



"WOMEN LEADING THE WAY: ASSESSING KNOWLEDGE, ATTITUDES, AND PRACTICES IN FEMALE-LED HOUSEHOLD WASTE MANAGEMENT WITHIN COIMBATORE CITY CORPORATION, INDIA"

ASAITHAMBI PONDHARSHINI, THULASI RADHAKRISHNAN, MOHANDAS SHAHIN, SHANMUGASUNDARAM SAMUTRA, RAVI SAM BANARJI ADRINA NICELINE, ARUNACHALAM MANIMEKALAN *
DEPARTMENT OF ENVIRONMENTAL SCIENCES, BHARATHIAR UNIVERSITY, COIMBATORE, INDIA DEPARTMENT OF GEOGRAPHY, NIRMALA COLLEGE FOR WOMEN (AUTONOMOUS), COIMBATORE, INDIA

RESEARCH MOTIVATION

Municipal solid waste (MSW) poses a significant challenge worldwide, impacting the environment, public health, economy, and local governance. In many countries, particularly in the Global South and Asian regions like India, women are highly responsible for managing household waste. Note ably 55 to 80% of MSW is generated at the household level

highlighting the crucial role of women in waste management. yet there is a lack of comprehensive studies focusing solely on women and their understanding of waste management concepts, particularly in the India. To address the gap between women's Knowledge, Attitudes, and Practices (KAP) on household solid waste and household waste management,

Municipal solid waste (MSW) poses a significant challenge worldwide, impacting the environment, public health, economy, and local governance. In many countries, particularly in the Global South and Asian regions like India, women are highly responsible for managing household waste. Note ably 55 to 80% of MSW is generated at the household level

AIM & OBJECTIVES

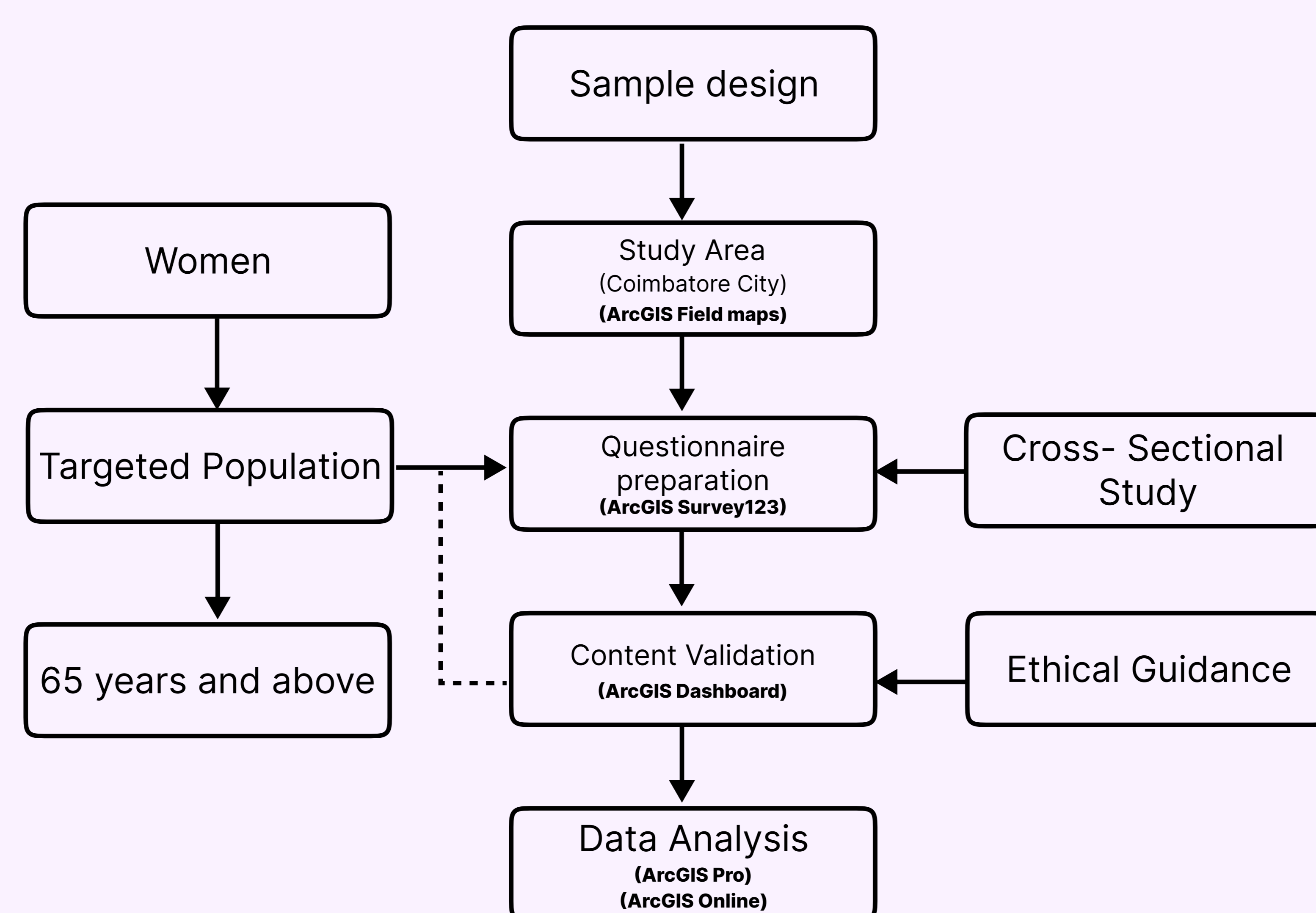
This study aimed to understand Knowledge, Attitudes, and Practices (KAP) of women in Coimbatore city regarding household waste management with the goal of promoting sustainable and efficient waste management practices

- Understand Knowledge, Attitudes, and Practices (KAP) of the primary gender responsible for house hold waste management in Coimbatore city.
- Explore the relationship between knowledge, attitude, practice and the socio-economic profile of residents to understand their interconnectedness.
- Provide recommendations to the authority of Coimbatore city based on the analysis for sustainable waste management practices.

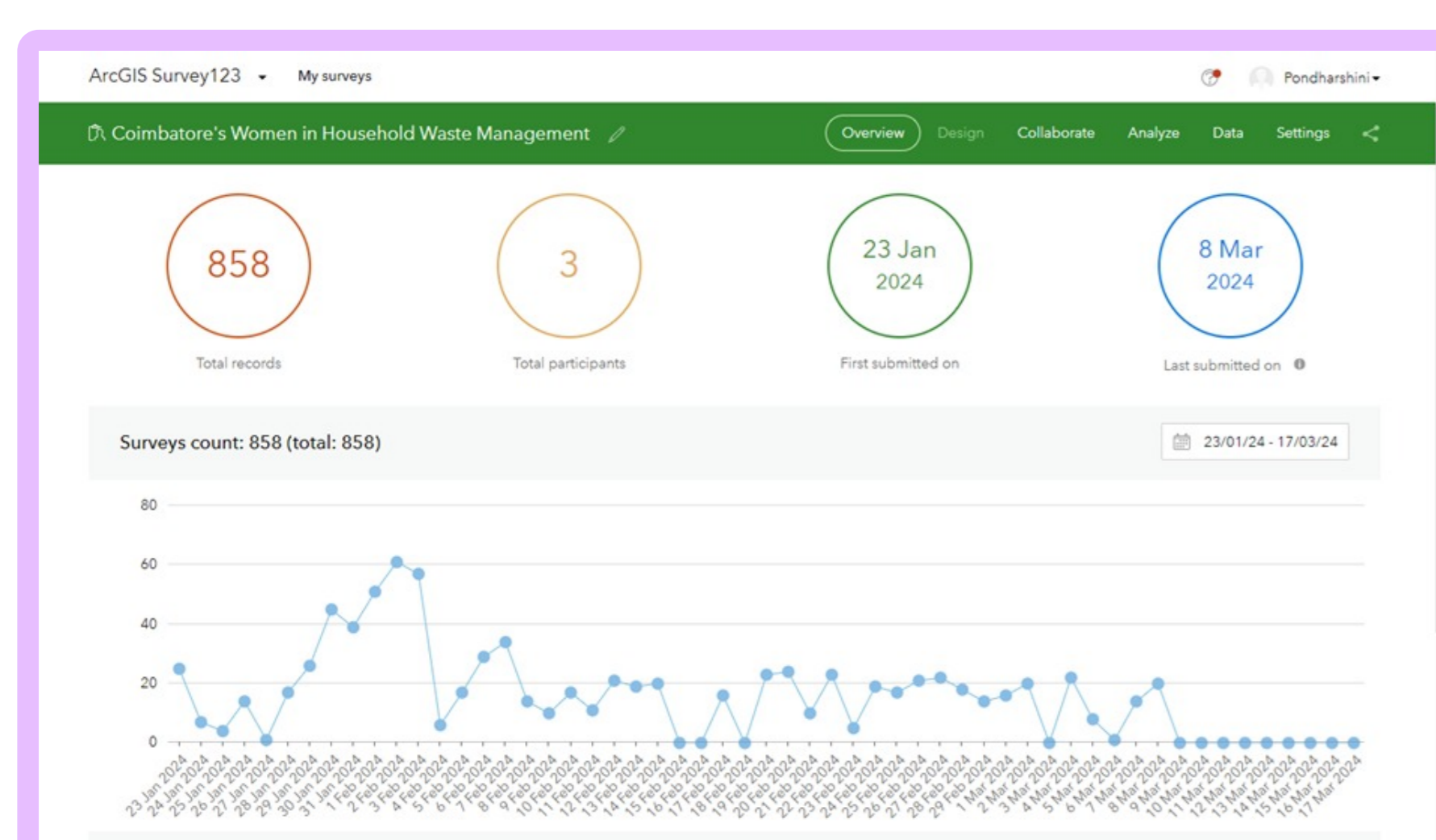
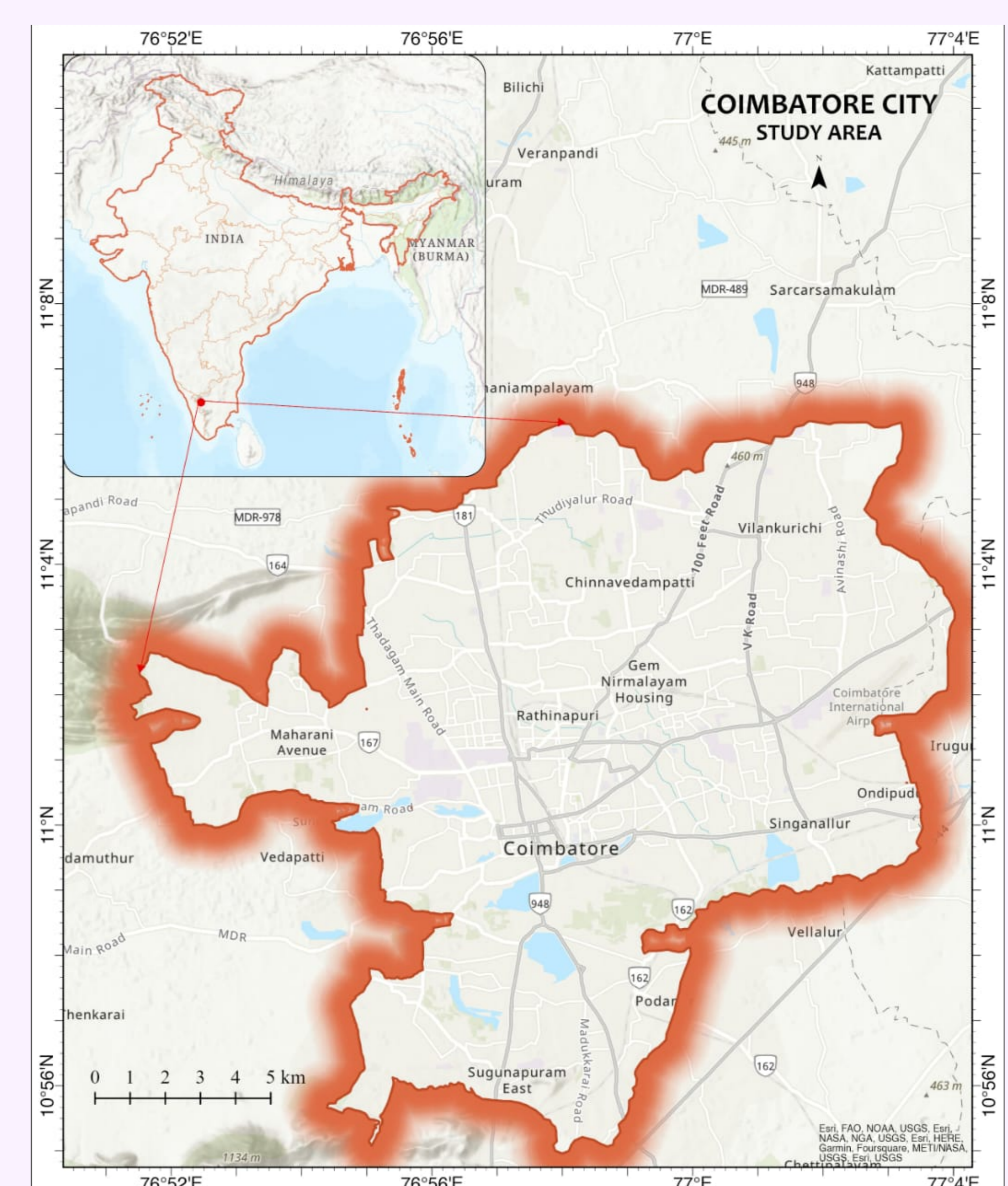
SOFTWARE USED

- ArcGIS Pro
- ArcGIS Online
- ArcGIS Field maps
- ArcGIS Dashboard
- ArcGIS Survey123

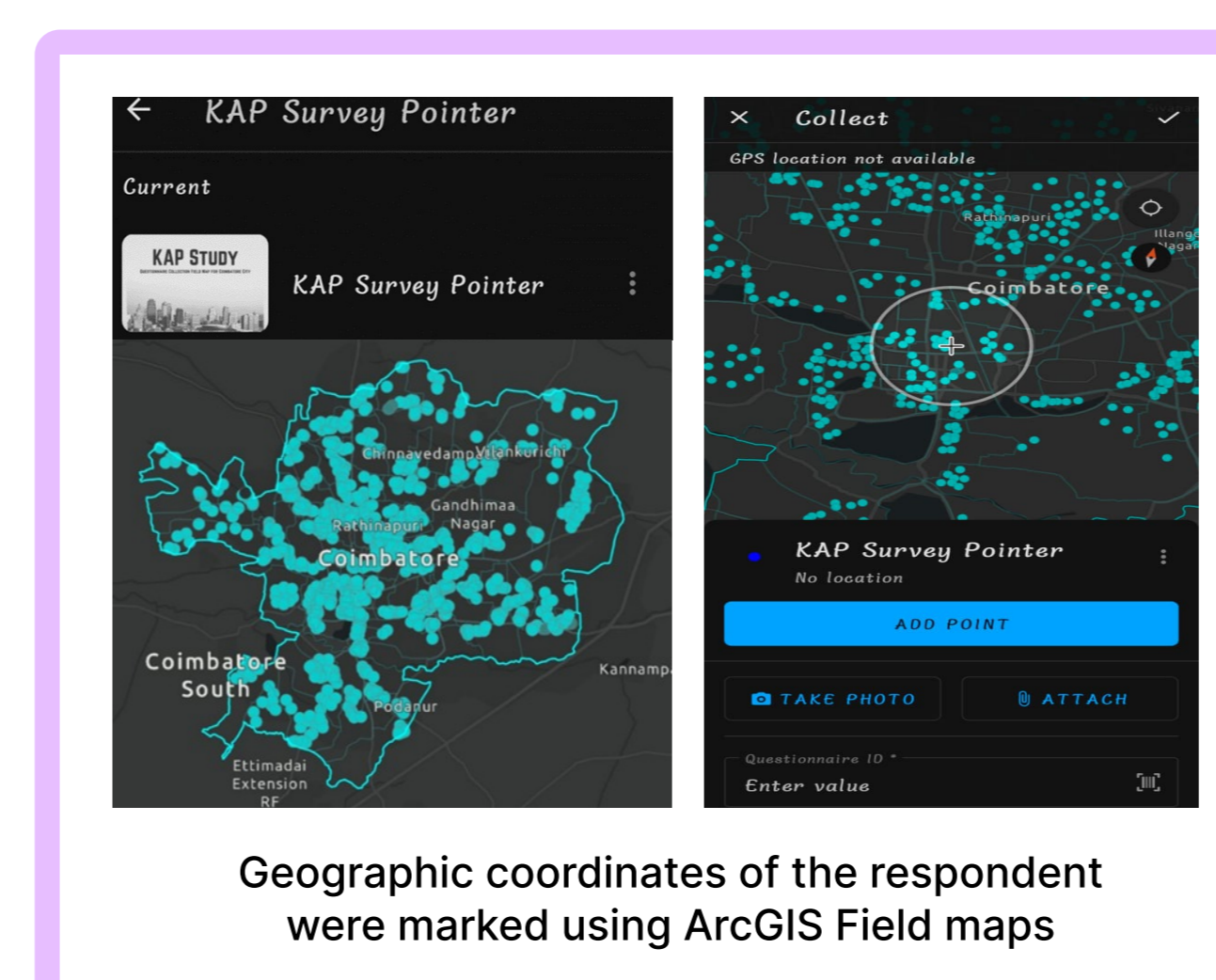
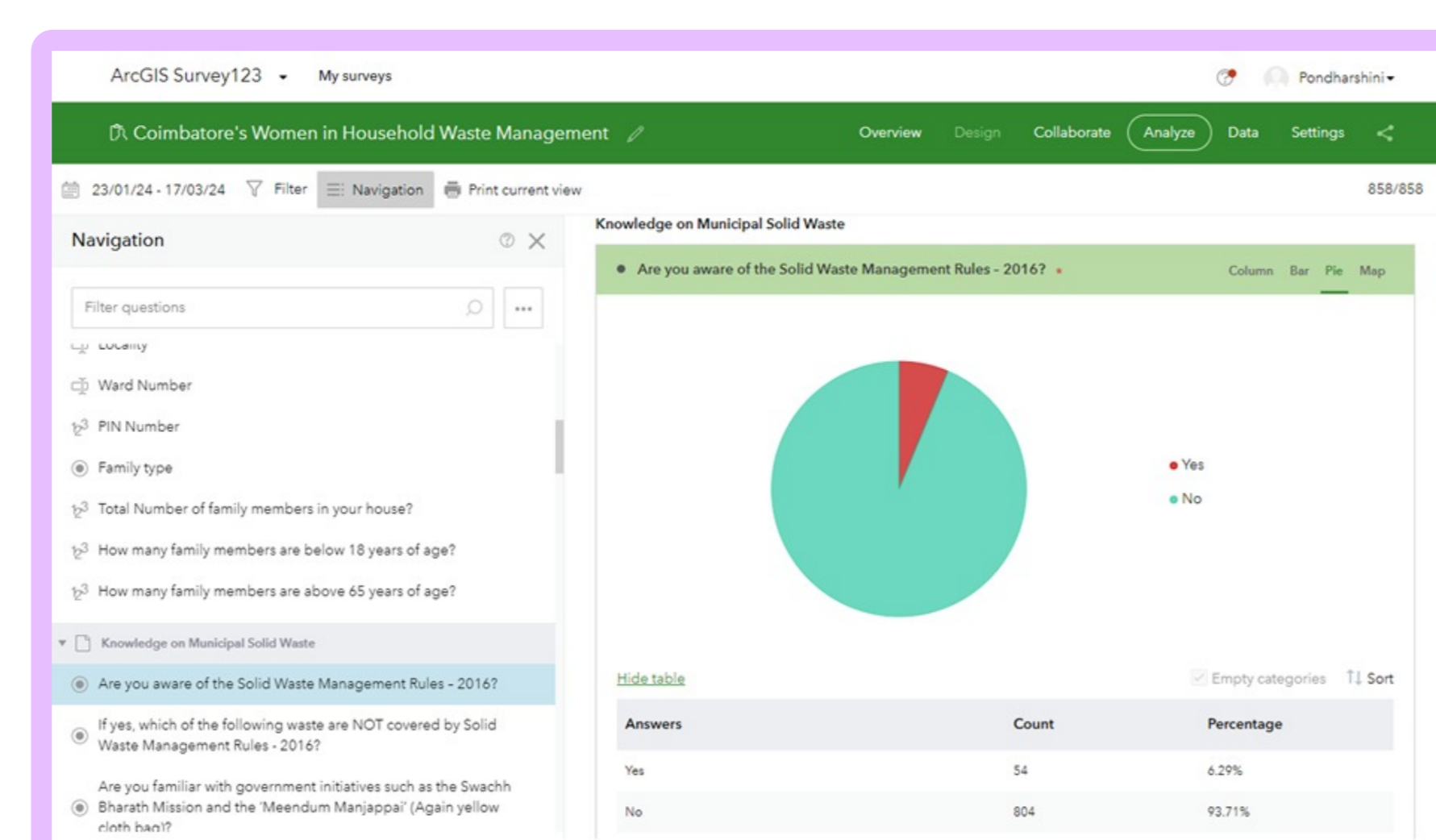
METHODOLOGY



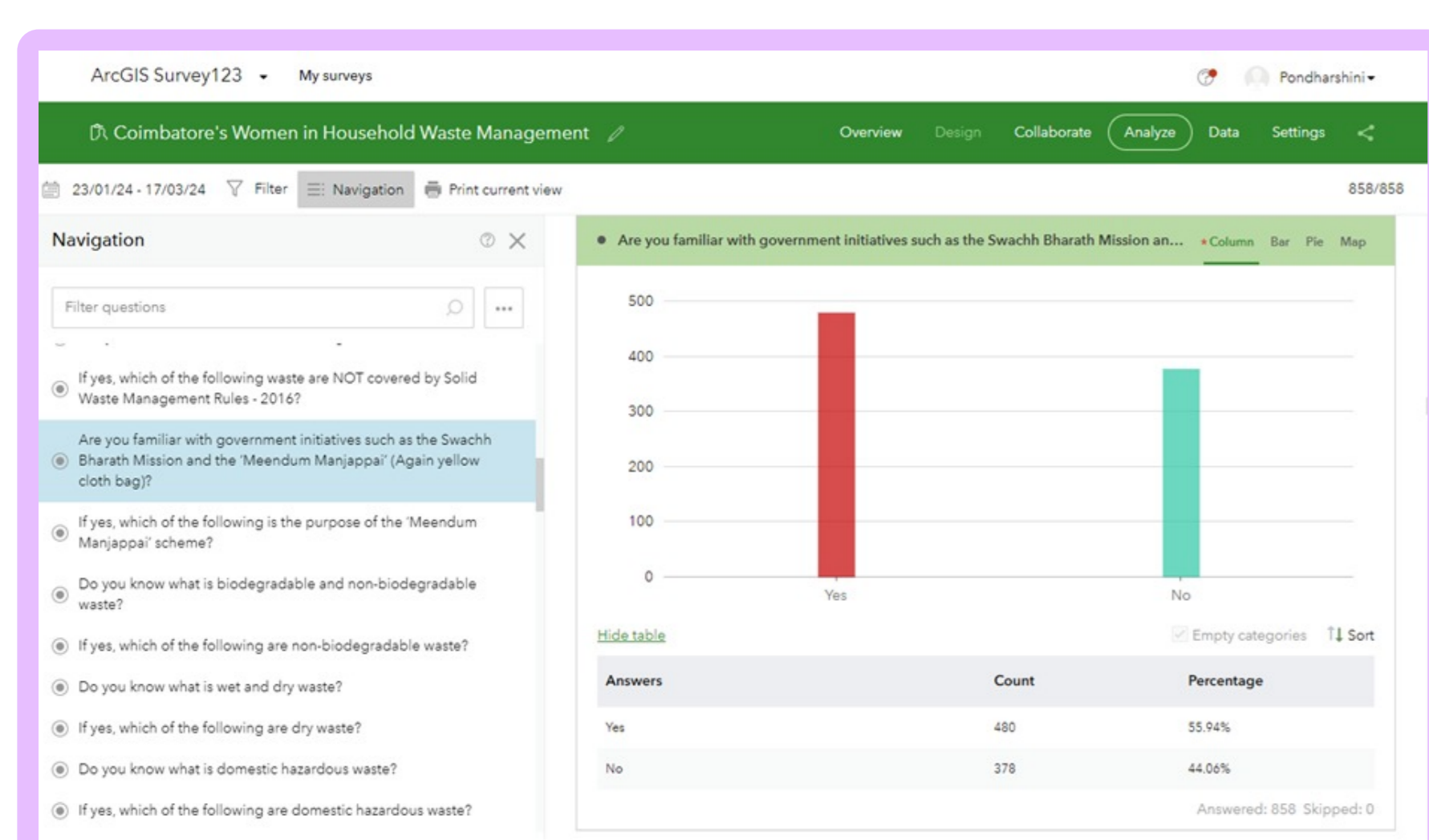
STUDY AREA



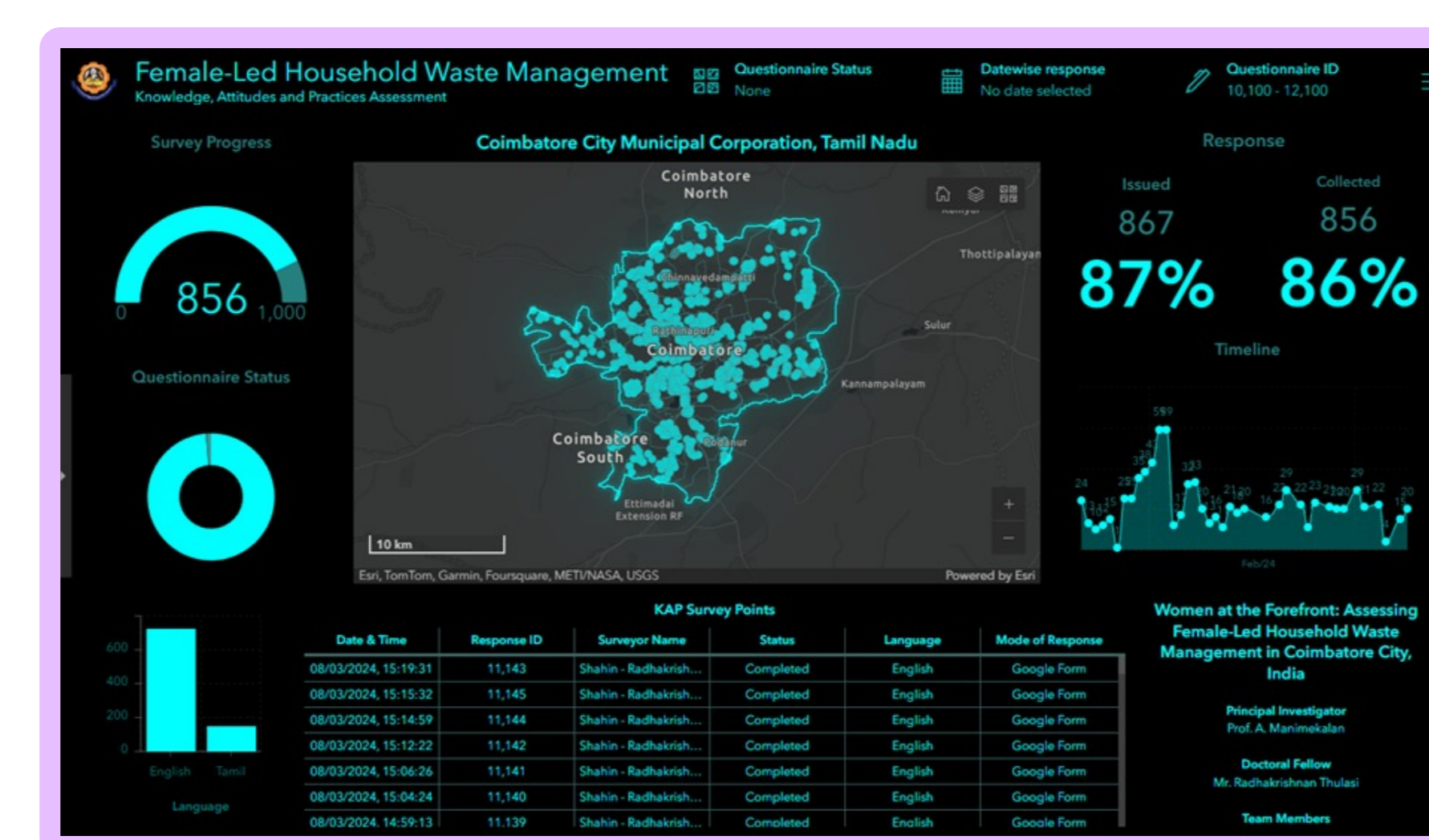
ArcGIS survey 123 used for data collection process



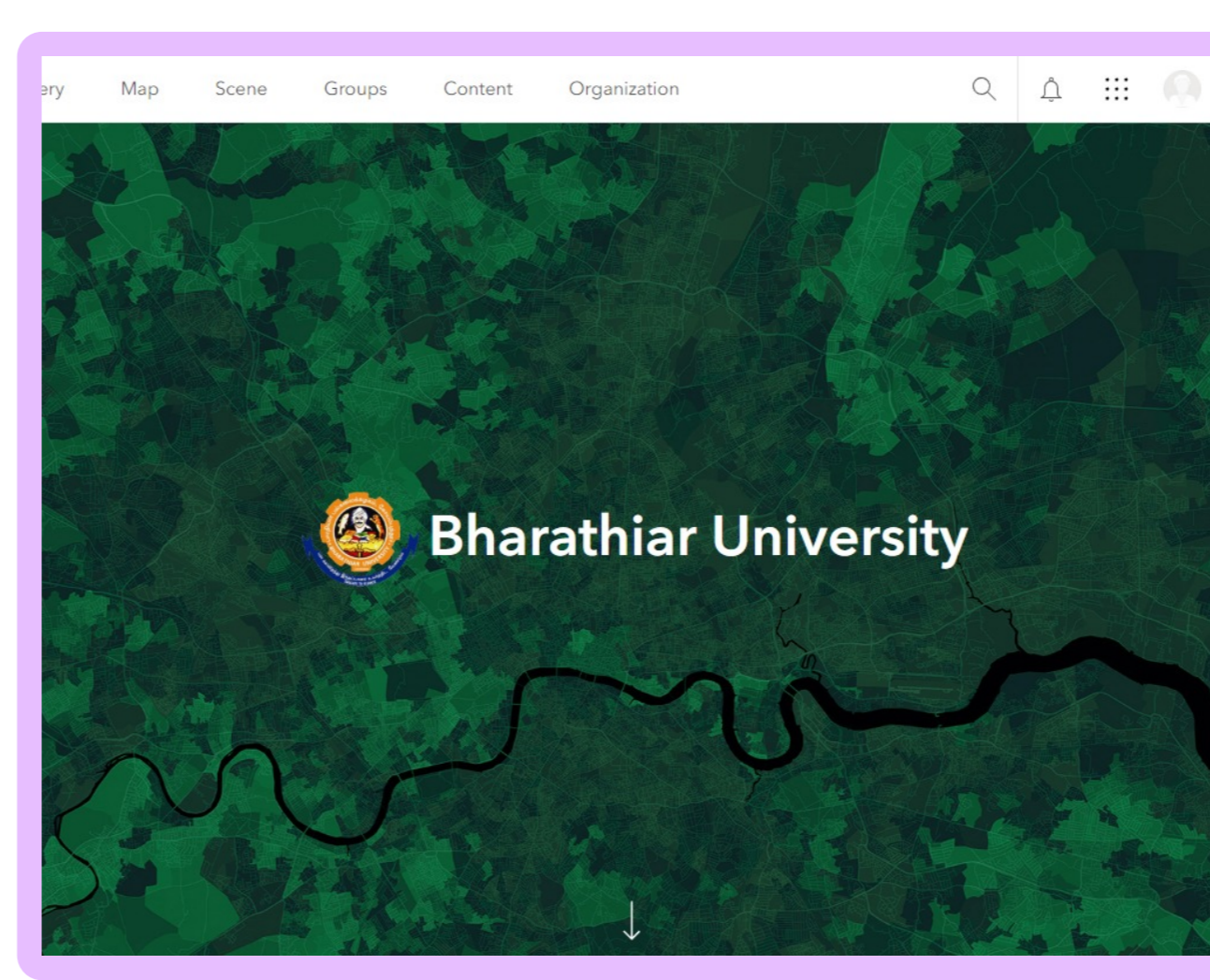
Geographic coordinates of the respondent were marked using ArcGIS Field maps



ArcGIS Pro & ArcGIS online used



ArcGIS dashboard was used to monitor the data collection progress



ArcGIS online & ArcGIS Pro was used for data analysis

RESULT & DISCUSSION

We conducted a huge survey with 856 women in Coimbatore city to learn about how they deal with household waste. The results indicated some highly interesting things. Among the findings, 89% of women were familiar with biodegradable and non-biodegradable waste. Surprisingly, only 50% of women understood the concept of wet and dry waste., unfortunately 12% of women responded that they are not receiving door-to-door garbage collection services. However, it's appreciable that 76% of women practice waste segregation. Disappointingly 68.53% of women were not so interested in using mobile applications for waste management. Tragically, the findings indicate a very low level i.e., 6.29% of awareness among women on Solid Waste Management Rules. Additionally, only 55% of women were familiar with government initiatives like the Swachh Bharat Mission. These findings highlight the need for targeted education and awareness programs, which are crucial to improving women's Knowledge, Attitudes, and Practices (KAP) on household waste management. Such initiatives are essential for promoting sustainable waste management practices.

CONCLUSION

The data collection process was efficiently completed with the support of ESRI products such as ArcGIS Online & ArcGIS Pro, ArcGIS Field Map and Survey123. The precise location of each respondent was accurately marked using ArcGIS Field Map. ArcGIS Dashboard played a crucial role in monitoring the progress of data collection effectively. Furthermore, ArcGIS Online and ArcGIS Pro were utilized for thorough analysis of the collected data. Focusing solely on women and their understanding of waste management concepts supports to sustainable household waste management, this approach not only contributes to environmental sustainability but also holds potential for women's empowerment and social welfare and in turn also supports policymakers in their efforts to promote sustainable waste management practices and achieve long-term sustainable development objectives. As the proverb goes, "little drops make a mighty ocean," even small improvements in household practices can have significant impacts on waste management. These incremental changes can greatly support municipalities in achieving sustainable waste management goals. Also, this matches the waste-to-wealth mission, giving women opportunities to come up with new ideas and help achieve long-term sustainability goals.

ACKNOWLEDGEMENT

We thank department of Environmental Sciences, Bharathiar University, Coimbatore, India and Department of Geography, Nirmala College for Women (Autonomous), Coimbatore, India for supporting us in various stages of the project implementation

Prof. Dr. A. Manimekalan,
Professor and Project Investigator,
Bharathiar University, India
email: manimekalan@buc.edu.in