



Interim impacts of an integrated resilient development project: The case of Accra, Ghana

Hsi-Chuan Wang

- The Greater Accra Resilient and Integrated Development (GARID) project, initiated in 2019, is a World Bank-funded project that aims to improve flood risk management and access to basic infrastructure and services in targeted informal settlements.
- While several key works under the GARID project have yet to be completed, we use data from baseline and midline household surveys to examine GARID's interim impact.
- The results indicate that the introduction of GARID had no significant intermediate effects on flooding conditions in GARID-targeted neighbourhoods compared to non-GARID neighbourhoods.
- GARID's initiation has facilitated project transparency and stimulated notable bottom-up commitments to neighbourhood improvements.
- The midline results also indicate a decline in living satisfaction among households in GARID-targeted neighbourhoods. While this is contrary to expectation, it is understandable because GARID's interventions have been delayed, and its implementation is still in progress.
- The project interventions should be expedited to maximise benefits. The team should also continue extensive participatory activities and initiate early discussions on maintenance for sustainable operations.
- The experiences from GARID can offer valuable lessons for other cities aiming to advance their resilience investments.

This project was funded by IGC Ghana

theigc.org

DIRECTED BY



Research motivation

Resilience has been extensively explored theoretically and pragmatically, making its pursuit a shared value among different disciplines. Understanding resilience in the scope of development and adaptation, projects built upon this concept have spread worldwide, bringing changes that can transform human wellbeing through livelihood stress reduction and climate adaptation enhancement (Jha et al., 2013). Documenting the material outcomes achieved in resilience projects is durable, capturing the transformation while showing the alleviation of shocks and stresses. However, it may be challenging (Keating and Hanger-Kopp, 2020). Although some earlier assessments have paved the way forward (Béné et al., 2020; Béné and Haque, 2022), studies developed to enhance this discussion with evidence are still limited. More work is needed to understand the impacts that resilient development projects could result in. This study aims to extend the field by exploring the impacts of the Greater Accra Resilient and Integrated Development Project (GARID). It focuses on a main question:

Did GARID improve Greater Accra's regional resilience?

Research methodology

Because GARID intervenes in three specific neighbourhoods (Nima, Alogboshie, and Akweteyman; as GN), the study uses paired, non-intervened neighbourhoods (Accra New Town, Abofu, and Achimota, respectively; as CN) as the comparison counterparts. An impact assessment framework tied to GARID is developed based on the literature. The assessment framework instructs two independent surveys for pre- and post-interventions. Also, two assessment dimensions are identified in the framework, considering their relevance to Accra: (1) resilience enhancement and (2) inclusive growth. As such, 19 indicators across eight dimensions were structured to facilitate the two surveys, including detailed information on household characteristics, demographics, socio-economic information, household flooding and living conditions, and household perceptions of GARID and the neighbourhoods.

The study surveyed 451 randomly selected households in both GN (300) and CN (151) before the introduction of GARID in September 2022 as the baseline. The study followed up with a survey of the same neighbourhoods 24 months after GARID was introduced and in the progress of development in September 2024 as the midline.

JANUARY 2025

2

Findings

Did GARID improve Greater Accra's regional resilience?

This study uses a Difference in Difference (DiD) approach to understand the influence of GARID on resilience enhancement and inclusive growth. Regressions are utilised among the above 19 indicators and the results are integrated with the responding dimensions summarised in Figure 1. The results suggest that the introduction of GARID has significantly affected GN, in contrast to CN, among Dimensions 2, 4, 7, and 8 during the transition from the baseline to the midline. GARID does not result in obvious differences in GN from CN between the assessed timeframe across the other dimensions.



Figure 1: Intermediate influences of GARID on Greater Accra resilience

Knowing that GARID has stressed its transparency (Dimension 2) and stimulated committed bottom-up action (Dimension 8) among focus neighbourhoods is an exciting empirical finding. Scholars have stressed enhancing projects' transparency (Ophiyandri et al., 2013) and emphasised the crucial role of bottom-up activities in strengthening community resilience (Yi et al., 2020). The study engages with the literature through respective interpretations. On the one hand, a project's transparency is often based on the degree of stakeholders' involvement, relying on intentional strategy-making, visioning, and empowerment in a top-down manner (Sharifi and Yamagata, 2018) to format responsible governance (Mitchell et al., 2015). On the other hand, GARID's influence on stimulating a growing local commitment in GN implies not only how residents are accumulatively and positively responding to the changing urban scape, but also the possibility of driving a positive impact on community resilience via bottom-up actions (Kirby et al., 2024). The findings echo scholars' argument (Yi et al., 2020) that collaborative efforts from both topdown and bottom-up are needed for successful resilience development.

3

The finding that GARID is resulting in negative impacts on living quality (Dimension 4) and social safety net (Dimension 7) is unexpected but understandable, partly by hearing words from the ground like "the pace of work is slow." Scholars have explored discourses around delayed urban interventions (Anand et al., 2018) and the potential "temporal contestation" (Koppelman, 2018), which features merging collective action to demand acceleration from the state. The findings are similar to those of these scholarships and can be interpreted in two ways. The negative impacts might reflect that the GN are challenging environments, which is why they were chosen under GARID. The conditions in GN have been deteriorating while waiting for GARID to hit the ground. Another explanation is attached to the delay itself. When the wait has exceeded residents' expectations, doubts could start to occur, negatively influencing the respondents' living satisfaction and their awareness of trustworthy organisations to enhance the neighbourhoods' safety net.

The indifferent influences of GARID among Dimensions 1, 3, 5, and 6 is due to many reasons. First, the study might not successfully capture the most appropriate indicators to assess GARID impacts. The indicators selected in the study are based on the reference centring on resilience enhancement and inclusive growth. GARID might have impacts on other dimensions that the study has yet to address. Another factor is tied to the fact that the interventions are not reaching completion. The latter could be more of a solid reason for some indicators to be indifferent in the assessment, particularly considering how the completed structural interventions (like works of dredging and upgrading) could significantly reduce flooding incidents and enhance livelihoods but have limited influence before they are in effect.

Recommendations

- Flood interventions that have a greater influence on disaster risk reduction among neighbourhoods can be expedited if no extensive engagement activities are needed.
- The effective and extensive engagements that GARID has led since its beginning are encouraged to continue.
- It is desirable to establish and investigate the localised maintenance mechanisms that allow local governments to self-support and maintain the functionalities of the completed infrastructure.
- Projects similar to GARID can enhance regional resilience when a more thorough review of GARID's implementation process is conducted. Some notable discussions could include securing successful leadership and giving sufficient mobilisation authorisation among government agencies.
- Similar surveys, including an endline survey, could be periodically conducted in the future to trace GARID's progress.

4

JANUARY 2025

References

- Anand, N., Gupta, A., & Appel, H. (2018). The promise of infrastructure. Duke University Press. http://ebookcentral.proquest.com/lib/ku/detail.action?docID=545215 2
- Béné, C., & Haque, M. A. B. M. (2022). Strengthening the resilience of vulnerable communities: Results from a quasi-experimental impact evaluation in coastal Bangladesh. *The European Journal of Development Research*, 34(2), 843–868. https://doi.org/10.1057/s41287-021-00399-9
- Béné, C., Riba, A., & Wilson, D. (2020). Impacts of resilience interventions –
 Evidence from a quasi-experimental assessment in Niger. *International Journal of Disaster Risk Reduction, 43*, 101390. https://doi.org/10.1016/j.ijdtr.2019.101390
- Jha, A. K., Miner, T. W., & Stanton-Geddes, Z. (2013). *Building urban resilience: Principles, tools, and practice*. World Bank Publications.
- Keating, A., & Hanger-Kopp, S. (2020). Practitioner perspectives of disaster resilience in international development. *International Journal of Disaster Risk Reduction, 42*, 101355. https://doi.org/10.1016/j.ijdtr.2019.101355
- Kirby, N., Stasiak, D., & von Schneidemesser, D. (2024). Community resilience through bottom–up participation: When civil society drives urban transformation processes. *Community Development Journal*. https://doi.org/10.1093/cdj/bsae031
- Koppelman, C. M. (2018). "For now, we are in waiting": Negotiating time in Chile's social housing system. *City & Community*, 17(2), 504– 524. https://doi.org/10.1111/cico.12301
- Mitchell, D., Enemark, S., & van der Molen, P. (2015). Climate resilient urban development: Why responsible land governance is important. *Land Use Policy*, *48*, 190–198. https://doi.org/10.1016/j.landusepol.2015.05.026
- Ophiyandri, T., Amaratunga, D., Pathirage, C., & Keraminiyage, K. (2013). Critical success factors for community-based post-disaster housing reconstruction projects in the pre-construction stage in Indonesia. *International Journal of Disaster Resilience in the Built Environment, 4*(2), 236– 249. https://doi.org/10.1108/IJDRBE-03-2013-0005
- Sharifi, A., & Yamagata, Y. (2018). Resilience-oriented urban planning. In Y. Yamagata & A. Sharifi (Eds.), *Resilience-oriented urban planning: Theoretical and empirical insights* (pp. 3–27). Springer International Publishing. https://doi.org/10.1007/978-3-319-75798-8_1
- Yi, F., Deng, D., & Zhang, Y. (2020). Collaboration of top-down and bottom-up approaches in the post-disaster housing reconstruction: Evaluating the cases in Yushu Qinghai-Tibet Plateau of China from resilience perspective. *Land Use Policy*, *99*, 104932. https://doi.org/10.1016/j.landusepol.2020.104932