000
Sheikan	S86	—	<u> </u>	744,000	744,000
	S87	—	—	441,000	441,000
	S88	—	—	519,000	519,000
	S91	—	—	465,000	465,000
Total		2,490,000	4,284,000	6,513,000	13,317,000

• 3,000 SDG/House \Rightarrow 5,000 SDG/House (From Feb. 2025)

3-9. Balance of user Fee Collection in Sheikan

	Income				Expenditure				Balance	е																							
Section No.	HHs No.	Collected No.	Unit rate (SDG)	Unit rate (SDG)	Amount (SDG)	Amount (USD)	Items	Qua ntit y	Unit rate (SDG)	Unit rate (USD)	Amount (SDG)	Amount (SDG)	(SDG)	(USD)																			
S 94	(371)	(355)			1,420,000	710	Fuel (litter)	25	2,600	1.3	65,000	32.5																					
S1	(502)	(435)			1,740,000	870	Driver	1	4,400	2.2	4,400	2.2																					
S 9	(369)	(336)	4000			1,344,000	672	Workers	2	4,000	2	8,000	4																				
S10	(337)	(322)		2.0	1,288,000	644	Rate collector	1	5,000	2.5	5,000	2.5																					
S86	(262)	(248)		4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000 2	4000 2.0	2.0	992,000	496												
S87	(149)	(147)																								588,000	294						
S88	(198)	(173)																		692,000	346												
S91	(169)	(155)																				620,000	310										
S7	(460)	(45)					180,000	90																									
S104	(320)	(124)			496,000	248																											
Total					9,360,000	4,680	Sub total (1 day)				82,400	41.2	6,064,000	3,032																			
(1 month)					9,300,000	4,000	Total (1 month)				3,296,000	1,648		3,032																			

• Collected number of user fee for month of December

• 5000 SDG/House *0.2 (20% of the user fee collection is be charged by Sheikan Locality)

After Delivery GA vehicles, fee collection can be operated by collection user fee

3-10. Amount of Waste collected in Sheikan

Unit: ton

	Dec.	2021	Dec. 2024			
Type of waste	Generated Collected Amount Amount		Generated Amount	Collected Amount		
Household	260.0	36.0	280.0	13.0 (4.6%)		
Business	88.0		95.0	54.5 (57.4%)		
Total	348.0	36.0(10.3%)	375.0	67.5 (18.0%)		

$10.3\% \Rightarrow 18.0\%$ (Without GA vehicles)











THANK YOU