

What Do the Students Want? Reflections from a Participatory Approach to Creating Safe and Inclusive School Zones in Banjarmasin, Indonesia

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Abstract

Many public spaces in Indonesian cities are inaccessible to vulnerable and marginalized groups such as children, older people, and persons with disabilities, partly due to a lack of accessible environment and limited understanding by citizens and government agencies. The design and planning of these spaces are typically conducted in a top-down approach, with little participation from citizens. Regulation by the Indonesian Transportation Ministry¹ stipulates that school areas with heavy traffic and a high risk of accidents should have a Safe School Zone (Zona Selamat Sekolah, in Indonesian). The regulation details a technical guideline for the Safe School Zone, i.e., traffic signs, crossroads, and speed bumps, but its implementation does not yet consider inclusive principles and universal design. To build a more inclusive and accessible city for all in accordance with the New Urban Agenda, a participatory design process with multiple stakeholders—teachers, local government, and most importantly, students—plays a vital role in ensuring inclusive planning in cities. This paper reflects on the experience of Kota Kita and the Banjarmasin City Transportation Agency implementing a participatory Safe and Inclusive School Zone pilot project in Banjarmasin, Indonesia, to promote inclusive city planning and build the community’s capacity to improve their living spaces.

Keywords: participatory design, inclusive planning, children participation

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I. Introduction

Indonesia has made notable commitments toward social equity and inclusion in urban development in the past decade, with the ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) in 2011, a disability rights law in 2016 (Law No. 8/2016), and several ministerial decrees standardizing physical accessibility obligations for public buildings and facilities (Housing and Public Works Ministerial Decree 30/2006 and 14/2017). However, such pledges have faced implementation barriers at the neighbourhood and city level, with many public spaces in Indonesian cities remaining inaccessible to vulnerable groups such as persons with disabilities, older persons, children and other marginalised groups/communities. A participatory research study by Kota Kita Foundation (“Yayasan Kota Kita”) in two Indonesian cities—Surakarta, Central Java and Banjarmasin, South Kalimantan—evidenced a lack of accessibility of the built environment and limited understanding of inclusion principles by the government and the general public as well as has hindered citizens, particularly those living with disabilities or are older persons to participate meaningfully in social, economic, and political activities on an equal basis. Furthermore, their perspectives are often not included in design and development processes—or if included, it is typically conducted in a formal consultative manner.

Supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and Transformative Urban Mobility Initiative (TUMI), between 2019 and 2021, Kota Kita Foundation collaborated with the City Government of Banjarmasin, urban designers and practitioners, academics, and civil society organizations to address accessibility and mobility issues in Banjarmasin, as part of the TUMI Inclusive Banjarmasin initiative. Through citizen-driven processes and multi-stakeholder engagements, the initiative aimed to promote inclusive city planning in Banjarmasin as a model of inclusive cities and build the community’s capacity to improve their living spaces through participatory pilot projects.’

This paper reflects on the results of the program coordinated by the Kota Kita Foundation and the City Government of Banjarmasin, particularly on the implementation of a safe and inclusive school zone. While certain aspects of the project are tailored to specific cultural, social, and spatial contexts in Banjarmasin City, learnings from this case study may provide a model of how participatory approaches can play a role in the creation and management towards more accessible and inclusive public spaces in Indonesia.

Challenges in creating accessible and inclusive public spaces in Indonesian cities

Accessible and inclusive public spaces in cities are created with the involvement of diverse perspectives, particularly of vulnerable and marginalized communities, in the decision-making process to ensure their needs and aspirations are adequately addressed (2016, New Urban Agenda). Furthermore, community ownership and management in the planning and management of public spaces can contribute to an effect on safety and people’s feeling of safety (Safer Cities UN-Habitat, 2019). And yet, inclusive planning practices are still overlooked in Indonesia. Common barriers that typically hinder the implementation of an accessible and inclusive built environment in Indonesia include 1) Attitudinal and knowledge barriers, i.e., a lack of understanding of inclusive planning practices and universal design principles (Kota Kita Foundation, 2019, p. 2) Administrative barriers, i.e., challenges concerning cross-sectoral coordination,

budgeting and timeline, political will (Hutabarat Lo, 2011, p.15).

In practice, there remains a general lack of awareness on disability inclusion, rights of persons with disabilities and accessibility requirements in Indonesia, which has resulted in stigmatization and poor decision making during the design and construction of public spaces. This is further compounded by a gap in the enforcement of the standards and the monitoring of construction and procurement procedures in government-led construction projects.

From an administrative perspective, the creation of public spaces in Indonesia is often conducted in a top-down manner involving multiple departments i.e., Transportation Agency, Public Works Office, and Environmental Affairs Department. These departments typically execute plans according to the mayor's agenda, and their function is limited to their corresponding ministries at a national level. For example, the Banjarmasin Transportation Agency heeds the vision of the Banjarmasin Mayor in office, but its regulatory jurisdictions are overseen by the Transportation Ministry.

Furthermore, public space implementation and management falls under the purview of two overlapping agencies at a city and national level: Public Works oversees the built environment, including streets and main roads, while Transportation regulates activities related to mobility, such as traffic lanes.

The Case in Banjarmasin: A Safe School Zone for Who?

One example of the gap between national commitments and local planning is the regulation overseeing how Indonesia's Safe School Zones, or Zona Selamat Sekolah (ZoSS), are designed and implemented. Indonesian Transportation Ministry regulation stipulates ZoSS should be implemented in schools located near highly trafficked areas with a high risk of accidents to ensure the safety and security of children and pedestrians. An area is categorized as a ZoSS when it is equipped with mandatory tactical traffic management and road safety features such as traffic signs and signalling devices, road markings, and rumble strips. Meanwhile, accessibility facilities for pedestrians, cyclists and persons with disabilities are an optional supplement to the minimum ZoSS regulation.

In the case of Banjarmasin, the Banjarmasin Transportation Agency noted that the planning and implementation process for ZoSS, as in the case of many infrastructure developments in Indonesian cities, is typically done as a formality as it relies solely on the technical specifications detailed in the regulations. With limited resources i.e., time, budget, and knowledge, the design and implementation process of ZoSS is usually conducted in a top-down manner with limited involvement from communities—particularly persons with disabilities, children, and older people. This is further compounded by cross-sectoral coordination challenges, which place a dent in the enforcement and monitoring of universal design standards in ZoSS and other public spaces and result in the poor—in some cases, ineffective and damaging—implementation of accessibility features.

II. Methodology

In collaboration with urban design firm Urban+ Institute the aim of the Safe and Inclusive School Zone pilot project is to address existing traffic problems in inclusive school zones and improve the safety and accessibility by facilitating the meaningful

participation of all key stakeholders, particularly students. In strengthening the agency of citizens, urban spaces can then be co-designed and co-produced according to the collective needs and aspirations of citizens - thus achieving a truly accessible and inclusive public space for all. (Lefebvre, 1968).

The pilot project focused on two inclusive schools: SDN Gadang 2 primary school and SMPN 10 secondary school. The schools were in the Gadang neighbourhood of Banjarmasin, which was notorious for poor road safety and inefficient waste management that has led to mobility challenges for students, persons with disabilities, and older people in the area. Although the schools were in a densely populated neighbourhood, there were no dedicated sidewalks nearby. Moreover, waste spill over on streets exacerbated traffic during rush hours. Inclusive schools are educational institutions in Indonesia that enrol both students with disabilities as well as those without disabilities, with a founding principle that all children should receive the same education and be a part of the same learning environment, regardless of their differences. In SDN Gadang 2 elementary school, 66 students out of 350 total have a form of impairment as of 2019 (60 students with cognitive impairments, 4 students with mobility impairments, 1 student with hearing/speech impairment, and 1 student with cerebral palsy). Between September 2019 to October 2021, the project used a participatory approach and a multi-stakeholder engagement process to conduct observation, several interviews, participatory design workshops, and remote engagement in order to understand each aspiration and point of view, and genuinely make the space inclusive for all.

Observation & Interviews

The project began in September 2019 with site observations of the Gadang neighbourhood. We first observed the general school area during school time to better understand the situations and challenges students may encounter. Preliminary findings included: a lack of dedicated sidewalk and crossroad for safe school access; no parent pick up zone, limiting the safe movement room for students; limited space for teacher parking; and mismanaged garbage in a nearby waste management building, which congested traffic and possibly endangered children. We then presented these findings when interviewing residents, schoolteachers, neighbourhood offices, and city government agencies—including the Departments of Transportation, Environment, and Public Works to compile perspectives on these issues and understand their roles and aspirations.

Participatory Design Workshops

In March 2020, we conducted participatory design workshops with 34 elementary students in SDN Gadang 2 Banjarmasin and 19 junior high school students in SMPN 10 Banjarmasin, in collaboration with Kaki Kota Banjarmasin, and Urban+ Institute. Out of 53 total participants, 21 have cognitive impairment and mobility impairment. Students are rarely parties to school zone planning discussions despite being key stakeholders, so to address this we conducted participatory workshops involving 40 students — with and without disabilities — across both pilot schools. A total of 40 students with and without special needs in the primary and secondary schools participated. Through journey mapping, role play, co-design and participatory art activities, the workshops aimed to capture students' nuanced challenges, needs and

aspirations. Students highlighted the importance of safety, comfort, and enjoyment of the school environment during the workshops — enriching and validating our preliminary findings pertaining to the safe school zone. We presented these findings to our multi-stakeholder focus group which involved parents, schools, city government representatives, civil society organizations, and community-based organizations around the area of intervention. This process allowed us to confirm national and city regulations pertaining to safe school zones, and to establish cross-sector coordination and integration in government. Our final findings were presented to Banjarmasin's mayor to gain leadership support for establishing a safe school zone by providing a tactical traffic management zone equipped with safe and accessible drop-off, parking, and pick-up areas.



Figure 1. Preliminary observation and interviews were conducted around the school area of SDN Gadang 2 and SMPN 10 Banjarmasin. Source: Authors.

Remote Co-Design

Between August 2020 and March 2021, we reviewed three alternative designs to address the implementation of safe school zones while addressing the challenges (i.e., waste management issues, street vendors, parking areas) and sought the final buy-in from all stakeholders involved prior to construction. The COVID-19 pandemic posed challenges to stakeholder engagement, but remote consultations and engagements with support from local facilitators made it possible to continue the project in a participatory manner. The design of the safe school zone was conducted in consultation with An organization of persons with disabilities (OPDs) — Indonesia's Association of People with Disabilities (PPDI) Banjarmasin and the Indonesian Association of Women with Disabilities (HWDI) Banjarmasin and finalized in collaboration with Urban+ Institute. Our safe school zone implemented accessible design features and universal design

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principles in the sidewalk and crossroads including dedicated zoning and sidewalk, curb ramps, guiding blocks, sidewalk edging, clearly legible traffic signs, rumble strips and sheltered space. A redesigned waste management system addresses previous traffic congestion issues, and handwashing facilities encourage hygiene practices amid the pandemic. Finally, a participatory mural showcases inclusive values shared by students and fosters social cohesion.



Figure 2. Elementary students from SDN Gadang 2, Banjarmasin participating in a co-design workshop held by Kota Kita and Urban+ Institute. Source: Authors.



Figure 3. A remote consultation with key stakeholders in Banjarmasin on the safe school zone design. Source: Authors.

III. Results and Reflection

The participatory process was able to address physical barriers to accessibility while addressing urgent needs brought by the COVID-19 pandemic

The participatory design and multi-stakeholder process of the project resulted in the addition and improvements of accessibility features in the space, such as curb ramps, guiding blocks, and signage that comply with the universal design standard. The space also addressed urgent needs — including waste issues near the school creating discomfort for students, and COVID-19 health response.

Table I. Features of the Safe and Inclusive School Zone in Gadang

| No | Feature | Description |
|----|-------------------------------------|--|
| 1 | Curb ramps | To provide a safe and accessible entrance for those with disabilities, particularly when going from the road to the sidewalk, and vice versa. |
| 2 | Guiding blocks | For those with visual difficulties navigating the sidewalk, thus creating a safer environment for all pedestrians. |
| 3 | Bright colors on dedicated sidewalk | One of the early problems identified in the area was the absence of a dedicated sidewalk. This meant that pedestrians and motorists had to share the same area of the road, and thus prone to accidents. Bright colors were intentionally used in the final design of the sidewalk to mark a clear distinction between areas where pedestrians walk and where vehicles pass. |
| 4 | Zebra cross | Three zebra crosses are installed in the area to further improve traffic management and create a safer pedestrian crossing for all |
| 5 | Rumble strips | These strips are installed within 50 meter from the schools to alert and slow down drivers when entering the Safe School Zone. |
| 6 | Traffic signs | Traffic signs such as speed limit and Safe School Zone signages have been installed within 100 meter from the schools. |
| 7 | Dedicated drop-off zone | A dedicated drop-off zone has now been created outside of both schools for parents in motorcycles and bikes to pick-up and drop off their children. |
| 8 | 'Angkot Ceria' Zone: | The 'Angkot Ceria' Zone is a drop-off and pick-up zone for 'Angkot Pelajar Ceria', a free public transport service for students with special needs run by the Banjarmasin City Transportation Agency. |
| 9 | Sheltered space | To provide a comfortable and sheltered space for students to wait for their parents during after-school hours, greeneries are planned to be added on the canopy. |
| 10 | Participatory mural | A mural where students of SDN Gadang 2 shared their messages through an annual coloring activity, involving around 60 students from all grades. The participatory art project seeks to bring the students from both schools together to showcase a school environment that reflects inclusive values. |



Figure 4. The finished Safe and Inclusive School Zone at SDN Gadang 2 and SMPN 10 Banjarmasin in December 2021. Source: Authors.

Empowering aspirations and introducing urban inclusivity concepts among students

The participatory approach provided a safe space for elementary and junior high students from the SDN Gadang 2 and SMPN 10 Banjarmasin to voice their aspirations in decision-making processes where they are typically unheard of otherwise. The use of board games allowed students to participate in a fun and accessible manner—instead of a formal consultative form. Multiple students showed positive responses expressing that they enjoyed the process, and were able to provide specific points of improvement. For

instance, the consideration to address waste management issues and improvements made to the drop-off zone to protect students against speeding and reckless drivers were direct recommendations made by the students. Furthermore, the process exposed students to concepts of urban inclusivity and improved their sensitivities to the issue. An instance where this was observed was when a male junior high school student of SMPN 10 Banjarmasin expressed concern over having murals painted on the street as it may distract younger elementary students, particularly those with cognitive difficulties when crossing the street. The student then suggested having the mural painting on a nearby vacant wall instead—a suggestion that was subsequently implemented in the final design of the school zone.

Quote

“I really like the idea of having the mural painting in the schools, but I’m concerned that if it’s painted on the road, the younger students from the SDN Gadang 2, especially those with cognitive difficulties, will be distracted when they cross the street. I wonder if we could move the painting idea from the primary students to the wall. That sounds great, right? It will be safer for us and enjoy the school environment at the same time.”
(Male student, SMPN 10 Banjarmasin junior high school)

Promotion of inclusive planning practices and universal design principles

By facilitating a shared learning process among stakeholders, the approach exposed government officials to inclusive planning practices and universal design concepts while strengthening the voice and aspirations of students, as well as disabled people’s organizations. Slamet from the PPDl Banjarmasin, who was involved in the process, noted that the project showed an ideal participatory mechanism as disabled people organizations such as PPDl were involved from the start of the planning process to the monitoring to ensure that each feature was designed to suit universal design standards.

Quote

“[City planning] should be like that [participatory]. [The safe and inclusive school zone project] is what we expect people to do when it comes to development, whether it’s infrastructure, public facilities, or anything that benefits everyone. It has to involve persons with disabilities themselves, or the disabled people’s organizations, because they could assess the safety of the facilities.”
(Slamet, Indonesia’s Association of People with Disabilities (PPDI), Banjarmasin chapter)

As a pilot project, the process offered by local government officials such as Febpry Ghara Utama from the Banjarmasin City Transportation Agency with practical lessons learned on designing and planning inclusive public spaces. It expanded the understanding of involved government officials in translating a technical regulation for school zones to reach beyond just formalities and into a comprehensive city-wide agenda to provide

more inclusive spaces for all. When construction was completed in September 2021 and the results were shown to Banjarmasin officials, the pilot project became a model that inspired the replication of safe school zones in five additional sites in Banjarmasin. Still, although the pilot project improved knowledge and understanding, issues relating to bureaucratic matters still present a challenge as the process for the five replicated safe school zones was not fully participatory. Budget constraints and strict deadlines for implementation were reported to be the root of the challenge. Furthermore, components such as universal design for sidewalks and other road features are overseen by a different department, which means another layer of coordination must be addressed.

Quote

“By being involved in the safe and inclusive zone in Gadang, we at the Banjarmasin Transportation Agency learned a different way of planning and thinking about inclusivity. We understand that inclusivity means equal access. It means thinking about how we can involve the citizens as much as we can in the process.”

(Febpary Ghara Utama, Banjarmasin City Transportation Agency)

IV. Conclusion

Reflecting on our experience, the success of participatory design practices in devising a model for more comprehensive Safe and Inclusive School Zone provides potential for wider inclusive planning adoption, while noting these takeaways:

- Participatory processes address both develop social and physical inclusivity issues: The participatory design process not only led to the construction of a physical Safe and Inclusive School Zone, but it has also facilitated a safe space for students to voice their opinion without judgment, introduced them to the concept of inclusivity and developed their understanding of different individuals' needs. Resultantly, the needs and aspirations of vulnerable groups such as students and person with disabilities were highlighted to the City Government of Banjarmasin, developing understanding of urban inclusivity on a regulatory level as well.
- Strong leadership agenda is vital to advance cross-sectoral collaboration: Public space development and management are governed by a disjointed arrangement created by an overlap between Indonesia's Transportation and Public Works Ministries and a lack of institutional oversight or effective management. (Hutabarat Lo, 2011) This limited governmental coordination creates a challenging environment for inclusive public planning, particularly for Safe and Inclusive School Zone development. Coordinated strategies and strong leadership, and cross-sector collaboration are crucial for the further development of inclusive public spaces.
- Engagement of DPOs must be maintained to monitor the adoption of universal design and inclusive principles: : The Banjarmasin Transportation Agency has developed five additional ZoSS inspired by the Safe and Inclusive School Zones in Gadang. However, bureaucratic and coordination issues hindered local

government from following through with a fully participatory planning process and addressing every accessibility feature. This replication effort demonstrates the city's political will and increased awareness of universal design and inclusive principles are present, but more advocacy is required for truly inclusive spaces. As the design and planning process also determines inclusivity, DPO engagement remains vital throughout the process — from planning to execution — so the adoption of universal design in the inclusive spaces can be properly monitored and assessed by those who use the facilities.

References

- Asterina, N., Thamrin, H.N. and Beagen, B. (2019) Banjarmasin City: A Disability-Inclusive City Profile. [online] Kota Kita. Available at: <https://kotakita.org/resources?title=banjarmasin-city-a-disability-inclusive-city-profile>.
- Harvey, D. (2003) The right to the city. *International Journal of Urban and Regional Research*, 27(4), pp.939–941. doi:10.1111/j.0309-1317.2003.00492.x.
- Hutabarat Lo, R.S. (2011) Walkability Planning in Jakarta. [online] Available at: <https://www.proquest.com/openview/da80f2dc7d55c988c3a5b42d859b6a81/1?pq-origsite=gscholar&cbl=18750> [Accessed 28 Jan. 2022].
- Imrie, R. (2000) Responding to the Design Needs of Disabled People. *Journal of Urban Design*, 5(2), pp.199–219. doi:10.1080/713683959.
- Kara, H. (2015) *Creative research methods in the social sciences: a practical guide*. Bristol; Chicago: Policy Press.
- Kota Kita Foundation (2021) TUMI | Safe and Inclusive Neighborhood for All! [online] [www.inclusivebanjarmasin.id](http://inclusivebanjarmasin.id). Available at: <http://inclusivebanjarmasin.id>.
- Lefebvre, H. (1973) *Le Droit à la ville*. I. Paris: Anthropos.
- Purcell, M. (2013) The right to the city: the struggle for democracy in the urban public realm. *Policy & Politics*, 41(3), pp.311–327. doi:10.1332/030557312x655639.
- Surjadi, P. and Asterina, N. (2019) Participatory Data for Disability-inclusive City: Experiences from Facilitating Citizen's Agency and Collaboration in Banjarmasin. In: *The International Conference on Disability and Diversity in Asia (ICDDA)*. [online] Available at: <https://kotakita.org/resources?title=experiences-from-facilitating-citizens-agency-and-collaboration-in-banjarmasin> [Accessed 24 May 2022].
- UN Habitat (2022) Safer Cities [online] Available at: <https://unhabitat.org/programme/safer-cities> [Accessed 24 May 2022].
- United Nations General Assembly (2016) *The New Urban Agenda, A/CONF.226/4* (29 September 2016) [online] HABITAT III. Available at: <https://habitat3.org/the-new-urban-agenda/>.
- Widianingsih, I. and Morrell, E. (2007) Participatory Planning in Indonesia. *Policy Studies*, 28(1), pp. 1–15. doi:10.1080/01442870601121320.

Regulations

- National Law 4/1997 concerning Persons with Disabilities, Republic of Indonesia.
- National Law 19/2011 concerning Ratification of the UN Convention on the Rights of Persons with Disabilities (CRPD).
- National Law 8/2016 concerning Persons with Disabilities.
- Regulation of the Minister of Public Works 30/PRT/M/2006 on Technical Guidance of Facilities

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and Accessibility for Buildings and Environment.

Regulation of the Minister of Public Works and Housing of the Republic of Indonesia No. 14/PRT/M/2017 on Access Requirements for Building Facilities.

Regulation of the General Directorate of Land Transportation on the Technical Guidance in Pedestrian Safety and Security in School Areas Through the Provision of Safe School Zones SK. 3582/AK. 403/DRJD/2018.