

Kasa Kiosk: Your Clean Neighbourhood Partner, An innovative solution to reduce black spots in Bangalore city



Picture 1: Kasa Kiosk at Wind Tunnel Road

1. Project inception

Omega Healthcare Management Service Pvt Ltd, a leading healthcare outsourcing services and solutions providing company, with its headquarters at NAL Wind Tunnel road, Murugeshpalya. Omega Healthcare approached Saahas, a waste management non-profit organisation with a

request to provide a solution for the spillage from the transfer station leading to the formation of black spots at the Wind Tunnel road, from Omega Healthcare to Air Force campus entrance.

Saahas thus came up with Bangalore's first manned and monitored bin-based segregated waste collection station at Wind Tunnel road, Murugeshpalya in December 2018.

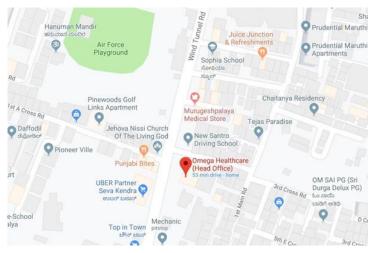


Image © Google Maps



2. Situation before Project Intervention

The Wind Tunnel Road, leading from Air Force campus entrance to Omega Healthcare office had a Bruhat Bengaluru Mahanagara Palike (BBMP) transfer station, where waste used to get transferred from auto tippers to compactors. So, in the process, waste would spill on the road and footpaths, leading to regular black spots. The black spots remained, even after BBMP cleared waste at the transfer station on a regular basis. This prompted the people to drop their waste

where waste had spilled out. Also when BBMP vehicles do not turn up for collection, people would drop waste in the dumpsites on Wind Tunnel Road.



Picture 2: Black spot in Wind Tunnel Road



Picture 3: BBMP transfer station in Wind Tunnel Road

3. Steps taken in implementing the Kasa Kiosk project

Kasa Kiosk project at Wind Tunnel Road, Murugeshpalya is a joint initiative of Omega Healthcare Management Service Pvt Ltd, BBMP and Saahas, a non-profit organisation. The steps taken in implementing the project are as follows:

- Omega Healthcare which is the funding organisation for the project, as part of their CSR initiatives, approached Saahas to come up with a sustainable waste management solution for the prevailing situation at Wind Tunnel Road.
- ➤ A stakeholder meeting was held between Saahas team and Omega Healthcare officials, to assess the situation and to come up with a solution for the dumpsites.
- > Saahas team conducted an audit to understand how many people were dumping waste regularly.
- A detailed project proposal, consisting of project implementation steps, manpower required, setting up of Kasa Kiosk, Kiosk operations-collection-disposal, along with audit findings was submitted to Omega Healthcare from Saahas.
- ➤ With the project approval from Omega Healthcare, Saahas team took necessary approvals and permissions from BBMP. Saahas also took the adjacent school authorities and



- Airforce camp officials into confidence, as the Kiosk is built on the wall adjoining the school and Airforce camp.
- The design of Kasa Kiosk, Kiosk logo, flyers and awareness materials were finalised in consultation with Omega Healthcare officials.
- A survey of shops and households in Wind Tunnel Road and cross roads adjacent to Omega Healthcare's office were conducted to assess the present collection scenario, segregation levels, reasons for dumping and lack of waste segregation.
- Continuous IEC (Information, Education, and Communication) sessions were organised by Saahas the residents/shops of Wind Tunnel Road and roads adjacent to it, through door to door awareness campaigns with households and shops, to bring everyone on board to achieve the project objectives.
- ➤ Volunteers from Ugly Indian and Omega cleaned the premises, cleared the footpath of debris and painting of adjacent walls.
- Installation of the Kasa Kiosk was completed in the second week of December 2018.
- The Kasa Kiosk, which is a manned waste collection Kiosk for collecting segregated waste, was inaugurated on December 18th 2018 at Wind Tunnel Road, Murugeshpalya, to address the problem of illegal mixed waste dumping in Wind Tunnel Road.



Picture 4: Kasa Kiosk inauguration

- ➤ Continuous operations, and manned collection of segregated waste is done in 2 shifts, from 7 am to 11 am and 7 pm to 11 pm.
- Regular awareness sessions were held with the commercial establishments and households on how to use Kasa Kiosk, assessment of waste segregation, as well as feedback from public at the Kasa Kiosk, monitoring collection, storage and transport of dry, wet and reject waste categories
- Follow up with BBMP authorities for regular pick up of segregated waste categories from Kasa Kiosk and to move the waste transfer station from Wind Tunnel Road.

4. Awareness Campaigns

Awareness of people, forms a very significant part of the project. Various awareness campaigns were conducted for the general public, shops and households in the adjoining areas near the Kasa Kiosk. A survey was conducted during the initial stages of the project, followed by a door to door awareness campaign. Street plays were organised, and regular awareness to the public who handover waste at the Kasa Kiosk, throughout the duration of the project.







1) <u>Initial survey and project awareness to shops and residents:</u> Saahas team, conducted survey of shops and households in Wind Tunnel Main Road and also on the cross roads adjacent to Omega Healthcare's office. During survey, a detailed set of questions regarding the present collection scenario, segregation levels, reasons for dumping and lack of segregation etc. were asked. Residents were also asked if a Kiosk, would actually be beneficial or not.

2) <u>Door to Door awareness campaign:</u>

Introduction on waste categories and proper waste management practices. Basic information on the need for waste segregation at source and to hand over segregated waste to the Kasa Kiosk.

3) Review or assessment survey:

A survey was conducted to find out the reason for drop in the number of people who were giving waste in the morning shift to the Kasa Kiosk. The reason attributed was that the BBMP waste collection had become regular.



4) Jaatha and Street plays:

Saahas team also organised Jaatha and street plays to reach out to the general public, children, shops and residents of Murugeshpalya and the streets adjoining to the Kasa Kiosk at Wind Tunnel road.





Picture 5, 6, 7, 8, and 9: Survey, awareness campaign and street play images

5. Waste collection - storage - transport

Segregated waste is brought to the unit by the public, and is collected in three categories; wet waste, dry waste and domestic hazardous waste into three separate bins. Segregated dry waste is sent to the nearest Dry Waste Collection Centre, whereas wet waste and domestic hazardous waste is picked up by the BBMP auto tippers and rejects waste collection vehicle.



Picture 10: Waste being handed over at Kasa Kiosk









Picture 11: Wet and Dry waste bins

Picture 12: Wet waste transport

Picture 13: Reject waste transport

Waste is stored in three different categories/bins in the unit. Wet waste is stored in green bins, and is collected separately by the BBMP wet waste collection auto tipper.

Dry waste is sent to the nearest BBMP DWCC, which is handled by an organisation called Kartavya. The reject waste is picked up by the BBMP reject collection vehicle or compactor, which is sent to landfills.



Picture 14: DWCC near Wind Tunnel Road

6. Project Challenges

- The main challenge was to convince the entire neighbourhood including the nearby school and hospital inside the Airforce camp that the Kasa Kiosk will not become one more dump spot, and is in fact going to be a solution for the dump spot.
- Another important challenge was to convince people to segregate waste at source and to bring segregated waste to the Kasa Kiosk.
- To convince BBMP to shift the transfer station from Wind Tunnel Road, so as to avoid creation of black spots and dumping of waste.







Picture 16: Black spot in Wind Tunnel Road



- After shifting the transfer station at wind tunnel road, dumping of waste takes place in front of the Kasa Kiosk.
- During Kasa Kiosk non-operational timings, waste gets frequently dumped around the Kasa Kiosk, and frequent cleaning has to be done.







Picture 17 and 18: Waste dumped around Kasa Kiosk

Picture 19: Sign board at Kasa Kiosk

- ➤ Irregular waste collection by BBMP from the Kasa Kiosk, has many times resulted in waste getting piled up around the Kasa Kiosk, as it cannot store higher quantities, inside the Kasa Kiosk. Also, wet waste starts stinking and both wet-dry waste attracts rodents, making the place dirty.
- A significant reduction in number of people giving waste during the morning shift was observed.
- ➤ It is observed that the BBMP waste contractor collects mixed waste from residential areas. So, convincing residents the need and importance of waste segregation has been difficult
- Lot of eateries, small hotels and other commercial establishments drop the waste in and around the Kiosk, during non-operational hours, and is difficult to identify the offenders.





Picture 20 and 21: Waste stored around the Kasa Kiosk



- > Due to weekly dry waste collection from the DWCC contractor, waste has to be stored outside the unit. Lack of storage space at the kiosk has again led to spillage and illegal dumping by residents.
- Vehicular parking in front of the Kasa Kiosk, which blocks entry and visibility of the Kiosk, is one more problem, which has been continuously dealt with.

7. Project Impact

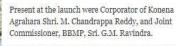
- > The ongoing project has completed 200 days of non-stop operation at the Kasa Kiosk as on 5th June 2019. Saahas staff has continuously worked in two shifts every day (morning shift (7 am -11 am) and the evening shift (7 pm -11 pm)), to make the project a success.
- > Awareness on scientific waste management has been created among the shops and residents in and around Wind Tunnel Road, through door to door awareness, jaatha and street plays.
- Recognition of the work done through Kasa Kiosk, in print media, as well as in social media, and also acknowledgment of the same by BBMP authorities.

Omega Healthcare, with BBMP and Saahas, takes up an initiative to keep NAL Wind Tunnel Road clean

Published on December 19, 2018

Bengaluru: Omega Healthcare Management Services Pvt. Ltd., in association with Bruhat Bengaluru Mahanagara Palike (BBMP) and Saahas - a non-profit organization working in the field of waste management, today set up its first monitored bin station for segregated-waste collection called 'Kasa Kiosk' in the city. As part of the launch, volunteers

> from Omega Healthcare kicked off a plog run, collecting dry waste and handing it over at the kiosk.



The kiosk set up near the Air Force Campus on NAL Wind Tunnel Road, Murugeshpalya, will be manned by two people across two shifts in the day, 7-11 am and 7-11 pm. Awareness campaigns are being organised around the area to inform people about this facility where they can drop segregated waste at their convenience. Collected dry waste would be handed over

to the Dry Waste Collection Centre while Wet and Domestic Hazardous waste would be taken by BBMP.

Speaking at the event Mr. Gopi Natarajan, CEO, Omega Healthcare, said, "At Omega we take CSR very seriously and explore numerous avenues to contribute constructively to the communities in which we are present. The Kasa Kiosk is one of our initiatives to help the community residents sustain a more environment friendly way of life.

Explaining about the kiosk, Miss Divya Tiwari, CEO of Saahas said, "Often people are not able to handover their waste to the waste contractor and are forced to dump it leading to creation of dump sites. With the 'Kasa Kiosk' they can drop segregated waste at their convenience as the facility is open early in the morning and late night. However, segregation is key to ensure this waste gets processed instead of being dumped in landfills.

While the kiosk is a solution to manage waste better, it is the responsibility of every individual to support and consciously make eco-friendly choices to bring changes in Bengaluru and other cities too.



The Kasa Kiosk set up near Air Force campus on NAL Wind Tunnel Road, Murugeshpalya

City gets 'Kasa Kiosk', first bin station for collecting segregated waste

mestic hazardouswaste would hat Bengaluru Mahanagara Palike (BBMP) along with Omega Healthcareand Saahas on Tuesday launched 'Kasa Kiok' —city's first monitored bin station for segregated-waste station for segregated-waste collections. The station for segregated waste and handing it station for segregated waste would be taken by the civic body. Divya Tiwari, CEO of Saa-hasaid: "Often people are not able to hand over their waste out waste and handing it of the waste contractor, and are forced to dump it leading to the waste contractor, and the proposal contractor of the waste contractor of the waste contractor, and the proposal contractor of the waste contractor of the waste contractor, and the proposal contractor of the waste contractor of the wast

The kiosk is set up near Air ning. Force campus on NAL Wind
Tunnel Road, Murugeshpalya.

After banning litter bins in the city, this is one of the first induction. itiatives by the civic body to provide kiosks to dump segregated waste.

BENGALURU, DHNS: The Bru-hat Bengaluru Mahanagara in the day from 7-11 am and be taken by the civic body.

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can drop segregated waste at their convenience. The collected dry waste would be handed over to the dry waste collection According to the civic body, the kiosk will be manned by centre while the wet and do-

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. "However, segregation is key to ensure this waste gets processed instead of being dumped in landfills," she add

Picture 22 and 23: Kasa Kiosk featured in a web portal And a Bangalore daily (above)

A resident of Murugeshpalya has given a positive feedback of the Kasa Kiosk and the resident says, "People are very happy about the kiosk. Recently I heard many people talking good about it. They are happy that they have a place to handover the waste".



- Clear footpaths and cleaner walkways at the area near the Kasa Kiosk, on the Wind Tunnel Road, Murugeshpalya.
- Regular BBMP waste collection from houses in the area nearby of Wind Tunnel Road has improved significantly, with Saahas intervention.





Picture 24 and 25: Footpaths in Wind Tunnel Road near the Kasa Kiosk

8. Analysis and Discussion

As on 30th June 2019, nearly **29 tonnes of waste** has been handled through the Kasa Kiosk, from its inception on 18th December 2018. Nearly 8395 people (residents or small eateries) have handed over waste to the Kasa Kiosk, till the end of June 2019.

Table 1: Kasa Kiosk footfall and waste collection data

Waste collection data and footfall data of Kasa Kiosk							
Month of	Dry waste	Wet waste	Rejects	Total	Shift 1	Shift 2	Total
operation	In kilograms				Number of people		
December-18	581	627	110	1318	459		459
January-19	652	2020	288	2960	176	557	733
February-19	530	2310	579	3419	317	542	859
March-19	145	2090	3195	5430	723	1058	1781
April-19	630	2360	1590	4580	557	854	1411
May-19	910	2550	1700	5160	673	848	1521
June-19	796	3080	2090	5966	705	926	1631
Total	4244	15037	9552	28833	3610	4785	8395



The project has been able to create awareness on source segregation of waste among the residents and commercial establishments of wind tunnel road, and in ensuring that segregated waste reaches proper end destinations. Bulk generators like small eateries, hotels, juice shops etc. have come on-board with the project and most of them segregate waste and handover segregated waste to the Kasa Kiosk.

The long term plan is to make the programme sustainable by levying service fees for waste collection/handing-over and handling of waste to Kasa Kiosk on the commercials establishments and vendors around the Wind Tunnel Road area. This would support the cost of operations and maintenance of Kasa Kiosk.

9. Newspaper articles quoting Kasa Kiosk

- https://www.apnnews.com/omega-healthcare-with-bbmp-and-saahas-takes-up-an-initiative-to-keep-nal-wind-tunnel-road-clean/
- https://www.thehindu.com/news/cities/bangalore/more-kasa-kiosks-in-the-offing/article25987958.ece
- https://www.deccanherald.com/city/kasa-kiosk-citys-first-bin-708801.html
- https://swarajyamag.com/insta/bengalurus-first-of-its-kind-kasa-kiosks-more-manned-stalls-for-garbage-collection-segregation-soon

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