

Case Study and Knowledge Sharing on Waste Management

North/South Cooperation Across the Border
in Sudan



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1. Background

1.1 History of Sudan SWM Project

Framework of the Project

- **Overall project** : Improved sustainable solid waste management (SWM) system in Khartoum state .
- **Project Purpose**: the SWM becomes more efficient and effective .
- **Budget** : 15,000,000 USD
- **Period** : 2014 - 2017 (3 years)

Project Activities 2014 - 2017

- Sign agreement for technical cooperation
- Implement pilot projects in residential area
- Training (workers, communities, supervisors)
- Awareness (Bus Tours, lectures, work shops, community meetings)
- Collection trucks and landfill equipment procured by Grant Aid in 2015
- Training regarding Grant Aid equipment's for Drivers, Mechanics and Collection crews
- Constructed central work shop (two floors)

Fix Time Fix Place Method

BEFORE

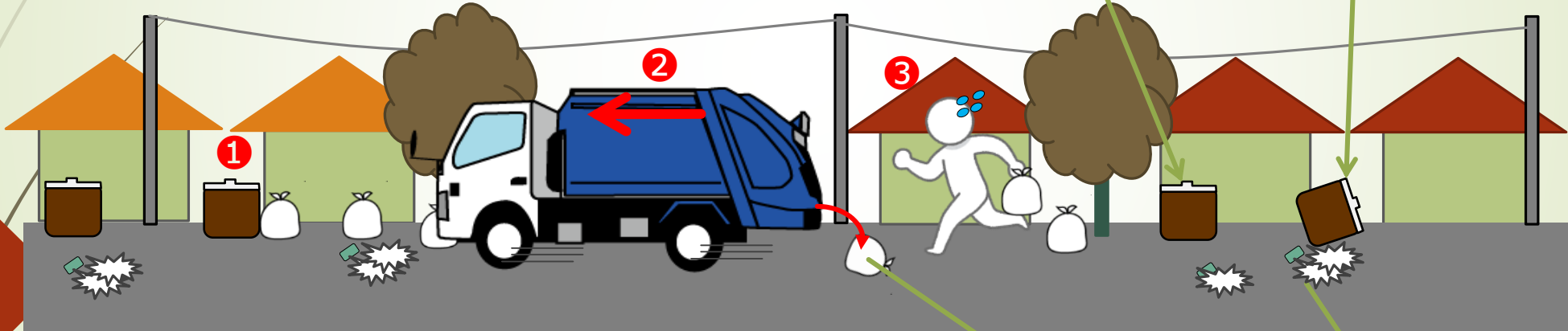
نظام الجمع من منزل

- لمنزل

- ① كثرة النقاط يؤدي ال صعوبة جمع من كل النقاط
- ② السيارة متحرك يؤدي تساقط نفايات اثناء الجمع
- ③ عامل النفايات يبذل مجهود اكثر

لا ترجع السلة الى النقطة الجمع

نفايات منسية



نفايات مبعثرة

نفايات ساقطة من
السيارة



نظام الجمع في المكان المحدد و الزمان المحدد

AFTER



6



- يتم الجمع بشكل آمن
- يمكن جمع كل النفايات
- يصبح المنطقة نظيفاً و لا توجد نفايات مبعثر

Central Workshop in Soba



Japanese Embassy with Project Team



1. Background

1.2 Current Situation of South Sudan SWM Project



Waste Management By-law of Juba City Council

- Department of Environment is responsible for waste collection from markets and main roads.
- Operation Permits for garbage collection, Licenses for private sewage tankers.
- Donations from well wishers
- General campaign involving all stakeholders
- Defaulters and offenders

The By – Law determinates the above points to happen



Practical Collection of waste from main Roads on daily basis



1. Background

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1.3 Cooperation among Sudan/South Sudan/JICA

Project Purposes (FEB2017 – JULY2018)

1. Collect basic information of solid waste management system (waste generation, collection and transportation, intermediate treatment, recycling and landfill), which will be a foundation of the new master plan of SWM in Juba.
2. Review lessons learnt from SWM system at the city level in Sudan, and identify priority issues and effective supports for the future to improve SWM in Juba.

Summary of Study tour and meeting

	Activity	preparation
1	Kick-off meeting	<ul style="list-style-type: none"> • To collect the data & analysis
2	1st study tour	<ul style="list-style-type: none"> • To analyze field data collection
3	2nd study tour	<ul style="list-style-type: none"> • To make the annual report • To plan pilot project outline
4	Final workshop	<ul style="list-style-type: none"> • To make action plan of pilot project • To summarize data collection activity
5	(Extension) Pilot project preparation	<ul style="list-style-type: none"> • To make realistic pilot project plan
6	(Extension) Pilot project implementation	<ul style="list-style-type: none"> • To analyze data from pilot project

2. Study Tour in Sudan

2.1 Outline of Study Tour

1. Courtesy Call

- A) Ministry of Environment, Natural Resources and Physical Development (MENRPD)
- B) Minister / Higher Council, Khartoum State
- C) Khartoum Cleaning Corporation (KCC)

2. Site Visit

- A) AU Office (Karary & Khartoum): Fixed-Time Fixed-Point Collection
- B) Transfer Station (Omdurman/ Khartoum/ Umbadah)
- C) Landfill Site (Omdurman/ Bhahari)
- D) Central Workshop (Soba)

FIX-TIME FIX-PLACE COLLECTION



AU Office

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Transfer Station



CLOSING CEREMONY

MENRPD of Sudan

**Representative of
Govt. of South Sudan**



2.2 Experiences gained during the Study Tour

- How to formulate action plan and Master Plan (M/P) through data collection.
- The collection system in Khartoum State (the waste from the residential areas, markets, streets etc. to the transfer station and finally to the landfill site) and the importance of weighing machine (weigh bridge) and the use of incinerators for medical waste.
- Establishment of Workshop including training of maintenance of collection vehicles.
- Establishment of recycling facility is important for Juba but also the feasibility and sustainability should be taken into consideration

3. Lessons Learnt & Challenges

- JICA pilot project has succeeded in Khartoum State through cooperation, commitment and hard work.
- Before the pilot project the department of Environment and Sanitation did not know the amount of waste which had been collected but now we came to know that the collection ratio is only 4% and the rest are dumped illegally.
- Involvement and participation of the leadership in decision making regarding the pilot Project.
- Hard work, hospitality, commitment and team work by the localities and KCC.
- The Japanese history of Solid Waste management and the current situation.

4. Way Forward

- Exchange experience and knowledge is important, such as survey instruction, mechanic training, collection system improvement. E.g. Mr. Gosai was dispatched to support to conduct waste amount generation survey in Juba on September 2017.
- Governmental cooperation between Juba and Khartoum continue.
- Expansion of SWM project from Khartoum to other state, and pilot project in Juba.
- Temporary dumping site and Official landfill should be renovated and new dumping site is required to be open for expanded area.

Thank you for your
attention