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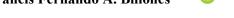






Infrastructure Initiatives towards Sustainable Cities and Communities

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Abstract

Infrastructure is a catalyst for development, thus, this study explored the initiatives of Roxas City, Capiz, Philippines, in contribution to Sustainable Development Goal 11 or SDG 11, building sustainable cities and communities. A mixed-method convergent triangulation approach was employed. The quantitative component assessed the initiatives and their level of alignment with SDG 11 targets and indicators, while the challenges in the implementation and insights to future development plans were dealt qualitatively. Eighty key officials and people associated with Roxas City infrastructure development were the respondents and participants of the study. The 70 respondents were surveyed using the researcher-made, validated and reliability-tested questionnaire, while the 10 were the participants providing insights for future infrastructure development implementation. The study identified 14 major infrastructure initiatives from 2017 to 2022, which were assessed with the mean score of 4.49, indicating a very high level of alignment with SDG 11. Initiatives included but not limited to housing, wet market reconstruction, solid waste and landfill development, disaster and health centers, beautification, road network construction and street light installation. However, implementation of these initiatives were challenged by the insufficient to non-availability of funds, limited community engagement, uncertainty of initiatives' sustainability, upkeep and project maintenance, and mismatch with community need. Based on these findings, the initiatives demonstrated how SDG 11 can be localized in cities or communities. This study envisions multiple pathways for advancing SDG11 in Roxas City by fostering urban sustainability solutions tailored to local contexts. By emphasizing indigenized approaches, it aims to develop durable, demand-driven strategies that effectively address the city's unique needs.

Keywords: Infrastructure, Initiatives, Sustainable development goal 11, Cities, and Communities.

1. Introduction

The United Nations envisioned "a world where no one is left behind," leading to the creation of the 17 Sustainable Development Goals (SDGs). These goals served as the foundation for global development efforts. However, the Sustainable Development Report

2024 highlighted that, on average, only 16 percent of the SDG targets projected for 2030 had been achieved globally, while the remaining 84 percent showed either reversal, stagnation, or limited progress (Hasanova and Nurieva, 2024).

In the United Nations' Sustainable Development Report, Philippines ranked 92nd among 167 nations, reflecting a six-position improvement in its pursuit of the SDGs. Despite this progress, the country continued to face significant challenges, particularly in poverty reduction, hunger alleviation, and improving education quality. The report identified steady progress in several SDGs. However, stagnation persisted in crucial areas such as healthcare (SDG 3), education (SDG 4), gender equality (SDG 5), water and sanitation (SDG 6), clean energy (SDG 7), sustainable cities and communities (SDG 11), and strong institutions (SDG 16).

Among these, Sustainable Development Goal 11 (Sustainable Cities and Communities) was particularly critical for achieving the 2030 Agenda, as cities played a pivotal role in advancing the SDGs' five Ps: People, Planet, Prosperity, Peace, and Partnerships (United Nations, 2023). Urbanization, the process through which cities expanded, was a key driver of national development. However, rapid urbanization presented considerable challenges. The SDG Report 2024 stated that over half of the world's population lived in cities, with projections suggesting that 70percent would reside in urban areas by 2050. This rapid urbanization led to the growth of informal settlements, increasing pressure on infrastructure and public services, thereby underscoring the importance of SDG 11.

Despite Roxas City's ongoing urban sustainability efforts, a comprehensive assessment of how these initiatives aligned with SDG 11 remained distant. The extent to which these projects contributed to sustainable urban development amidst rapid urbanization and climate challenges had yet to be thoroughly evaluated. Additionally, current literature lacks a structured sustainability framework assessing the long-term viability and social equity impact of infrastructure initiatives.

As Roxas City moved towards global competitiveness, little research had explored how this economic development and way forward to social sustainability. This gap underscored the need for an in-depth study to evaluate infrastructure initiatives and its sustainability towards achieving economic growth.

This study, therefore, analyzed Roxas City's infrastructure initiatives in relation to Sustainable Development Goal 11, focusing on their role in sustainable urban development. It aimed to identify best practices, challenges, and recommendations, providing valuable insights for Roxas City and other urban centers facing similar growth challenges. By examining these initiatives, the research offered evidence-based guidance to foster more resilient, inclusive, and sustainable cities aligned with the 2030 Agenda and the 2050 Agenda for sustainable development.

2. Methodology

This study adopted the mixed-method approach convergent triangulation to examine the infrastructure initiatives of Roxas City, Philippines towards achieving SDG 11. This approach allowed for the simultaneous collection and analysis of both qualitative and quantitative data, giving equal importance to each type of data, which explored the same research problem. The research design was especially suitable for this study because it enabled a more holistic understanding of how Roxas City's infrastructure initiatives were perceived by key stakeholders and measured in terms of their alignment to sustainable development goals. Collecting data from both approaches at the same time, the study was able to identify consistencies between people's experiences and actual data, helping to generate valuable insights into the potential contributions of these initiatives to the sustainability of cities and communities.

To validate the qualitative findings, the Delphi method involved utilized. This a structured was communication process, a specific written interview with a panel of experts, including local planners and government officials from the members of the City Council. The participants provided informed judgments on the challenges and insights on the future directions of Roxas City's infrastructure initiatives. The Delphi study helped validated the results that emerged from the quantitative data, ensuring that the findings were grounded not only on stakeholders' experiences but also supported by other experts' evaluation.

The qualitative method helped in the identification of emerging themes essential in understanding of the infrastructure initiatives done by Roxas City, particularly the challenges encountered by participants in implementing sustainable initiatives. The quantitative method provided the infrastructure initiatives and the numerical data that determined the level of alignment between Roxas City's infrastructure initiatives and the objectives of SDG 11.

This study explored the infrastructure initiatives of Roxas City from 2017 to 2022. This did not compare past and present administrations. It excluded projects that fell outside the 2017 to 2022 timeframe and those not documented in the official records provided by the City Engineer's Office.

The participants were the 70 key officials involved in the planning process of each initiative, such as engineers and urban planners. Their expertise and first-hand experiences allowed for a deep assessment of how these initiatives contributed to the goals of sustainable cities and communities, specifically, SDG 11.

For the qualitative approach, the participants included members of the Sangguniang Panlungsod, the City Council of Roxas City and other experts in the field of urban planning, infrastructure development, and local governance. The 10 experts participated by responding to a written interview prepared by the researcher.

This study employed two researcher-made instruments to support its mixed-method approach. For the quantitative component, a structured questionnaire was developed to assess the perceived alignment of Roxas City's infrastructure initiatives with SDG 11. For the qualitative component, a written interview guide was structured to explore the challenges faced in implementing infrastructure initiatives and governance-related concerns. To accommodate the schedules of the respondents, the interview was conducted in written format, allowing participants ample time to provide reflective and detailed responses.

To ensure the validity of the research instruments, they were first evaluated by the advisory committee, whose feedback guided necessary refinements to improve clarity, relevance, and coherence to the research UniversePG I www.universepg.com

objectives. Further validation was sought from two external experts in public management, whose insights helped enhance the questionnaire's applicability to governance and infrastructure planning. Through this validation process, the instruments were clarified to uphold credibility, ensuring that they effectively captured both quantitative data on infrastructure alignment with SDG 11 and qualitative insights into the challenges faced in project implementation. Upon completion of the validation process, the researchermade survey for the quantitative component was subjected to a reliability test administered to 30 respondents from the pool of Roxas City Officials and experts associated with the study, but were not among the respondents selected in the actual study. The results of the pilot test were validated by a statistician, with a Cronbach's alpha coefficient obtained at 0.820, thus the instrument is acceptably reliable. After then, the researcher administered the survey and allotted a two-week period for data collection. Ten experts were able to accomplish the written interview guide; there were others that due to their busy schedule, were unable to be reached out and others refused to participate.

After the data collection process, the survey responses were reviewed, categorized, and analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, including the mean and standard deviation, were utilized to summarize and interpret the data.

Meanwhile, the written interview responses underwent reflexive thematic analysis, wherein recurring themes and insights were systematically coded and grouped to reveal underlying challenges, strategies, and policy implications related to sustainable urban development.

Ethical considerations were strictly upheld to ensure the integrity and credibility of this study. Confidentiality was maintained, sources were accurately attributed. Informed consent was obtained from all participants. The consent process ensured that participants signified their intent to join the study. They were also informed of their right to withdraw at any stage without any negative repercussions, reinforcing respect for their autonomy and willingness to contribute to the research. The study's survey

design allowed participants to respond at their convenience, minimizing any potential discomfort or disruptions to their professional responsibilities. To further protect participant privacy, all collected data were securely stored throughout the research process and were permanently deleted upon the study's completion.

3. Results and Discussion

Local Government Infrastructure Initiatives of Roxas City

Roxas City has undertaken a range of infrastructure projects from 2017 to 2022. There are 14 key infrastructure initiatives, which address critical urban challenges including, but not limited to, housing, transportation, public spaces, disaster resilience, education, and environmental sustainability demonstrating the city's commitment in advancing sustainable urban development.

Construction of Jumaguicgic Ville and Angelville

It is the development of residential housing for low-income families and displaced settlers by urban redevelopment. This initiative, connected to SDG 11.1, ensured access to safe and affordable housing and to curb the growing informal settlers. After super Typhoon Haiyan (Yolanda) in 2013, the National Housing Authority (NHA) turned over a housing resettlement project to the city government. It built a total of 1,533 housing units in Jumaguicjic Ville Site 1 and 2 under the national government's Yolanda Permanent Housing Project. The beneficiaries are people living in danger zones, mostly informal settlers along bodies of water such as rivers and creeks or near shorelines and those displaced by Typhoon Haiyan.

The Roxas City Integrated Transport Terminal

It was built as a centralized transport hub to organize the public transportation system in Roxas City. This was closely linked to SDG 11.2, which promotes access to safe, affordable, and inclusive transport.

People's Park Redevelopment

It is one of Roxas City's major open spaces, and the redevelopment helped provide better recreational facilities for people of Roxas City. This supports SDG 11.3, focused on inclusive and sustainable urbanization.

Road Widening Projects in Roxas City

This is for the improvement of road networks and ease traffic. This aligned with SDG 11.3, responds to growing urban demand and seeks to improve traffic flow while supporting integrated urban planning.

Repair/Rehabilitation of the Roxas City Museum

It is an important cultural and architectural landmark that supports SDG 11.4, which aims to safeguard cultural heritage. The Roxas City Museum is a whitewashed museum building, once a circular water tank, is an example of intelligent architectural reuse. By history, in 1910, President Pastor Alcazar, third president of the town of Capiz, (1908-12) constructed a water tank near the municipal hall to provide water to the Capisnon during the dry season. Water flowed from the roof of the two-story municipal building to the tank. However, the municipal hall was destroyed during World War II, but the water tank which is 11.5 meters in diameter and 6.10 meters in height, with walls 27.5 cm thick, was spared. After the War, offices were built around the tank completely hiding it from view. Only a water spout was visible. In 1993, the offices were demolished and for the first time, the water tank was seen. It had outlived its purpose as Roxas City had a new water system. To repurpose, the city government and culture and art gurus came up with the idea of converting it into a museum, now called the Roxas City Museum, named "Ang Panublion". In Hiligaynon, the local dialect, "Panublion" is a term referring to a precious thing to be handed down to generations.

Construction and Improvement of the Hortus Botanicus Evacuation Center

It responds to SDG 11.5, focusing on reducing disaster impact and protecting vulnerable populations. As noted in the SENDAI Framework (UN, 2021), resilient infrastructure is critical in minimizing human and economic losses.

Rehabilitation of Sanitary Landfill Cell 2

This is an expanded landfill operations and waste management capacity, which is connected with SDG 11.6, which targets reduced environmental impact, especially in waste management.

Teodoro Arcenas Trade Center (TATC) Redevelopment Project (Phases 1, 2, and 3)

This modernization helped in better sanitation and sustainability. The city public market is about 40 years old, named after the late City Mayor Teodoro Arcenas. Current administration transformed it into a two-storey mall-market that is clean and environment-friendly. The project was funded from the city's reserved funds and economic enterprise income and additional allocation from the 20% Countrywide Development Fund. This initiative supports SDG 11.6, as it involves sustainable upgrades in market infrastructure and waste control, reducing environmental pressures and improving sanitary conditions.

Riverside Promenade and Promenade Phase 2 (Lapu-Lapu and Altavas Streets)

This added to the recreational spaces and safer pedestrian access. This initiative is in line with SDG 11.7, which promotes universal access to green and inclusive public spaces.

Beautification of the Plaza Heritage Zone

This includes installing interactive lights, which added to the welcoming environment of the city and recreational areas for people of Roxas City. This is connected to SDG 11.7, enhancing urban aesthetics and providing welcoming environments, especially for women, children, and seniors.

Establishment of the Comprehensive Land Use Plan/Zoning Ordinance (2021–2030)

It helped update the urban planning framework of the city for managing growth and land use sustainably. This aligns with SDG 11.a, which supports linkages between urban and rural areas through improved regional planning.

Rehabilitation and Reconstruction Projects Post-Typhoon Ursula

This included the repair of critical public infrastructure damaged during the typhoon's impact in the city. The initiative supports SDG 11.b, which involves adopting inclusive, disaster-resilient urban strategies.

Construction and Improvement of Casa de Mercado

This renovated the city's traditional marketplace to make it more resilient, hygienic, and accessible. This UniversePG I www.universepg.com

is connected with SDG 11.c, by improving infrastructure using locally sourced materials, helping to build sustainable and resilient facilities.

Roxas City Water Supply and Sanitation Projects

This upgrades water infrastructure for cleaner water access and better sanitation for the urban population. This aligns with SDG 11.c, supports long-term resource-efficient infrastructure and promotes sustainable service delivery to the urban population, addressing issues like water scarcity and sanitation gaps.

Collectively, these initiatives illustrate Roxas City's multi-faceted approach to achieving sustainable urban growth. The city envisions a future with the legacy of people-centered development. It remains steadfast to continue key programs and public infrastructure developments. Other initiatives identified in the course of this research included the following: Busog, Lusog, Talino (BLT) Kitchen, Asphalt Overlay in different areas of Roxas City and Procurement of Garbage Collection. Among the major projects currently underway are the transformation of the Roxas Civic Center into a fully functioning Convention Center, the construction of a new Roxas City Hall in Pueblo de Panay, a modern Medical Complex, improvements to the Libas Fishing Port, and a new slaughterhouse to support the city's meat supply chain. In addition, the new City Hall, is set to be completed by early 202 to serve as a hub for better public service delivery. All these infrastructure initiatives are ways forward of the City towards promotion of human dignity; and upliftment of the life of every Roxas City resident, tourist and stakeholders. These are initiatives in achieving SDG 11 by 2030 making Roxas City a Sustainable City and Community.

Challenges in Implementing Infrastructure Initiatives in terms of SDG 11 Targets and Outcomes

Participants expressed various answers about the challenges they encountered in the implementation targets. All participants highlighted that one of the challenges encountered when it comes to implementation of targets was financial and budget constraints. The challenge of budget availability implies that Roxas City without additional fund sources or improving local revenue generation, future

infrastructure projects will continue to experience delays, downsizing, inferior and mismatch and even cancellation of development project. This situation could affect the overall community development, limit economic growth opportunities, and reduce public trust in the government's ability to deliver essential services and improvements. This, as pointed out by Gurara *et al.* (2017) developing countries like the Philippines continuously struggle with infrastructure funding gaps and poor institutional frameworks often lead to project delays and substandard outcomes.

Another challenge in the implementation of infrastructure projects according to the participants was community engagement issues. Participants expressed their sentiments about community engagement issues. This implies that community engagement has been raised both as an issue and challenge. Many community members expressed fears that failure in infrastructure projects and other development initiatives negatively impact on their lives, lead to delays and requiring extensive consultation and negotiation efforts. Community engagement remained a significant challenge in Roxas City's efforts to implement development projects, especially when these initiatives involved infrastructure that directly affected residents' homes and livelihoods. The Local Government of Roxas City had put forth several community engagement initiatives aimed at fostering participation and trust. Local residents are sought to actively involved in programs such as mangrove management and rehabilitation, which directly engaged community members in conservation activeties relevant to their environment. Roxas City also established partnerships with schools, civic groups, and private sectors to create platforms for dialogue on environmental and climate concerns, while providing technical support to ensure transparency and citizen involvement in project procurement and monitoring processes.

Further, on the challenges in the implementation of infrastructure initiatives along Sustainable Development Goal 11 outcomes, the participants unanimously raised community dissatisfaction with project outcomes. Participants suggest that community dissatisfaction stems not only from the outcomes, but from far deeper issues such as misalignment between UniversePG | www.universepg.com

project planning and community needs, as well as delays in implementation. This implies a need for more inclusive and participatory planning processes, better communication with constituents, and improved project management. Addressing these concerns is essential to rebuild public trust and ensure that future initiatives truly reflect the priorities of the people they are meant to serve, and community involvement, thus shared ownership over the project. This implies, a government for the people, by the people and of the people. The result supported Gurara *et al.* (2017), who added that delays and inefficiencies in implementation, often stemming from bureaucratic challenges, significantly damage public perception, even when local officials are well-intentioned.

Another challenge encountered, according to the participants, was the low adoption or sustainability of project outcomes. From the responses of the participants, this implies that the lack of adequate funding for maintenance and the absence of necessary skills and resources among community members are significant barriers to long-term success, suggesting that future projects may not only secure sustainable funding but also prioritize capacity-building and community training. Without these elements, even wellintentioned projects, like infrastructure and sanitation initiatives, are at risk of becoming ineffective over time. Molina, (2018) highlighted that development initiatives often fail without strong community ownership and capacity-building, underlining the need for participatory approaches. Manalansan, (2019) further confirmed that many local infrastructure projects initiated by the local government units deteriorated due to insufficient follow-up support and technical assistance. These findings collectively suggest that for projects to be sustainable, local governments must ensure not only initial implementation but also long-term financial planning and community empowerment through training involvement.

The challenges encountered by the participants in implementing and sustaining development initiatives highlight persistent issues in local governance. Leading among these are funding constraints, which delay infrastructure projects and hinder their

maintenance. Inadequate community engagement, stemming from fears of displacement and poor communication, further complicates implementation, while misaligned priorities and lack of capacity-building contribute to low project sustainability and community dissatisfaction.

Rapid urban growth often results in informal settlements and displacement pressures, leading to community resistance against infrastructure projects (Makata, 2024). Meideros *et al.* (2020) emphasized that sustainable and integrated urban planning must prioritize social inclusion to avoid exacerbating inequality and social unrest. Similarly, Yang *et al.* (2024) highlighted the importance of incorporating strong stakeholder participation, particularly in addressing fears related to livelihood loss. Franc *et al.* (2015) also stated that effective urban governance requires collaboration with affected communities to ensure that development initiatives do not unintentionally harm vulnerable groups.

These findings align with the Futures Triangle Theory by Inayatullah, (2023) which frames change through three forces: the pull of the future or the aspiration for sustainable and effective local development; the push of the present or the current pressures such as urban growth, public expectations, and governance demands; and the weight of the past referring to the historical limitations in planning, funding, and public trust. Addressing these challenges requires not only technical solutions but also a comprehensive and strategic approach involving inclusive planning and decision making processes. It also calls for community participation and engagement, and long-term financial sustainability, where investments are not just shortterm fixes, window dressing and band-aid solutions but are durable and demand driven solutions and development projects. Additionally, stronger community involvement is essential to build trust, promote shared responsibility, and ensure that solutions are culturally relevant and locally driven.

Additional initiatives that overarching the achievement of SDG 11 were social initiatives in improving the lives of the people in the community. These included the "Bugas para sa Taga-Roxas" rice assistance program, crisis support for vulnerable families, health

projects like medicine procurement in barangays, disaster response equipment, infrastructure improvements such as road and drainage repairs and school facility upgrades, city hall construction, and enhanced public safety through expanded CCTV installation. Inclusive efforts in building planning include compliance of the PWD and Senior Citizens building requirements. Despite these efforts, specific issues persist during project implementation, particularly regarding communication and community trust. Participants in a recent assessment highlighted that poor communication and inconsistent updates from the Local Government Unit generated confusion among residents, undermining their trust and willingness to participate.

Level of Alignment of Roxas City Infrastructure Initiatives to SDG 11 Targets and Indicators

Roxas City exerts efforts to improve it infrastructure, the findings show that Roxas City's infrastructure initiatives are closely aligned with the goals and targets of SDG 11. The alignment rating had a grand mean of 4.49, indicated as "very high". This result indicated that the city's planning and development efforts are clearly helping to make Roxas City more inclusive, safe, and resilient towards sustainable city and community as aimed by SDG 11. This also showed Roxas City's infrastructure initiatives ability to turn sustainable goals into practical and local actions. The city's infrastructure programs are well thought out and organized in a way that supports sustainable urban growth and resilience. These are efforts do Roxas City's to improve public service to its people and build a safer and more livable environment for every constituent.

Meanwhile, stronger city infrastructure has been in need also to help reduce the damage caused by disasters and to improve how cities recover - making them better prepared for emergencies.

Efforts done by the city to turn global plans into local initiatives are a good example of how sustainable goals can be achieved from the ground up. The city's work shows that when development is guided by local needs and sustainability, real progress can be made in making cities safer, inclusive, and better able to handle challenges.

Bringing these points together, is indicative of Roxas City's commitment towards in achieving Sustainable Development Goal 11 (SDG 11) through thoughtful urban planning and strong community involvement towards the 2030 global goals and in keeping abreast with the constantly changing times and the many futures ahead of Roxas City.

Level of Alignment of Construction of Jumaguicgic Ville and Angelville to SDG 11.1 Target and Indicator

The assessment of the housing initiatives in Jumaguicgic Ville and Angelville revealed a "very high" level of alignment with SDG 11, which emphasizes access to adequate, safe, and affordable housing. The initiatives, with the mean score of 4.49, demonstrated Roxas City's commitment to implementing practical and community-oriented development solutions. These efforts go beyond providing shelter; it emphasized the importance of affordability, ensuring that housing remains within reach for low- and middle-income families. In addition, it allowed accessibility, making it easier for residents to connect with essential services such as transportation, education, healthcare, and employment opportunities. The results suggest that Roxas City's housing strategies are positively addressing social inclusion, urban resilience, and equitable development, while also meeting immediate shelter needs as per what the indicators and targets aim. 11.1 implementation of Jumaguicgic Ville and Angelville highlights the importance of community engagement and inclusive planning in creating safer and more stable neighborhoods. By focusing on well-structured housing that ensures access to key services and encourages community involvement, these initiatives foster a more inclusive urban environment, offering better opportunities for vulnerable and marginalized groups to thrive.

These perspectives validated the positive outcomes seen in Roxas City, where formal, government-supported housing is helping to uplift local communities and reduce urban inequalities.

However, while Roxas City's performance is promising, the broader national and global context revealed continuing challenges. These communities

often face poor living conditions, insecure tenure, and limited access to water, sanitation, and other basic services. This contrast underscores the urgency of replicating and scaling effective housing models like those seen in Roxas City.

Level of Alignment of Construction of Roxas City Integrated Transport Terminal to SDG 11. 2 Target and Indicator

The construction of the Roxas City Integrated Transport Terminal received a "very high" overall mean rating of 4.65, indicating strong alignment with SDG 11.2, which promotes access to safe, affordable, accessible, and sustainable transport systems for all. This result suggests that stakeholders see the terminal as a key infrastructure development that significantly helps in urban mobility and accessibility, especially for vulnerable populations such as the elderly, persons with disabilities, and low-income commuters as per SDG 11.2 target and indicator. The Roxas City Integrated Transport Terminal was rated 4.71 for SDG 11.2 Target and 4.59 for its Indicator, confirming consistent and positive perceptions among stakeholders about its impact. These scores highlighted that the transport terminal other than meet local commuting needs - it also advances global goals by making transportation more inclusive, efficient, and environmentally sustainable. According to the United Nations, (2021) sustainable transport systems are crucial for reducing poverty and inequality by connecting people to jobs, healthcare, education, and public services. The UNEP Share the Road campaign also emphasizes that investments in public transportation and active mobility infrastructure promote equity and help reduce environmental harm. In a global context where only 6 out of 10 urban residents have convenient access to public transport where access is even more limited in many developing countries (UN, 2023).

The Roxas City terminal stood out as a practice model. It shows how local governments can respond to international goals with targeted infrastructure that meets both community needs and environmental goals. The initiative not only upgrades public transportation but also contributes to urban resilience, economic productivity, and social inclusion. This initiative implies that well-managed infrastructure can support

the broader aims of SDG 11 by improving mobility, enhancing commuter safety, and ensuring that transportation systems work for all segments of society. By offering a more structured commuting experience, the terminal directly improves urban living conditions. The Roxas City Integrated Transport Terminal represents how a single infrastructure initiative designed with inclusivity and sustainability impacts on both urban development and community well-being. By prioritizing inclusive design, the terminal accommodates the needs of diverse users from all walks-of-life, inclusive of the elderly and persons with disabilities ensuring equal access to transportation services for all. Moreover, sustainable features, such as eco-friendly materials, energy-efficient systems, and waste management solutions, make it an environmentally responsible project that aligns with the city's commitment to sustainability.

Level of Alignment of People's Park Redevelopment to SDG 11.3 Target and Indicators

The People's Park Redevelopment in Roxas City received an overall mean score of 4.53, indicating a "very high" alignment with SDG 11.3. This goal promotes inclusive and sustainable urbanization, integrated planning, and efficient land use. This result suggests that Roxas City is positively implementing initiatives that support integrated and participatory urban development in line with the SDG 11.3 target and indicators. Moreover, the redevelopment initiative scored 4.50 for the SDG 11.3 Target, reflecting a strong alignment with efforts to create peoplecentered, inclusive, and environmentally sensitive public spaces. The redevelopment of People's Park has turned a central urban space into a more functional, welcoming, and inclusive area. It provides recreational and social spaces that accommodate diverse community needs, while also demonstrating a commitment to sustainable land use practices.

Supporting this, the initiative scored 4.54 for Indicator A, which assesses land use efficiency. The score reflects stakeholders' perception that the initiative makes strategic use of existing space, helping to manage urban density and improve quality of life without contributing to urban sprawl. In addition, the initiative received a 4.56 for Indicator B, which UniversePG I www.universepg.com

measures public participation in urban planning. This high score indicates that community members were actively involved in the planning and decision-making process, helping to shape the initiative according to local needs. This not only enhances the relevance and usability of the space but also builds a sense of ownership and trust among residents.

The redevelopment of People's Park highlighted the power of inclusive planning, effective land use, and active community involvement in creating a public space that enhances both sustainability and quality of life. This strategy clearly evident in Roxas City's approach. Furthermore, global urban development data cited in the file reveal a troubling trend of urban sprawl surpassing densification. The People's Park initiative, by contrast, demonstrates compact development and effective use of existing urban space, aligning with efforts to control sprawl and improve urban density. The high score for land use efficiency highlighted stakeholders' recognition that the project makes strategic use of space to manage density and enhance quality of life. This supports United Nations findings that stress the importance of compact, mixeduse development to counteract the negative effects of urban sprawl. Vaidya, (2020) emphasized integrating sustainable development principles into municipal planning through active stakeholder engagement.

The transformation of People's Park into a multifunctional and inclusive area aligns with global priorities for creating safe, accessible, and inclusive green spaces, as emphasized by UN-Habitat, (2024). This redevelopment not only provides a recreational space for all ages and backgrounds but also supports broader goals such as urban resilience, environmental sustainability, and public health.

Level of Alignment of Road Widening Initiatives in Roxas City to SDG 11.3 Target and Indicators

The Road Widening initiatives in Roxas City posted an overall mean score of 4.53, reflecting a "very high" alignment with Sustainable Development Goal (SDG) 11.3, which focuses on inclusive and sustainable urbanization, participatory urban planning, and land use efficiency. The initiative was rated 4.51 for the SDG 11.3 Target, 4.56 for Indicator A (land use efficiency), and 4.53 for Indicator B (public

participation in planning). These scores suggest that the initiative is perceived as a key contributor to enhancing urban mobility, optimizing land use, and engaging the community in the planning process.

The high alignment for Indicator A, which focuses on land use efficiency, indicates that the road widening initiatives effectively optimize urban space and avoid contributing to urban sprawl. This approach is particularly important in the context of SDG 11.3, which encourages cities to manage land use efficiently, balancing the need for infrastructure with the preservation of natural spaces. The positive score for Indicator B reflects that community participation was incorporated into the planning process, helping to foster civic trust and ensure that the infrastructure serves the real needs of the population. This participatory approach also enhances the sustainability of the initiative, as community involvement typically leads to greater acceptance and more effective long-term implementation.

These findings suggest that the Road Widening initiatives are a critical part of Roxas City's broader strategy to promote inclusive, integrated, and sustainable urban growth. By focusing on optimizing existing infrastructure and engaging the public in decisionmaking, the city is addressing challenges such as urban sprawl and resource management. Roxas City follows global best practices to reduce environmental impact and enhance public services, aligning its efforts internationally recognized standards sustainability. These practices include environmentally friendly infrastructure, efficient waste management, and green public spaces, all aimed at promoting a healthier urban environment.

Level of Alignment of Repair/Rehabilitation of Roxas City Museum to SDG 11.4 Target and Indicators

The Repair and Rehabilitation of the Roxas City Museum, received an overall mean score of 4.58, indicating "very high" alignment with Sustainable Development Goal (SDG) 11.4, which focuses on protecting and safeguarding cultural and natural heritage. This target underscores the importance of preserving cultural identity and heritage as integral elements of sustainable cities and communities. The

initiative scored 4.64 for the SDG 11.4 Target and 4.51 for the Indicator, reflecting strong stakeholder support for the museum's restoration as a significant cultural asset that contributes to community identity, education, tourism, and local pride.

The high score of alignment of the SDG 11.4 Target, with the mean of 4.64 suggests that the infrastructure initiative aligns with efforts to protect and conserve cultural heritage. This high alignment indicates that the community views the restoration as a way in preserving local history, traditions, and identity. Rather than simply repairing a building, the initiative is seen as a way to revive cultural memory and ensure continuity for future generations. The SDG 11.4 Indicator score of 4.51 reinforces this positive outlook by highlighting how the museum's restoration is perceived to contribute to community engagement, education, tourism, and cultural preservation.

The alignment with SDG 11.4 reflects the deep appreciation for the museum as a vital part of community identity and its role in promoting social inclusion and sustainable urban development. This is supported by global and local perspectives on heritage conservation. Cultural heritage conservation is not only about preserving physical structures but also about revitalizing community identity, promoting economic development, and fostering social cohesion (Sridharan *et al.*, 2023). By revitalizing the museum, Roxas City is not only honoring its past but also engaging its community in shaping a culturally rich and resilient future.

Providing access to exhibits, educational programs, and interactive activities, they encourage a deeper understanding of both local and global histories, allowing people to engage with the past in meaningful ways. Moreover, they promote cultural exchange by facilitating interactions between different communities, enabling individuals from various backgrounds to share stories, perspectives, and experiences. This helps create a more inclusive and tolerant society where cultural diversity is valued and celebrated, fostering mutual respect and understanding among different communities. By promoting spaces and programs that highlight diverse traditions, languages, and histories, it

encourages dialogue and unity while reducing prejudice and social divisions.

Level of Alignment of Construction and Improvement of Evacuation Center Hortus Botanicus to SDG 11.5 Target and Indicators

The Construction and Improvement of the Evacuation Center at Hortus Botanicus in Roxas City received an overall mean score of 4.50, which indicates a "very high" alignment with Sustainable Development Goal (SDG) 11.5. This target and indicators focus on disaster risk reduction (DRR) and improving access to safe, resilient infrastructure. The high rating underscores the community's recognition of the evacuation center as a crucial facility for providing safety and protection during disasters. The infrastructure initiative achieved the mean score of 4.51 for the SDG 11.5 Target, reflecting strong community acknowledgment of the evacuation center's role in reducing disaster impacts and providing resilient infrastructure. This score indicates that the public views the evacuation center as a vital community asset, a dependable shelter where individuals can find safety during emergencies and also shows the city's commitment to disaster preparedness, safety, and community welfare.

The SDG 11.5 Indicator A, which measures physical readiness and structural integrity, received a score of 4.46. This suggests that the evacuation center is widely seen as meeting the basic requirements for safety, space, and accessibility. The SDG 11.5 Indicator B, which focuses on functionality, community preparedness, and emergency use, received a score of 4.51. The high score suggests that the community has confidence in the center's ability to serve its purpose during emergencies. The high level of alignment reflects the city's commitment to not only building structures but to investing in the dignity and security of its people, especially in times of disaster. This aligns with the work of Yang et al. (2024), who argued that effective resilience strategies must combine both physical infrastructure and social preparedness. Their research highlighted that community confidence in emergency shelters depends not only on their structural integrity but also on their maintenance, supplies, and integration into local response systems. In this sense, the high ratings for the evacuation center reflect both UniversePG | www.universepg.com

its reliability as a physical shelter and its readiness to serve the community in times of crisis, demonstrating a holistic approach to disaster preparedness.

Furthermore, the initiative supports the Philippines' broader national commitment to disaster risk reduction. According to the United Nations Office for Disaster Risk Reduction (UNDRR), 72% of local governments in 106 countries had implemented local the DRR strategies aligned with national frameworks by 2023. Through the construction and improvement of this evacuation center, Roxas City contributes to this global trend, ensuring that local infrastructure supports national goals under SDG 11.5. Beyond being a physical refuge, the center also enhances community preparedness, disaster awareness, and climate adaptation efforts, exemplifying an integrated approach to resilience-building that addresses both immediate and long-term community welfare.

Moreover, the evacuation center was constructed and equipped with consideration for community safety, the facility provided reliable shelter for vulnerable populations during emergency situations especially during the COVID-19. Beyond its function as a physical refuge, the center contributed to enhanced community preparedness, increased disaster awareness, and the advancement of long-term climate adaptation strategies.

Level of Alignment of Rehabilitation of Sanitary Landfill Cell 2 to SDG 11.6 Target and Indicator

The Rehabilitation of Sanitary Landfill Cell 2 in Roxas City received an overall mean score of 4.50, indicating a "very high" alignment with Sustainable Development Goal (SDG) 11.6, which focuses on reducing the environmental impact of cities through sustainable waste management. The high alignment reflects a strong recognition of the rehabilitation effort as a key step towards improving the city's waste management practices and minimizing negative environmental outcomes.

The 4.53 score for the SDG 11.6 Target shows that stakeholders perceive the rehabilitation initiative as a crucial action in enhancing waste management capacity and promoting sustainability. The SDG 11.6 target encourages cities to reduce their environmental

footprint, and the rehabilitation of the landfill plays a direct role in this by improving the landfill's ability to safely manage waste and reduce risks associated with pollution and waste accumulation.

The overall high alignment demonstrates that the rehabilitation of the landfill is seen as a positive step towards achieving the goals of SDG 11.6, especially in terms of reducing the environmental impact of waste and fostering a cleaner, healthier urban environment. Poor waste management practices - such as improper waste disposal and contamination of land, water, and air - pose significant risks to public health and the environment. The rehabilitation of the landfill directly addresses these risks by ensuring that waste is properly managed, thus contributing to the creation of a more sustainable and livable urban environment.

The project aligns with global trends in waste management, as noted by the United Nations, (2023) which emphasizes the importance of enhancing waste management infrastructure and policies to tackle issues like waste mismanagement and pollution. By improving the infrastructure of the landfill and promoting more sustainable waste practices, Roxas City is contributing to the global effort to reduce greenhouse gas emissions and build a more resilient, low-carbon circular economy. Stakeholders recognize the landfill's rehabilitation as a key component of the city's broader efforts to meet environmental sustainability goals, particularly in addressing waste management challenges.

Level of Alignment of TATC Redevelopment Initiative Phase 1, 2, 3, and Repair and Rehab of TATC Fish, Vegetable, and Meat Section to SDG 11.6 Target and Indicators

The TATC Redevelopment Initiative Phases 1, 2, and 3, along with the repair and rehabilitation of the Fish, Vegetable, and Meat Section received an overall mean score of 4.48, indicating a "very high" alignment with SDG 11.6, which focuses on reducing the environmental impact of cities through better waste management and infrastructure improvements. This high alignment shows the stakeholder's positive perception of the initiative's contributions to improving urban sustainability and environmental health. The SDG 11.6 Target scored 4.59, and Indicator A

received 4.46, further confirming support for the project's alignment with SDG 11.6, particularly in waste management and environmental protection. According to the United Nations (2023), only 61% of global municipal solid waste is managed in controlled facilities, underscoring a widespread deficiency in effective waste management practices. And by implementing this infrastructure initiative and improving these sections, the initiative contributes to reducing organic waste and enhancing hygiene, which in turn improves environmental health in the community.

The high alignment with SDG 11.6 suggests that the initiative has made significant progress in addressing environmental challenges like waste management and pollution control.

In the Philippine context, the TATC Redevelopment Initiative is an example of SDG localization. Under the leadership of Mayor Ronnie Dadivas, Roxas City has prioritized urban renewal through the CHANCES program - which stands for Clean Up and Beautification, Health and Wellness, Agriculture and Aquaculture Support, Negosyo at Trabaho (Business and Employment), Community and Infrastructure Development, Education, and Social Services. The TATC initiative exemplifies the city's broader efforts to make urban spaces cleaner, more resilient, and more sustainable. This aligns with global sustainability goals and reflects the city's commitment to both environmental and social development by integrating ecological responsibility with inclusive growth. It demonstrates how urban planning can be guided by principles such as climate resilience, resource efficiency, and social equity. By addressing the needs of both the environment and the community, the city showcases a holistic approach to sustainable development that supports long-term well-being and progress for present and future generations. This integrated strategy ensures that ecological preservation, social equity, and economic viability are pursued together balancing immediate needs with long-term goals.

Level of Alignment of Riverside Promenade Lapu-Lapu St. and Promenade Phase 2 Altavas St. Brgy. 8 to SDG 11.7 Target and Indicators

The Riverside Promenade initiatives at Lapu-Lapu St. and Altavas St. in Barangay 8 scored an overall mean

score of 4.49, reflecting a "very high" alignment with SDG 11.7. This goal focuses on ensuring that all people have access to safe, inclusive, and accessible green and public spaces. The initiative achieved the mean score of 4.51 for the SDG 11.7 Target, indicating a very high alignment with the objectives of providing equitable access to public spaces for all residents. The initiative's design and implementation appear to meet key community needs, particularly in terms of urban spaces that support both environmental and social well-being.

A score of 4.46 for Indicator a, which covers physical aspects like accessibility and safety, is positive but also points to opportunities for further enhancement, particularly for persons with disabilities or limited mobility. Patrick and McKinnon, (2022) emphasized that inclusive design in public spaces must go beyond general access and incorporate principles of universal design, such as smooth transitions, signage for visually impaired individuals, and designated access points for all demographics. These adjustments can transform a good space into a truly inclusive environment, ensuring equitable usage by all members of the community.

Meanwhile, Indicator B with a high score of 4.49, reflected the initiative's success in social engagement and community cohesion. The Riverside Promenade has become a community hub, allowing people of diverse backgrounds to interact and build relationships in a neutral, welcoming setting. This aligns with the United Nations' broader vision for SDG 11.7, which promotes public space as a catalyst for inclusive urban societies.

The initiative also reflects global concerns about the inequitable distribution of green and public spaces, particularly in developing nations. The UN, (2023) stated that in least developed countries, fewer than 3 in 10 urban residents have convenient access to open public spaces. Roxas City's initiative directly addresses this issue by ensuring that well-maintained and attractive promenades are made accessible to the public, thus helping to close the accessibility gap and improve urban health outcomes, especially in rapidly growing cities.

By integrating these promenades along riversides, Roxas City is not only enhancing human interaction but also strengthening ecological balance within the urban environment.

Level of Alignment of Beautification of the Plaza Heritage Zone to SDG 11.7 Target and Indicator

The Beautification of the Plaza Heritage Zone received an overall mean score of 4.43, reflecting a "very high" alignment with SDG 11.7, which emphasizes providing safe, inclusive, and accessible public spaces. The initiative's strong alignment with SDG 11.7 demonstrates that the beautification initiative is making positive contributions to urban life, fostering inclusivity, and providing a platform for cultural expression. UN-Habitat, (2024) emphasizes that safe, inclusive, and accessible public spaces are vital for fostering social cohesion, equity, and civic identity. In particular, streets and plazas are recognized not merely as transit points but as arenas for public life, where community interaction and cultural activities can thrive. The SDG 11.7 Indicator A received a score of 4.30, indicating a positive view of the plaza's physical characteristics such as safety and accessibility.

In contrast, SDG 11.7 Indicator B scored a notably high 4.54, indicating strong public sentiment regarding the plaza's social utility and cultural value. The Plaza Heritage Zone positively achieved this transformation, becoming a lively venue for social and cultural activities, as reflected in the stakeholder feedback. The success of Roxas City's beautification initiative in creating a functional, inviting, and culturally relevant public space stands out as an important local achievement that mirrors the global goals of SDG 11.7. It provides a model of how local governments can reclaim and redesign underutilized spaces to better serve the needs of their communities.

The initiative's alignment with inclusive urban planning is also supported by Patrick and McKinnon, (2022) emphasis on education and capacity-building for urban practitioners, advocating that inclusive public space design requires both technical knowledge and sensitivity to community needs.

The revitalization of the Plaza Heritage Zone aligns with SDG 11, aiming to make cities inclusive, resilient, and sustainable. This initiative not only enhances community well-being by creating a vibrant and accessible public space that encourages social interaction and cultural expression, but also promotes urban resilience. The plaza serves as a focal point for community engagement and cultural preservation, providing a space where people can come together to celebrate local heritage.

In addition to its social benefits, the plaza contributes to economic revitalization. By attracting both locals and tourists, it drives tourism, local events, and small-scale entrepreneurship, particularly in the heritage and cultural sectors. This blend of cultural preservation and economic growth enhances the city's overall competitiveness while ensuring long-term sustainability by attracting tourism, stimulating local businesses, and creating jobs rooted in heritage and creativity. It also strengthens community identity and pride, encouraging civic engagement and social cohesion.

Level of Alignment of Establishment of Comprehensive Land Use Plan/Zoning Ordinance for 2021-2030 to SDG 11.a The establishment of a Comprehensive Land Use Plan/Zoning Ordinance for 2021-2030, with an overall mean score of 4.50, as seen on Table 5.11, demonstrates a "very high" alignment with Sustainable Development Goal 11.A, which emphasizes the importance of developing sustainable and inclusive urban policies. The high score is a recognition of the plan's relevance in promoting efficient land use, balancing urban growth with environmental protection, and ensuring equitable access to urban services.

The SDG 11.A Target score of 4.47 suggests that while the land use plan is viewed as a valuable step toward sustainable urban development, there may still be room for improvement in its long-term implementation and monitoring. Conversely, the SDG 11.A Indicator score of 4.54 indicates a positive perception regarding the effectiveness of the zoning ordinance in promoting urban resilience, environmental sustainability, and inclusive growth. This indicates that stakeholders perceive the plan as well-aligned with

broader sustainability goals and as contributing to better urban governance. The findings imply that the land use plan could benefit from continued stakeholder engagement and adaptive strategies to address emerging challenges in urban development, ensuring that it remains responsive to future needs. Ultimately, the implementation of such plans is crucial for fostering cities that are not only efficient and sustainable but also inclusive and resilient to future urban challenges.

The results of the assessment regarding the Comprehensive Land Use Plan/Zoning Ordinance for 2021–2030 show a strong alignment with SDG 11.A, validating the relevance of strategic land use planning as emphasized in the literature.

The high alignment for both the SDG 11.A Target and Indicator reflect how local stakeholders perceive this initiative as not only responsive to urban development pressures but also as a concrete measure that promotes economic, environmental, and social balance across regions. The strong score of 4.54 for the indicator suggests that stakeholders see the zoning ordinance as highly effective in promoting urban resilience and inclusivity, especially through strategies that accommodate environmental constraints and population growth. This is supported by Meideros et al. (2020), who assert that integrated and sustainable urban planning is essential for addressing challenges such as urban sprawl, social inequality, and environmental degradation. The authors argue that cities must adopt zoning frameworks that encourage equitable distribution of land use, improve access to public services, and strengthen resilience to both social and environmental shocks.

These strategies align with global best practices in sustainable urban planning and reflect the broader goals of SDG 11.A and 11.3, which promote participatory, inclusive, and environmentally responsible city planning. The infrastructure and urban development in the Philippines supports the idea that cities like Roxas must strategically use Comprehensive Land Use Planning (CLUP) to direct investments, manage urban expansion, and reduce development inequalities.

Level of Alignment of Rehabilitation and Reconstruction Initiatives Post-Typhoon Ursula to SDG 11.b

The Rehabilitation and Reconstruction initiatives following Typhoon Ursula received an overall mean score of 4.45, reflecting a "very high" alignment with SDG 11.B. This goal emphasizes the adoption and implementation of integrated policies and plans aimed at building resilience and reducing disaster risks. The SDG 11.B Target received a score of 4.42, indicating a very high alignment of initiative's relevance to sustainable recovery and risk reduction efforts. Indicator A, which likely relates to integration of disaster risk reduction measures into development planning, scored 4.46, which shows that reconstruction efforts were thoughtfully planned with future resilience in mind. Meanwhile, Indicator B, which may focus on local preparedness and institutional coordination, achieved a score of 4.47, showing strong support for how local systems responded and adapted post-disaster.

These high ratings collectively highlight that the city's recovery strategy was not merely reactive, but forward-looking and inclusive. It demonstrates that communities value efforts that not only rebuild physical structures but also strengthen social systems and preparedness mechanisms, ensuring that the lessons from Typhoon Ursula translate into improved resilience and sustainable urban development.

The high score of 4.46 for Indicator A indicates stakeholder satisfaction with how disaster risk considerations were integrated into the reconstruction plans. This supports Yang *et al.* (2024), who argue that resilience strategies must go beyond rebuilding - they must incorporate future-oriented planning, community engagement, and institutional readiness. They stress that effective resilience is not only about physical infrastructure but also about strengthening governance structures and empowering local communities. This is precisely what Roxas City achieved through its strategic, participatory approach to rebuilding after Typhoon Ursula.

Level of Alignment of Construction and Improvement of Casa de Mercado to SDG 11.c

The Construction and Improvement of Casa de Mercado initiative received an overall mean score of UniversePG | www.universepg.com

4.37, indicating a "very high" level of alignment with SDG 11.C. This goal emphasizes supporting least developed countries (LDCs) in building sustainable and resilient buildings using local materials, particularly in alignment with regional development needs.

The SDG 11.C indicator score of 4.33 means that Roxas City infrastructure initiative utilizes local resources and supports community-based development efforts. This suggests a broader discussion for initiative approaches that are cost-effective, culturally appropriate, and environmentally sound. Like Casa de Mercado not only to enhance economic vitality through improved market facilities but also to promote local employment and community participation in urban renewal.

The findings imply that sustainable development in local markets, especially through infrastructure upgrades, plays a vital role in strengthening local economies while preserving cultural identity - an essential step toward resilient and self-sustaining urban systems.

The broader implications of the initiative align with the arguments made by Meideros *et al.* (2020), who assert that sustainable and integrated urban planning is crucial for addressing rapid urbanization and social inequality.

Level of Alignment of Roxas City Water Supply and Sanitation Initiatives to SDG 11.c

The Roxas City Water Supply and Sanitation initiatives received an overall mean score of 4.39, indicating a "very high" alignment with SDG 11.c, which supports the development of sustainable and resilient buildings and infrastructure in least developed and developing contexts. With the target scoring 4.33 and the indicator at 4.46, the results show that these initiatives significantly contribute to enhancing local sustainability and resilience. These initiatives not only improve access to clean water and adequate sanitation - critical components of public health and urban resilience - but also promote environmental stewardship and sustainable urban growth. The findings imply that the city's focus on essential services like water and sanitation infrastructure plays a

key role in strengthening urban resilience and supporting long-term sustainable development, especially in communities vulnerable to resource scarcity and climate-related risks.

As highlighted by the United Nations, (2023) advancing urban sustainability in developing contexts requires strategic investment in infrastructure that uses locally appropriate materials and supports ecological compatibility. The initiative's high alignment reflects how well initiatives embody these priorities, particularly in reinforcing the resilience of essential urban systems.

Roxas City's initiative to prioritize community needs through enhanced water and sanitation services exemplifies a commitment to ethical infrastructure development. This approach aligns with the broader global goal of ensuring equitable access to basic services, especially for marginalized and vulnerable populations. By focusing on water and sanitation, the city not only addresses immediate health and hygiene needs but also contributes to long-term environmental sustainability. Proper waste management and water conservation practices reduce pollution and safeguard local ecosystems by preventing harmful substances from entering waterways, soil, and natural habitats. These practices help maintain biodiversity, protect wildlife, and ensure that natural resources remain clean and available for future use. Additionally, they contribute to climate resilience by reducing the environmental footprint of urban areas and promoting more sustainable lifestyles among residents.

4. Conclusion

Roxas City's infrastructure initiatives demonstrate a very high level of alignment with the targets and indicators of SDG 11, reflecting a strong commitment to creating inclusive, safe, resilient, and sustainable urban development. Across key areas, such as housing, transport, public spaces, disaster resilience, and environmental management, the city effectively translates global SDG 11 objectives into localized, actionable programs addressing both current urban challenges and long-term sustainability goals. The findings underscore the critical role of participatory planning and community engagement in enhancing the sustainability relevance, acceptance, and

infrastructure projects. Roxas City's inclusive planning approach ensured that infrastructure efforts not only met technical requirements but also promoted social equity and environmental stewardship. This integrative practice significantly contributes to building urban resilience and strengthening local governance aligned with SDG 11. Although the city's achievements are commendable, sustaining them required consistent budgetary support, stakeholder engagement, and monitoring and evaluation mechanisms. Flexibility in adapting to emerging urban issues remains essential. Roxas City's experience illustrates that sustainable development is an evolving process, demanding persistence, collaboration, and innovation. Other local governments can learn from this approach in successfully localizing global goals through community-centered planning.

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6. Conflicts of Interest

The author declares no conflict of interest.

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