Cities Alliance Innovation Programme

Stronger Partnerships: Local Innovations for New Climate Realities in Cities

Cities Without Slums



- Grant recipient: Tree Adoption Uganda
- Grant amount: USD 30,000
- Duration: 8 months
- Year: 2020-2021

WASTE MANAGEMENT FOR FLOOD CONTROL IN BWAISE, AN URBAN SLUM IN UGANDA

Creating a community that is intrinsically motivated to manage its waste appropriately for flood control

Project overview

What is the problem?

Poor disposal of garbage is the major cause of flooding in Bwaise, Uganda. People impacted by flooding lose livelihoods and belongings as well as time spent drying out their flooded houses, which also exposes them to further health hazards.

Where is it?

In Bwaise, an urban slum in Kampala, Uganda

Who does it affect?

Flooding affects all residents in the area, but women are especially vulnerable due to their low socioeconomic status, fewer opportunities, and responsibilities that confine them at home.

What are the causes?

Poor disposal of garbage, which ends up in the already inadequate drainage channels, causes blockages and hence flooding. The underlying factors are inadequate waste management facilities, limited drainage systems, and the need for better community awareness and education.

Approach

Tree Adoption Uganda (TAU) aims to change behavior and inspire an intrinsic desire towards environmental stewardship through sensitizing and educating the community about the need for and value of proper waste disposal. The project includes a variety of approaches:

- Practical learning sessions on proper waste sorting
- Collection of segregated waste for 1000 households
- Demonstration of potential value in sorted waste by
 - Providing carbonizers and tarpaulins to convert organic waste into carbon for briquette making
 - Linking residents with recyclers to sell collected reusable plastics to materialize it into a profit

To enable the community to adapt to the new realities of climate change, TAU is also advocating for better drainage systems and engineering designs, in collaboration with city authorities and other stakeholders, by engaging all key stakeholders in planning and formulating processes. The aim is to reduce future flooding resulting from inadequate facilities, such as narrow drainage channels.



PROJECT UPDATE

Achievements so far

- 1. Conducted a baseline community survey to better understand waste management and flooding situations in the area, as well as map households. Mapped 100 clusters of 10 households each to capture baseline information.
- 2. Held an initial stakeholders' workshop to present the survey report, introduce the project, get stakeholder recommendations, and identify potential project partners.
- 3. Revised the project strategy based on the survey and community recommendations: instead of colour-coded collection bins, the project will distribute carbonizing drums to convert sorted organic waste into carbon for briquette making.
- 4. As waste must be properly sorted for carbonizing, conducted community awareness and training on waste management, sorting, carbonizing and briquette making.
- 5. Created an <u>animated video</u> to raise awareness on waste management and for training. It was shared through TAU social media pages and by Cities Alliance and will soon be running on national television to create awareness at a bigger scale.

Lessons learned

- Communities contain a great deal of knowledge; it is crucial to consult with them before introducing prospective technologies. For this project, community members shared concerns about potential problems, such as theft of the colour-coded bins and inconsistent collection and disposal of waste, which would create a public hazard. They instead suggested using carbonizers for converting sorted organic materials into carbon, which could be sold or used to make briquettes for cooking.
- From the survey, TAU also learned that the waste management payment system is not effective in Bwaise 3, with most of the respondents recommending free waste collection services, due to the low socio-economic status of the community.
- Because of COVID-19 health restrictions, TAU could not engage all stakeholders through targeted workshops, but learned that they could meet virtually instead. Activities like "sports day" couldn't be conducted as planned, but TAU were able to adapt community clean-ups to a hyper local scale for small groups instead, while strictly following the Ministry of Health guidelines. The COVID-19 pandemic has further shown how small the planet is; and going forward, projects will have contingency plans for climate change disasters and public health issues.
- Engaging different stakeholders quickens processes and provides a wider view of how to holistically solve local challenges; during the workshop it was easy to link the community with other key stakeholders like recyclers and briquette manufacturers.
- Despite some project fatigue, TAU found that the community was more enthusiastic and welcoming toward projects that directly contribute to their livelihoods.

Moving forward

- 1. TAU will procure carbonizers and tarpaulins to distribute for transforming waste.
- 2. Clean-up activities have begun at the small-group level as of November. Sport day will be considered for early in 2021, depending on the COVID-19 situation.
- 3. TAU will continue to measure progress and impact through M&E activities.



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