

ZIRO

Festival

2023 Waste Management Audit

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Executive Summary

Objective of the Report: The primary aim of this report is to evaluate and present the waste management efforts undertaken for the Ziro Festival of Music 2023.

Background: The Ziro Festival of Music is an annual event celebrated in the picturesque Ziro Valley, Arunachal Pradesh, India. The 2023 edition marked its tenth year, drawing a crowd of over 10,000 attendees over four days, from 28th September to 2nd October.

Established in the 2011, the festival has witnessed a steady growth in its audience, drawing attendees not just from India but from across the globe. Over the years, it has provided a platform for a diverse range of artists, from emerging local talents of the Northeast to internationally acclaimed musicians. But what truly sets the Ziro Festival of Music apart is its unique setting.

The Ziro Valley, a UNESCO World Heritage Site nominee, is renowned for its lush greenery, terraced rice fields, and the distinct culture of the indigenous Apatani tribe. The festival, in many ways, is not just about the music; it's about experiencing a way of life, a culture, and the breathtaking beauty of nature.

This festival is not just a musical extravaganza but a collaborative effort, with the local Apatani tribe, the administrative body of the Lower Subansiri district, and Arunachal Pradesh's tourism department playing pivotal roles. This year, the festival's waste management initiatives were bolstered by the support of the MakeMyTrip Foundation.

Key Highlights

Pre-Festival Measures: The festival's preparatory phase was marked by several significant steps towards sustainability.

- The festival team underwent comprehensive briefings on sustainability practices
- Collaborations were forged with the urban development authority to ensure the proper disposal and timely pick-up of generated waste
- The Women's Association of Ziro played a crucial role by assisting and supervising the on-ground waste management team
- The festival enlisted the expertise of Bangalore Creative Circus as waste management collaborators, responsible for designing and executing the waste management system and operations
- Vendor stalls were briefed about the festival's sustainability guidelines, emphasizing practices such as the prohibition of single-use plastics and the importance of waste segregation

During the Festival: Waste management highlights from the festival's sustainability initiative -

- Bins were strategically placed for attendee convenience and waste categorization
- Waste was regularly collected to prevent bin overflow and maintain cleanliness
- Waste was further segregated by staff to ensure sorting as per waste management criteria
- Organic waste was composted on-site, reducing volume and creating compost
- Recyclables were separated and stored at waste segregation plant for future processing
- Non-recyclables were collected separately for contamination-free disposal after the festival
- Urban Development Authority provided specialized trucks and manpower for waste transportation
- A tracking system was implemented for monitoring waste collection data
- Educational signage and information boards were displayed for attendee awareness
- Announcements and artist mentions were made to promote waste management
- Volunteers were actively engaged in guiding and participating in waste management

Post-festival impact: A thorough cleanup was conducted post-festival to remove all waste-

- Segregated waste was transported to Uzwal Ziro's facility for further processing
- Non-recyclable waste was disposed of responsibly, adhering to regulations and best practices
- A waste audit quantified the total waste managed, offering insights into the initiative's effectiveness

Importance of Waste Management at Live Events

Large-scale events, especially those that draw thousands have a significant environmental footprint. In the context of Ziro Festival, waste management isn't just about cleanliness; it's a broader commitment to sustainability, environmental responsibility, and community well-being.

Environmental Impact: Events of this magnitude produce substantial amounts of waste, including food remnants, packaging, and other disposables. If not managed properly, this waste can harm local ecosystems, pollute water sources, and contribute to the global waste crisis. In ecologically sensitive areas like the Ziro Valley, the stakes are even higher.

Community Well-being: The Ziro Festival of Music is deeply intertwined with the local Apatani community. Ensuring effective waste management is not just about protecting the environment but also about safeguarding the health and well-being of the local community.

Setting a Precedent: Events like the Ziro Festival of Music have the power to set standards and inspire others. By prioritizing waste management, the festival not only addresses its immediate environmental impact but also sets a precedent for other events, promoting a culture of sustainability in the larger event industry.

Project Overview

Project Description: The waste management project for the Ziro Festival of Music 2023 was a comprehensive initiative aimed at minimizing the environmental impact of the festival. Through a combination of pre-festival planning, on-ground measures during the event, and post-festival evaluations, the project aimed to ensure that waste is effectively collected, segregated, and disposed of in an environmentally responsible manner.

Expected Waste Generation:

- **Types of Waste:** The festival anticipated generating a mix of organic waste (food remnants, natural decorations), recyclable waste (paper, certain plastics, glass), non-recyclable waste (certain plastics, disposables), and potentially a minimal amount of hazardous waste (e.g., batteries from electronic equipment).

Key Stakeholders: The project involves multiple stakeholders, each playing a pivotal role. This includes:

- **Festival Organizers:** Coordination of all waste management activities, liaising with partners, and ensuring adherence to the project timeline
- **MakeMyTrip Foundation:** Providing support, both financial and logistical, for waste management efforts
- **Urban Development Authority:** Providing logistical support and expertise
- **Apatani Women's association:** Providing manpower and logistical support
- **Bangalore Creative Circus:** Consulting and developing and supervising the waste management process
- **Uzwal Ziro Charity Mission:** Providing expertise and waste disposal unit
- **St Clare College:** Providing student volunteers

Project Timeline:

- **Pre-Festival (August 2023 to 27th September 2023):** Planning, stakeholder meetings, setup of waste management infrastructure
- **During the Festival (28th September - 2nd October 2023):** Active waste collection, segregation, waste transportation and initial processing
- **Post-Festival (Month-Year to Month-Year):** Waste transportation, disposal, evaluations, and feedback collection

Challenges and Constraints:

- Logistical issues related to waste transportation, given the remote location of Ziro Valley
- Weather conditions that might affect waste collection and processing
- A well trained workforce

Monitoring and Evaluation: To ensure the effectiveness of the waste management efforts, several monitoring and evaluation mechanisms were put in place:

- **Metrics:** Tracking the amount and types of waste collected, segregated, and processed daily
- **Feedback Systems:** Gathering feedback from attendees, vendors, and on-ground staff to identify areas of improvement
- **Periodic Reviews:** Conducted regular checks to evaluate the function of the waste management system and plan

Pre-Festival Measures

In the lead-up to the 2023 edition of the Ziro Festival of Music, there was a lack of detailed historical data on waste generation from previous editions.

The partnership with the MakeMyTrip Foundation proved to be a game-changer in this context. With their support, the festival was in a place to undertake a more detailed and structured and precise waste audit.

Without precise numbers, the festival relied on general estimates based on the size of the audience, the number of vendors, and the nature of the event.

Vendor & Stall Guidelines: All vendors and stalls were provided with a set of guidelines emphasizing the festival's sustainability practices. These guidelines included:

- Prohibition of single-use plastics
- Waste segregation practices
- Encouragement to use biodegradable or recyclable materials for packaging and serving

Waste Management Infrastructure Setup: To facilitate effective waste collection and segregation:

- Designated waste collection points were established throughout the festival grounds
- Multiple bins, clearly labeled for different types of waste (organic, recyclable, non-recyclable), were strategically placed
- Signage and information boards were set up to guide attendees on proper waste disposal and the importance of segregation
- A waste segregation zone was constructed where the all waste for from the collections points was brought, further segregated and weighed
- A Compost pit was dug where all the compostable waste was disposed

Training & Awareness:

- **Staff and Volunteers:** Before the festival commenced, training sessions were organized for staff and volunteers. These sessions focused on the importance of waste management, the festival's sustainability goals, and the specific roles each individual/team would play in achieving these goals
- **Awareness Campaigns for Attendees:** In the weeks leading up to the festival, awareness campaigns were rolled out on various platforms, including social media, the festival's website, and email newsletters. These campaigns aimed to educate potential attendees about the festival's waste management initiatives and how they could contribute



The Waste Segregation point located on ground

Measures During the Festival

Waste Collection & Segregation:

- **Strategic Placement of Bins:** Bins were strategically placed throughout the festival grounds, ensuring easy access for attendees. Each bin was clearly labeled/color coded for different types of waste: wet and biodegradable, dry and recyclable, and reject waste
- **Regular Collection:** To prevent overflow and ensure cleanliness, waste from bins was collected at regular intervals and transported to the waste segregation zone
- **Further segregation:** Volunteers and staff further segregated the waste and checked to see if none of the waste segregation criteria were being violated

Wet and Biodegradable Waste	Dry and Recyclable Waste	Reject Waste
Tea bags, coffee grinds, leftover food, fruit and vegetable peels, tissue paper, leaf plates, garden waste etc.	Pet bottles, plastic carry bags, wrappers, newspapers, glass bottles, plastic wrappers, cardboard, aluminium tins, aluminium foil, tetrapaks, stationery, fabric etc.	Diapers, sanitary napkins, medicines, broken glass etc.

On-Site Waste Processing:

- **Composting:** Organic waste, which primarily consisted of food remnants, was directed to composting units set up on-site. This not only reduced the volume of waste but also created valuable compost that could be used to enrich the soil
- **Recycling Stations:** Recyclable materials, such as paper, glass, and certain plastics, were gathered and stored separately, ready to be sent to Uzwal Ziro's waste segregation point
- **Safe Disposal of Non-Recyclables:** Non-recyclable waste was collected in separate containers, ensuring it didn't contaminate the recyclable or organic waste streams. Plans were in place for its responsible disposal post-festival

Transportation of Segregated Waste:

Once the waste was meticulously segregated on the festival grounds, the next crucial step was its transportation for further processing. The Urban Development Authority played a pivotal role in this phase

- **Provision of Waste Collection Trucks:** The Urban Development Authority dispatched waste collection trucks to the festival site. These trucks were specially designed to handle and transport segregated waste, ensuring that the efforts made during the festival were not undone during transportation
- **Manpower Assistance:** Along with the trucks, the Urban Development Authority provided the festival with dedicated manpower. This team was responsible for efficiently loading the segregated waste onto the trucks, ensuring that different waste types remained separate and uncontaminated
- **Destination - Uzwal Ziro's Segregation Point:** The loaded trucks transported the segregated waste to Uzwal Ziro's waste segregation point located at Rachi, Ziro. Here, the waste underwent further processing, aligning with the broader waste management infrastructure of the region

Monitoring & Reporting:

- **Waste Tracking:** A system was implemented to track the amount and types of waste collected throughout the festival. This provided real-time data, enabling the waste management team to adjust strategies if certain areas generated more waste than anticipated
- **Feedback Mechanism:** A sustainability booth was constructed set up to gather attendee feedback on the waste management efforts
- **Daily Reviews:** At the end of each festival day, the waste management team convened to review the day's efforts, address challenges, and plan for the subsequent days

Awareness and Engagement:

- **Signage and Information Boards:** Throughout the festival grounds, informative signs and boards were displayed, educating attendees about the importance of waste segregation and the festival's sustainability goals
- **Stage announcements:** To further engage attendees, the festival emcee made regular announcements informing the audience to keep the festival's waste management efforts in mind. Artists were requested to do the same
- **Volunteer Engagement:** Volunteers played a crucial role in waste management efforts, from guiding attendees to actively participating in waste collection and segregation. Their enthusiasm and commitment were instrumental in the success of the waste management initiative



Festival Volunteers and cleaning staff worked together at the segregation zone to make sure all waste is segregated and weighed effectively.



- (L) Dustbins had instructions for waste disposal adobe them.
- (TR) The compost pit located on ground
- (BR) Garbage truck from the local administration on ground to pick up the segregated waste.

Post Festival Measures

Waste Transportation & Disposal:

- **Final Collection:** After the festival concluded, a thorough cleanup was conducted to ensure no waste was left behind on the festival grounds
- **Transportation to Uzwal Ziro's Segregation Point:** As previously mentioned, the segregated waste was transported to Uzwal Ziro's waste segregation point at Rachi, Ziro, for further processing
- **Safe Disposal:** Non-recyclable waste, which couldn't be processed at the segregation point, was responsibly disposed of in accordance with local regulations and environmental best practices

Waste Audit & Reporting:

- **Quantitative Analysis:** The total amount of waste collected, segregated, and processed was quantified. This data provided insights into the effectiveness of the waste management efforts and areas for improvement

QUANTITIES OF WASTE COLLECTED

	Wet waste	Dry waste	Reject waste	Total
28 Sept	126.2kg	63kg	4kg	193.2kg
29 Sept	253.45kg	85.85kg	0kg	339.3kg
30 Sept	434.06kg	345.87kg	0kg	779.93kg
1 Oct	431.9kg	370.15kg	8kg	810.05kg
2 Oct	469.4kg	250kg	10kg	729.4kg
Total	1,715.01kg	1,114.87kg	22kg	2,851.88kg



Uzwal Ziro Charity Mission's waste segregation facility located on the outskirts of Ziro



Plastic waste will be segregated further at the facility and then compacted.





Reject waste will be shredded and/or ground.

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www.zirofestival.com