

## SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Universitas Sumatera Utara (USU) is committed to supporting Sustainable Development Goal (SDG) 11—Sustainable Cities and Communities—through community service and research programs that enhance urban resilience and quality of life. Initiatives include the construction of vertical drainage wells in flood-prone areas to reduce waterlogging and improve infrastructure, the design of parks to foster social interaction among the elderly, and training residents in urban greening techniques such as growing fruit plants in limited spaces. These projects aim to promote sustainable urban living, strengthen community bonds, and create safer, more inclusive environments that support economic and environmental sustainability.

No	Title	Abstract	Outcome	Evident/Attachment
1	Pembangunan Sumur Laluan (Drainase Vertikal) Untuk Mengurangi Genangan Banjir Pada Kawasan Permukiman Masyarakat Di Kota Medan	This community service project aimed to build vertical drainage wells in Kota Matsum II, Medan, to reduce flooding in residential areas. Due to climate change, the frequency and intensity of rainfall have increased, leading to higher flood risks. The project involved constructing a vertical drainage system that could channel excess rainwater into underground aquifers, helping to alleviate persistent flooding. By implementing this system, the project sought to improve the quality of life for the local community by minimizing flood-related damage and disruptions. The initiative highlights the importance of innovative infrastructure in urban flood mitigation and aligns with efforts to enhance community resilience and well-being.	<ol style="list-style-type: none"> <li><b>Reduced Flooding:</b> The construction of vertical drainage wells effectively decreased water accumulation in residential areas, helping to mitigate flood risks.</li> <li><b>Improved Infrastructure:</b> The project provided the community with an innovative solution for water management, enhancing urban resilience against heavy rainfall.</li> <li><b>Enhanced Community Safety:</b> By minimizing flood-related disruptions and damage, the project contributed to a safer and more secure living environment for residents.</li> <li><b>Increased Awareness:</b> The initiative raised community awareness about sustainable water management practices and the importance of adopting proactive measures to adapt to climate change.</li> </ol>	<a href="https://drive.google.com/open?id=1xRKj0hSqDYos7dysl-w7_ZN882epEx_WF">https://drive.google.com/open?id=1xRKj0hSqDYos7dysl-w7_ZN882epEx_WF</a>
2	Penguatan Nilai Interaksi Sosial Sesama Lansia Dan Keluarga Pada UPT Pelayanan Sosial Lanjut Usia Binjai Melalui Desain Taman Lansia UPT Pelayanan Sosial Lanjut Usia Binjai	This community service project focused on enhancing social interaction among elderly residents and their families at the UPT Pelayanan Sosial Lanjut Usia Binjai through the design of an elderly-friendly park. The initiative aimed to address the issues of loneliness and social isolation commonly faced by seniors in care facilities. The project included surveys, interviews, and focus group discussions (FGD) to	<ol style="list-style-type: none"> <li><b>Improved Social Interaction:</b> The elderly residents experienced increased opportunities for social engagement with peers and family members, reducing feelings of loneliness and isolation.</li> <li><b>Enhanced Well-Being:</b> The project contributed to better physical and mental health for the elderly through activities such as light exercise and gardening.</li> </ol>	<a href="https://drive.google.com/open?id=1xmGQtnzNZM-iLcesi8L1kRoBUk4UsmDy">https://drive.google.com/open?id=1xmGQtnzNZM-iLcesi8L1kRoBUk4UsmDy</a>

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		<p>understand the needs and preferences of residents for a social interaction space. The result was a well-thought-out park design incorporating areas for gardening, light exercise, and family visits, fostering a supportive and interactive environment. This project is expected to improve the physical and mental well-being of the elderly by creating a warm and inclusive atmosphere that strengthens social bonds and enhances their quality of life.</p>	<ol style="list-style-type: none"> <li>3. <b>Supportive Environment:</b> The design of the park created an inclusive space that facilitated positive interactions and emotional support among the residents and their families.</li> <li>4. <b>Strengthened Family Ties:</b> The designated areas for family visits promoted stronger connections and more meaningful interactions between the elderly and their loved ones.</li> </ol>	
3	<p>Pengembangan Tanaman Buah Dalam Pot (Tabulampot) Dalam Menciptakan Lingkungan Yang Hijau Dan Meningkatkan Pendapatan Masyarakat Di Lingkungan Iv Kelurahan Gedung Johor, Medan</p>	<p>This community service project focused on educating and training residents of Gedung Johor, Medan, in cultivating fruit plants in pots (tabulampot) to create greener urban environments. Due to increasing urban development and a decline in green spaces, this initiative aimed to teach residents how to grow fruit plants in limited spaces like home yards. The program included lectures on the benefits and techniques of tabulampot cultivation and hands-on training sessions. As a result, participants gained knowledge, expressed increased interest in urban planting, and were equipped with free seedlings and planting materials. This initiative supports urban greening efforts and provides an opportunity for residents to engage in environmentally friendly activities that contribute to better air quality and potential additional income.</p>	<ol style="list-style-type: none"> <li>1. <b>Increased Knowledge and Skills:</b> Residents of Gedung Johor gained practical knowledge and skills in cultivating fruit plants in pots (tabulampot), enabling them to apply these techniques in their own spaces.</li> <li>2. <b>Enhanced Interest in Urban Planting:</b> The project sparked greater interest among participants in engaging in environmentally friendly planting practices to enhance their living environment.</li> <li>3. <b>Provision of Resources:</b> Participants were provided with free seedlings and planting materials, supporting them in starting their tabulampot projects at home.</li> <li>4. <b>Contribution to Urban Greening:</b> The initiative helped increase greenery in the urban area, improving air quality and contributing to a healthier environment.</li> <li>5. <b>Potential Economic Benefit:</b> The cultivation of fruit plants offers residents an opportunity for additional income through the sale of home-grown produce.</li> </ol>	<p><a href="https://drive.google.com/open?id=12VoQ9jUkx4f3QqWjC4pbpt6Lj3Nu4M5F">https://drive.google.com/open?id=12VoQ9jUkx4f3QqWjC4pbpt6Lj3Nu4M5F</a></p>

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4	Kesiapsiagaan Dan Implementasi Mitigasi Bencana Pada Kelompok Rentan Melalui Program Ketana Aur Di Kelurahan Aur Medan Maimun	This research project aimed to assess the knowledge and attitudes of teenagers in Aur Subdistrict, Medan Maimun, regarding disaster mitigation for vulnerable groups. The study was motivated by the frequent flooding affecting the area, particularly impacting pregnant women, mothers with infants, and children. A descriptive research design was used, involving 23 participants and data collection through questionnaires. The findings revealed that health education significantly increased the participants' understanding of disaster mitigation, with 47.8% showing good knowledge post-education. This project highlights the importance of targeted educational programs to prepare communities for effective disaster response, ensuring better protection and support for at-risk groups.	<ol style="list-style-type: none"> <li>1. <b>Improved Knowledge:</b> Teenagers in Aur Subdistrict demonstrated increased knowledge and understanding of disaster mitigation, especially for vulnerable groups, following the health education sessions.</li> <li>2. <b>Enhanced Preparedness:</b> The project helped equip participants with practical information and skills, enabling them to respond more effectively to flooding and support at-risk community members.</li> <li>3. <b>Community Awareness:</b> The initiative raised overall awareness in the community about the importance of prioritizing vulnerable groups during disasters.</li> <li>4. <b>Foundation for Future Programs:</b> The findings support the development of further educational programs and training initiatives aimed at building community resilience and preparedness.</li> </ol>	<a href="https://jurnal.kesdammeda.n.ac.id/index.php/jurhesti/article/view/317">https://jurnal.kesdammeda.n.ac.id/index.php/jurhesti/article/view/317</a>