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ASSESSING PUBLIC BAZAAR ACCESSIBILITY THROUGH UNIVERSAL DESIGN AND ADA STANDARDS TO ENHANCE SOCIAL SUSTAINABILITY

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Extended Abstract:

Public spaces are one of the most important spaces for social interaction and economic exchanges. Among public spaces, Bazaars play a crucial role as community hubs. These places present cultural authenticity while serving to diverse group of people (Ahsan et al., 2012). This research as part of a master thesis examines the accessibility of Wednesday Bazaar in Kyrenia, North Cyprus. This examination was done through Universal Design (UD) principles and the Americans with Disabilities Act (ADA) standards. The study addresses how accessibility can affect social sustainability and tries to support United Nation's Sustainable Development Goals (SDGs).

The literature review highlights the fact that the majority of the studies in this field focus on the accessibility assessment of formal built environments. In this regard, this study tries to address the gap in the literature on informal public bazaars and understand how they can become more inclusive spaces. The open public bazaars present unique characteristics such as; informal organization and temporary nature (Iqbal et al., 2022). This study develops an assessment framework compatible with the open bazaar characteristics.

This research has been built on the foundation of SDG11: Sustainable Cities and Communities (Figure 1). SDG11 focuses on safe, inclusive, and accessible public spaces (Lami et al., 2023). On the other hand, the study focuses on social sustainability as one of the three pillars of sustainable development. Social sustainability tries to achieve the creation of environments where all people, regardless of their ability, can participate in the community (Church et al., 2022) (Purvis et al., 2019). This study highlights that

accessibility is not only a technical requirement but a fundamental factor for social sustainability.

Figure 1: Goal 11 infographic (Retrieved from https://unstats.un.org/sdgs/report/2023/)

UD serves as a main framework to achieve the study's objective. The seven UD principles (Figure 2) provide a comprehensive approach to creating inclusive space. Additionally, UD principles combined with ADA standards give the study the opportunity for systematic evaluation of accessibility.

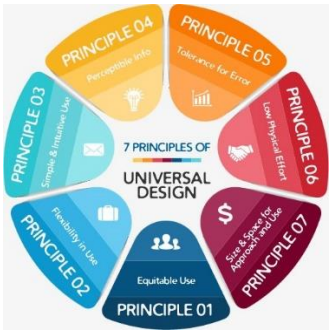

Figure 2: Seven UD Principles (Retrieved from: http://bijoumind.com/what-is-universal-design)

Site observation and quantitative measurements according to ADA make it possible to examine the existing facility. The ADA standards have been developed for permanent structures. In this regard, the authors developed a modified checklist tailored for open-air bazaars.

The Bazaar site (Figure 3) has been divided into five zones: Vendor area, Public Park, Parking lot 1, Terminal Building, and Parking Lot 2 (Figure 4). Each zone is assessed according to both ADA and UD principles. Photographic documentation supporting the evaluation process.

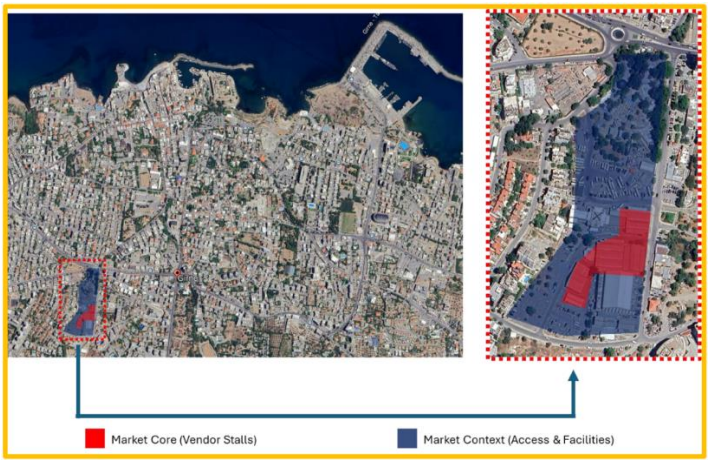

Figure 3: Location of the Case Study- Kyrenia Wednesday Bazaar (Authors, 2025)

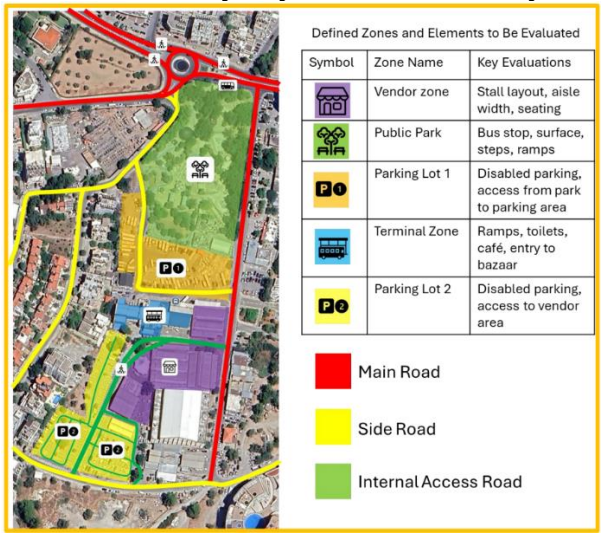

Figure 4: Bazaar evaluation zones map, with color-coded areas (Authors, 2025)

- **Key Findings: Barriers to Accessibility and Social Inclusion**

The assessment of Bazaar revealed accessibility challenges across all zones (Table 1).

Table1: Accessibility Challenges of Different Zones (Authors, 2025)

Zone	Challenges
Vendor Area	- The pathways between stalls are below the minimum 91cm width requirement. - Informal organization creates unpredictable circulation patterns. - The space in front of stalls is insufficient for wheelchair maneuverability. - Absence of wayfinding signage.
Transition Points and Connectivity	- Lack of accessibility between different levels. - Ramps are exceeding the acceptable slope rations. - Transition points rely only on stairs. - Pathways and zebra crossings are interrupted by vendors.
Parking and arrival area	- Designated disabled parking has wrong dimensions. - Routes from parking to bazaar areas required circuitous detours for wheelchair users. - Public transportation drop-off doesn't have a direct access to the bazaar.

The findings present the accessibility barriers throughout the whole journey from arrival to taking part in Bazaar activities. This limitation directly undermines social sustainability. The current situation of the Bazaar fails to accommodate people with disabilities, the elderly, or families with young children. In this case, the bazaar cannot act as a truly functional public space and becomes an exclusive environment. Consequently, it does not meet the social sustainability criteria and can't contribute to sustainable community development.

- **Recommendations: Integrated Approach to Accessibility**

The research proposes a multi-faceted approach to improve accessibility (Table 2).

Table 2: Recommendations for improving the bazaar's accessibility and inclusiveness (Authors, 2025)

Categories	**Recommendations**
Design Interventions	- Standardized stall dimensions. - Enforced boundaries for the stalls. - Clear circulation zone. - Accessible parking redesign
Policy and Management	- Formal accessibility requirements in vendor licensing. - Time-restricted vehicle access - Accessibility monitoring personnel
Education and Awareness	- Vendor training on the importance of accessibility - Public awareness campaigns - Visual reminders

This research contributes to the field of inclusive public space design by developing an assessment framework for informal bazaars.

In conclusion, this study tries to contribute to the field of inclusive design and social sustainability. The study's findings demonstrate that achieving the DSG 11 goal is possible if communities understand the value of accessibility. This goal can be reached

by design upgrades, policy changes, and cultural shifts. The study's contribution is beyond only upgrades of the selected case study; it can help accessibility improvement of global informal public spaces.

While these findings are based on the Wednesday Bazaar specifically, they may also be applicable to other informal bazaars in Cyprus and similar areas across the world. The modified methodology used in this study can be used as a guide for assessing and enhancing accessibility in open-air bazaars with similar spatial and organizational features.

Ultimately, the study presents how to create an environment that supports all participants in the community, and it goes beyond only removing the physical barriers. This approach to accessibility directly improves social sustainability. Creates an equitable, resilient, and vibrant community. As today we are facing rapid urbanization, the lessons from this study can be a valuable guideline for designing an informal public space that serves all.

Keywords: Universal Design, Social Sustainability, SDG 11, ADA Standards, Public Bazaar, North Cyprus.

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Authors' Biography:

Omar Alowaishi is a Palestinian-Syrian national, born and raised in Kuwait. He holds a bachelor's degree in Interior Architecture and is currently completing a Master's degree in Architectural Design at ARUCAD University in Northern Cyprus. Over nearly three years of volunteering with the Zero Food Waste Cyprus Initiative, Omar spent every Wednesday at the local bazaar, working closely with the community. This long-term involvement made him aware of the spatial and social challenges that limit people's ability to access and participate in public spaces, an experience that later inspired his thesis, which focuses on accessibility in the Wednesday Bazaar. Beyond academics, Omar is actively engaged in social and community-based initiatives. He values opportunities that help develop soft skills, build meaningful connections, and deepen his understanding of social issues. He often takes part in public events, discussions, and workshops. spaces where he can listen, exchange ideas, and learn from others lived experiences. These engagements continue to improve both his personal growth and his approach to design.

Asst. Prof. Dr Nazgol Hafizi completed her undergraduate studies in 2015 and obtained her Master of Science in Architecture in 2017 from the Department of Architecture, Eastern Mediterranean University(EMU). She completed a Ph.D. in Architecture from EMU in 2022 with a focus on Building Physics, where she explored the integration of technology and human-centric design to create sustainable and comfortable built environments. Her research specializing in IoT, human–computer interaction and adaptive facades has been published in prestigious international refereed journals, and she has authored a book chapter in the same field. With over seven years of experience as a research and teaching assistant at EMU prior to joining ARUCAD in 2022, Faculty

of Design, she has honed her expertise in architectural design, construction, and technology. Currently she serves ARUCAD as head of Urban Design and Landscape Architecture department. She brings a wealth of experience in educational administration; While at EMU, she was an active member of the accreditation committee. Beyond the classroom, she has actively engaged in research and collaborations, demonstrating a passion for pushing the boundaries of architectural design and exploring innovative concepts with a current focus on AI and Architecture in the metaverse. She has a keen interest in designing with AI and has developed skills in this emerging field.