



UNCDF support to Municipal Solid Waste Management Project

Integrated public-private partnership (PPP) for the collection and transportation, treatment and landfilling of waste

City of Mamou, Guinea



Description of the project

A. The problem

1



Low waste collection rate

- Waste collection rate is ~5%
- 95% of City waste generators are not covered
- Waste accumulates in open areas leads to increased healthy risk & environmental pollution

2



No integrated SWM system

- Waste collection, transport, treatment & landfill
- No separation at source

B. Key features of the proposed Integrated PPP project



Implementation Strategy

“1 neighborhood at a time”

- 1st Year- fully cover 2 Districts of CDB for demonstration
- After 6months- increase to 3 and to 5 after the 2nd year
- Use labor intensive approach in waste management
- Private Sector to manage City SWM services



Collection

- **1st YR- 2500** identified waste generators to be served, and projected to reach **8500** in year 10
- Sorting to be done at source
- Tools to be provided (truck, tricycle, bins) for door-door collection and transportation
- Waste collection rate to improve from 5% to 15%



Landfill & Recycling

- proper disposal of waste to reduce quantity
- transforming plastic waste into paving stones (produce 229,500m² paving stones in 10yrs)
- transforming organic waste into compost (produce 1375MT in 10yrs)

Waste transported to landfill

The Investment and financing model

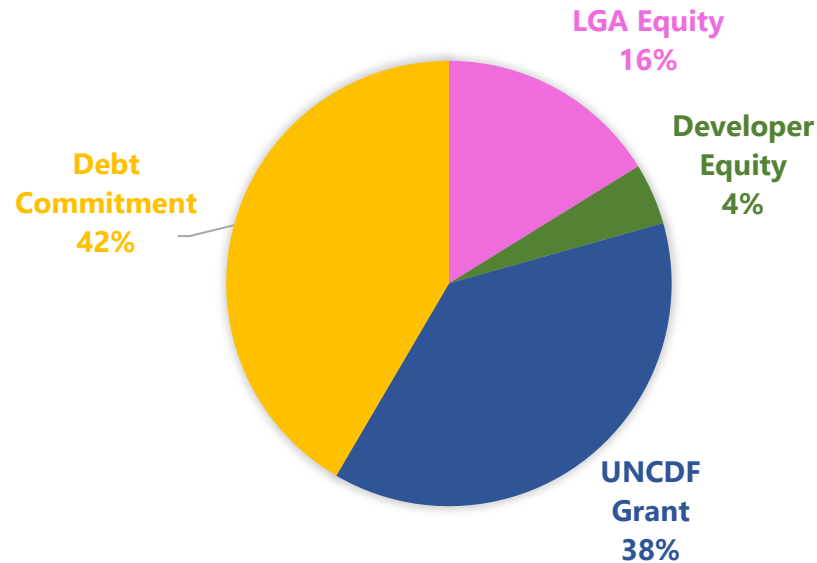


1. Investment Size

USD 264,452

3. Payout Model

2. Financing Structure



- Funds were used for construction, equipment and working capital
- SPV was created to manage the project
- Efficiency of water & electricity fees collection is low in Guinea
- Awareness campaigns and user willingness to pay studies were conducted to ensure understanding, fees benefits & sustainability
- User fee set at \$1.5 / month - users committed to pay up to \$2/month
- Recycled projects generate 62% of SPV revenue, that has subsidized fees from poor households (user fees account for 33% of the revenue)
- Allows to cover operational costs & guarantee social acceptance
- Net Present value of the total economic benefits is USD1,097,811 .
- The Economic Rate of Return (ERR) is 43.3%



People-first elements

1. Access to essential service



- City population of 90k had no access to waste collection services
- Only 5% of 14,168 tons of waste/ year was collected & transported
- 2 districts out of 28 that is 600 out of 2500 households targeted for Yr 1 have been registered
- 8500 households and businesses to be reached in 10yrs
- Is a door-to-door collection, efficiency is expected to be 80%
- 60% of waste is expected to be segregated at source
- Effective system to capture & solve customer related complaints

3. Womens Empowerement



- SWM is perceived as masculine work in most areas, but awareness is continuer to be raised in Mamou
- SPV will be headed by a team of women to encourage others to take an interest in this type of work.
- Proportion of women in the SPV workforce and in training – 35%
- Equal chances & opportunity for women in accessing jobs
- Easier the burden of dealing with disposing their household waste

2. Creation of Jobs



- Has a potential to create ~3,360 jobs (direct, indirect and induced) in 10 years; i.e. ~ 336 jobs per year
- To commence, 100jobs to be created in YR1 and 200 in YR 2 (both direct and indirect)
- 200 young people to be trained in YR1 following a Cash for Work approach- in partnership with ENABEL

4. Benefits to Society



- Waste collection improves public human health
- Environmental: Reduction of waste going to landfills
- Recovers valuable materials from the waste, producing by-products that are useful to the population
- Income from jobs, revenue to City
- A reduction in GHG emissions through proper waste treatment



Capacity need

- Guinea needs support to establish coherent national directives or policies on SWM to coordinate and support the action of Cities
- The project has set up a case study of an integrated PPP MSWM system in Guinea that deserves to be replicated in other cities, to influence establishment of appropriate policies or national mechanisms to strengthen municipal capacities



- Involve beneficiaries right from project inception to ensure ownership, support during implementation and sustainability
 - 600 households are already covered (from Jan to date)
 - Users understood the benefits, changed their mind and are willing to pay waste collection fees

Mindset change & social innovation



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