

Social Innovation in the Urban Informal Economy as a Mechanism for Reducing Income Inequality in Developing Countries

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ARTICLE INFO

Keywords: Social Innovation, Informal Economy, Income Inequality, Developing Countries, Economic Inclusion.

Received : 27, March

Revised : 29, April

Accepted: 30, May

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ABSTRACT

Income inequality in the urban informal economic sector of developing countries remains a structural challenge due to low productivity. This research aims to analyze the role of social innovation as a strategic mechanism in increasing economic capacity and reducing the income gap of urban communities. Through a qualitative approach of case studies of 40 informal economic actors, data was collected via interviews and observations for thematic analysis. As a result, the implementation of digital cooperatives and community financing systems has been proven to increase supply chain efficiency by 25% and household net income by 20%. These findings confirm that social innovation serves as a catalyst for a more equitable distribution of welfare through a decrease in internal income variance. In conclusion, this research offers a social innovation framework as a strategic instrument for policy makers in efforts to alleviate inequality in urban areas in an inclusive manner

INTRODUCTION

Income inequality remains a persistent structural challenge in developing countries, where the gap between the upper and lower social groups continues to widen paradoxically despite stable macroeconomic growth. This phenomenon is exacerbated by the dominance of the urban informal economy, which is often underestimated as a "residual sector", when in reality this sector absorbs more than 60% of the workforce in urban areas of developing countries (James Nyagwaya et al., 2026). Globally, the vulnerability of informal workers who are alienated from access to social protection and formal financial systems has become a key urgency in the sustainable development agenda, especially in efforts to mitigate extreme poverty in densely populated areas. Without proper intervention, wealth accumulation will remain concentrated in a handful of formal actors, while the masses of informal workers are trapped in acute economic precariats.

In many developing countries, the informal economy is not just a survival strategy, but a complex ecosystem that underpins the distribution of goods and services to low-income communities in essence. However, in the absence of a strong and integrated support mechanism, the sector tends to be trapped in a cycle of low productivity that perpetuates income inequality between generations (Schutter et al., 2023). Recent data show that despite the rapid pace of urbanization, economic integration for marginalized groups is often hampered by restrictive spatial planning and licensing policies. This creates an urgent need for a new approach that goes beyond mere administrative formalization – which often burdens small business actors – towards the creation of a more inclusive and participatory welfare distribution (Thapa Karki et al., 2021).

Social innovation has emerged as a new paradigm that offers community-based solutions to address socio-economic dysfunctions that have failed to be solved by conventional market mechanisms and government bureaucracy. This concept emphasizes the creation of social value through business model transformation, cross-sectoral collaboration, and appropriate technology empowerment (Pedersen et al., 2021). In the context of the urban informal economy, social innovation plays a vital role as a vital instrument to increase the collective bargaining power of informal workers. This innovation not only serves as a revenue lever through collective efficiency, but also as a self-protection mechanism for vulnerable groups in the face of global economic fluctuations (George, 2025).

Identification of scientific problems shows that although the literature on the informal economy has grown rapidly, there is a significant research gap regarding the specific mechanisms by which social innovation can causally reduce income inequality. Previous studies conducted by (Dana et al., 2021) tend to focus analysis on aspects of regulation and quality standardization without exploring the potential for innovations that are organically born from the grassroots. In addition, note that most interventions in the informal sector are still trapped in a technocratic top-down approach, so they often fail to understand the local dynamics, social capital, and ontological needs of economic actors on the ground (Lopez & Ludwig, 2021)

Another crucial gap was found in the research of (Li, 2025), which highlighted that the infiltration of digital technologies in the informal economy often creates a "new digital divide" instead of closing the income gap, especially if it is not accompanied by inclusive social model innovations. Researchers such as (Doligalski & Rojas, 2024) also argue that the current mainstream of economic studies is too fixated on economic efficiency metrics alone and ignores the dimension of redistributive justice in the income structure of the informal sector. The absence of an analysis on the mediating role of social innovation in linking access to resources with income equality for marginalized urbanites is a theoretical gap that this study seeks to fill (Kluvankova et al., 2021).

Based on these backgrounds and problems, this study aims to explicitly analyze how the implementation of social innovation in urban informal economic ecosystems can serve as an effective mechanism to reduce income inequality in developing countries. The focus of this research is directed at identifying the typologies of social innovations that have the most impact—such as digital platform-based cooperatives and self-managed community microfinance systems—as well as an empirical evaluation of their influence in improving income redistribution at the local level. In addition, this study also examines the correlation between the adoption of collective innovation and the increase in economic resilience of households in densely populated urban areas (Tajuddin & Mulang, 2024).

The theoretical contribution of this research is to enrich the treasures of the literature on development economics and economic sociology through the formulation of conceptual models of social innovation that are specific to the characteristics of the liquid informal sector. This research seeks to provide a deconstructive perspective that innovation is not always elitist or comes from large research institutions, but can be born from the collective creativity of marginalized communities as a form of resistance to asymmetrical economic structures. Scientifically, this study strengthens the theory of economic inclusion by providing primary data on the transformation of the informal sector from a mere labor storage sector to a key driver of income equity through community independence (Ndandani & Mbali, 2021).

Practically, this research provides a strategic foundation for governments, urban planners, and non-governmental organizations in formulating more pro-informal and evidence-based policies. The results of the analysis are expected to be a guide for stakeholders to adopt the social innovation framework as an instrument of adaptive financial inclusion and social protection in urban areas. By dissecting the sociological and economic mechanisms at work on the ground, public policy can be directed to facilitate—not criminalize or inhibit—local initiatives that have been shown to close income inequality gaps and improve the economic dignity of urban communities in developing countries.

THEORETICAL REVIEW

Reconceptualization of Informal Economy in Urban Areas

Informal economies in urban areas of developing countries are no longer seen as a transitional phenomenon or a "byproduct" of the failure of industrialization. Instead, the sector has transformed into a permanent and integral element in the structure of the urban economy. The informal economy encompasses a wide range of activities that are unregulated but make a crucial contribution to the Gross Domestic Product (GDP) (Khuong et al., 2021). The systemic vulnerabilities inherent in this sector—such as the lack of legal protections and structural barriers to accessing formal capital—have significantly widened the income inequality gap (Dell’Anno, 2022).

Contemporary views are now beginning to shift from the theory of classical economic dualism to an integrative paradigm that sees the informal sector as an "engine of growth from below". However, this transformation requires radical policy interventions to address job uncertainty and improve the well-being of the perpetrators (Luis David Fernández Zambrano & Loader Director, 2024). The main focus now is on how to transform the extractive informal sector into a productive and inclusive ecosystem.

Social Innovation as a Paradigm for Inclusive Development

Social innovation emerged as an antithesis to conventional development models that often failed to touch the bottom layers of society. This concept is defined as the creation of new solutions to social problems that are more effective, efficient, and sustainable than existing solutions. Emphasize that social innovation in the informal sector often manifests itself in the form of organic collaborations, such as grassroots cooperatives or flexible self-sustaining microcredit schemes (Matthias, 2024).

In contrast to purely profit-oriented technical innovation, social innovation focuses more on changing power relations and equitable redistribution of resources (Pansera & Fressoli, 2021). Through collective empowerment, informal economic actors not only create new economic value, but also build an independent and adaptive social safety net (Lekan et al., 2021). This creates community self-sufficiency that is able to mitigate the risk of economic shocks without full dependence on external assistance.

Digitalization and Technology Acceleration in the Informal Sector

Digital transformation has opened up new horizons for the acceleration of social innovation through the use of mobile devices and online platforms. Note that image analysis and digital data are now beginning to be integrated to map market needs for street vendors and informal service workers, which directly improves the accuracy of their business planning (Kamaruddin, 2025). Digitalization enables operational efficiencies that were previously difficult to achieve by small-scale informal actors.

However, crucial challenges remain in the form of "documentation gaps" and uneven digital literacy, which risks creating new inequality gaps (Porzecanski & Dávalos, 2025). Successful technology integration in this sector has proven to require intensive social assistance to shorten distribution chains and shift profit margins directly into the hands of workers (Asokan et al., 2022).

Without assistance, technology risks becoming a new instrument of exploitation by large platform providers.

Mechanism for Reducing Inequality through Social Intervention

The causal relationship between social innovation and the reduction of income inequality is mediated by increased accessibility to equal economic opportunities (Fragkandreas, 2021). Argue that quality standardization and community management in informal business groups can increase their bargaining power in the face of the formal sector (Barra & Papaccio, 2024). Social innovation allows the consolidation of small units into more competitive collective entities (Cheng et al., 2021).

With a more transparent and democratic profit distribution mechanism in innovative communities, wealth accumulation is no longer concentrated in a handful of actors or intermediaries, but is more evenly distributed among community members. This dynamic creates an economic multiplier effect that strengthens the financial resilience of households in urban slums and structurally reduces the income variance ratio (Kaiser et al., 2025).

METHODOLOGY

This study uses a qualitative approach with a descriptive-analytical case study design to explore the mechanisms of social innovation in informal economic ecosystems in depth. The selection of a qualitative approach is based on the need to understand complex and dynamic social phenomena in urban areas that cannot be measured purely through numbers (Dźwigoł, 2024). This design allows researchers to identify key variables that influence income redistribution as well as the role of collective agencies in creating self-sustaining economic solutions at the local level (Foster & Iaione, 2022).

The population in this study includes all informal economic actors in strategic urban areas, with a focus on communities that have adopted social innovation initiatives. The sampling technique was carried out by non-probability purposive sampling to select 40 participants consisting of 30 informal business actors and 10 urban economic policy stakeholders. The reason for selecting these participants was to ensure data-rich practical experiences related to systemic barriers and the success of innovative interventions in improving their standard of living (Mousavi et al., 2022). The inclusion criteria involve active participation in a digital cooperative or community finance scheme for a minimum of two years.

The data collection technique integrates semistructured interviews, participatory observations, and documentation studies into the community's financial statements. The interview instrument was developed by adapting economic inclusion indicators from previous research validated through triangulation of sources and techniques to ensure the credibility of the data (Cartwright & Igudia, 2024). Internal validity is also strengthened through member checking, where transcript results are reconfirmed to informants to ensure the accuracy of their representations of experiences (Cartwright & Igudia, 2024). The research procedure is carried out through four main stages: pre-field

(literature and licensing study), field stage (primary data collection), analysis stage (data reduction and categorization), and final report preparation stage.

Data analysis is carried out inductively using thematic analysis techniques through an interactive model that includes data collection, data condensation, data presentation, and conclusion drawn. The data processing process is supported by the computer-Assisted Qualitative Data Analysis Software (CAQDAS), namely NVivo 14, to facilitate systematic coding and mapping of relationships between social innovation themes (Olapane, 2021). The use of this tool ensures that the data interpretation process remains objective, transparent, and capable of generating strong theoretical propositions regarding the role of social innovation as a mechanism for reducing income inequality in developing countries.

RESULTS AND DISCUSSION

Based on data collected from 40 participants representing various urban informal economic clusters, it was found that this sector is no longer just a side job, but a main source of livelihood for marginalized communities. Demographic data shows that the majority of respondents (65%) are in the productive age range of 31–50 years, with the retail trade (50%) and services (30%) sectors dominating. Interestingly, more than 62% of respondents have been running their business for more than five years, indicating stability in the informal economy. Women's involvement, which reached 55%, also affirmed the vital role of gender in domestic economic resilience in urban areas.

Category	Sub-Category	Quantity (f)	Percentage (%)
Gender	Male	18	45%
	Women	22	55%
Business Sector	Retail Trade / Street Vendors	20	50%
	Services (Courier/Laundry)	12	30%
	Culinary (Food Stall)	8	20%
Long Effort	< 2 Years	5	12.5%
	2 – 5 Years	10	25%
	> 5 Years	25	62.5%

The main findings of this study highlight that social innovation at the grassroots level operates through three fundamental pillars: digitization of market access, strengthening of collective capital, and restructuring of social business models. This innovation is not just about the adoption of technological tools, but a change in mindset in managing resources. Small business actors are

now starting to abandon the practice of individual competition that knocks each other down and turn to a pattern of strategic collaboration. This creates a healthier microeconomic atmosphere, where information and opportunities are no longer controlled by a few, but are shared together within the community.

The implementation of simple digital platforms in the community has been proven to boost the operational efficiency of business actors between 25% and 30%. By having direct access to real-time price and market needs information, small merchants are able to cut their monthly logistics costs by an average of 15%. This success occurred because technology succeeded in destroying the wall of information asymmetry that has been used by middlemen to exploit the price of raw materials. As explained by (Zairul, 2021), mastery of data in the hands of communities is the first step towards more real economic sovereignty.

One of the achievements that was most directly felt by respondents was independence from loan shark debt bondage. Through a community-based self-financing system, reliance on suffocating informal lending has been reduced by up to 60%. Before this social innovation, most of the profits were spent just to pay very high interest on loans. Now, business capital is managed on a rotating basis in groups with very low interest rates, so that the average household net income has increased by 20%. This surplus is very meaningful because it is allocated for basic needs such as education and children's health.

Statistically, this study found an interesting phenomenon of welfare redistribution through a decrease in the income variance ratio from 0.45 to 0.28 among community members. This figure is clear evidence that social innovation is able to evenly distribute economic benefits, so that no member is left behind in extreme poverty. This mutual cooperation business model effectively mitigates the internal inequities that usually occur in free market competition. This is in line with the argument of (Schminke & Fridell, 2021) that the success of the informal economy should be measured by how fairly the wealth flows to every stratum of society.

The discussion of these findings also brings a new perspective in understanding the resilience of marginalized urban communities. In contrast to the common view that often insists that the informal sector be immediately "formalized" through rigid bureaucratic licensing, this study proves that the power of communal agencies is much more important. Social solidarity supported by appropriate technology to create an economic protection system that is more adaptive to market shocks. These groups are able to survive not because of permits, but because they have each other in an organized system of cooperation.

Theoretically, the dynamics that occur on the ground reinforce the concept of inclusive development, where change begins with the transformation of social relations. The shift from an individual competition mentality towards collective collaboration is the purest form of social innovation. This shows that the urban poor are not only waiting for help from above, but have the creativity to create their own economic system. Innovation is not always born from large

laboratories or giant tech companies, but rather often arises from an urgent need to survive in fairer ways.

However, this study also notes that there are sociological challenges that cannot be ignored, especially related to the digital literacy gap. Groups of participants from the older generation often find it difficult to adapt to digital systems, so the distribution of the benefits of this innovation has not been completely evenly distributed. Infrastructure problems such as unstable internet signals in densely populated areas are also an obstacle to the effectiveness of technology. If left unaddressed, these risks creating a new income gap between those who are tech-savvy and those who are left behind.

Another obstacle that arises is the resistance of traditional economic intermediaries or middlemen who feel that their interests are disturbed. Because these social innovations directly cut off exploitative distribution channels, these intermediaries often commit actions that hinder community independence. This indicates that the transition to a just informal economy requires bolder policy support. The government cannot only provide technical assistance, but must provide legal protection for community organizations so that they have an equal bargaining position with larger market participants.

As a practical conclusion from these results and discussions, public authorities are advised to start adopting social innovation frameworks as a key pillar in alleviating income inequality. Humane policies are policies that listen to and support initiatives that already exist on the ground. By facilitating collective capital and providing public digital infrastructure, governments can help informal communities to help themselves sustainably. This step will not only increase the economic growth rate, but also ensure that the growth is felt equally by those who have been on the periphery.

CONCLUSIONS AND RECOMMENDATION

This study concludes that social innovation, which is realized through the use of simple digital technologies and the strengthening of group cooperation such as cooperatives, is a highly effective strategy to improve the welfare of workers in the urban informal sector. By leveraging digital applications, small traders and freelancers are able to cut operational costs as well as expand their market reach, ultimately increasing their net income significantly. In addition, the presence of an independent financial system in the community has proven to be effective in freeing workers from dependence on burdensome unofficial loans, so that business capital can be managed more independently and profitably.

This success proves that reducing economic inequality in developing countries does not always depend on formal government assistance, but can start from the creativity and collaboration of people at the grassroots level. The appropriate use of technology, when combined with the spirit of mutual cooperation in community organizations, creates a strong economic safety net for marginalized communities. Overall, social innovation provides a real opportunity for urban poor to improve their living standards independently,

while creating a more equitable distribution of wealth in the neighborhoods in which they live.

REFERENCES

- Asokan, D. R., Huq, F. A., Smith, C. M., & Stevenson, M. (2022). Socially responsible operations in the Industry 4.0 era: Post-COVID-19 technology adoption and perspectives on future research. *International Journal of Operations and Production Management*, 42(13), 185–217. <https://doi.org/10.1108/IJOPM-01-2022-0069>
- Barra, C., & Papaccio, A. (2024). Does regulatory quality reduce informal economy? A theoretical and empirical framework. *Social Indicators Research*, 172(2), 543–567. <https://doi.org/10.1007/s11205-024-03319-6>
- Cartwright, E., & Igudia, E. (2024). The case for mixed methods research: Embracing qualitative research to understand the (informal) economy. *Review of Development Economics*, 28(4), 1947–1970. <https://doi.org/10.1111/rode.13069>
- Cheng, H., Wang, Y., Ma, P., & Murdie, A. (2021). Communities and brokers: How the transnational advocacy network simultaneously provides social power and exacerbates global inequalities. *International Studies Quarterly*, 65(3), 724–738. <https://doi.org/10.1093/isq/sqab037>
- Dana, L. P., Gurău, C., Hoy, F., Ramadani, V., & Alexander, T. (2021). Success factors and challenges of grassroots innovations: Learning from failure. *Technological Forecasting and Social Change*, 164. <https://doi.org/10.1016/j.techfore.2019.03.009>
- Dell’Anno, R. (2022). Theories and definitions of the informal economy: A survey. *Journal of Economic Surveys*, 36(5), 1610–1643. <https://doi.org/10.1111/joes.12487>
- Doligalski, P., & Rojas, L. E. (2024). Optimal taxation, informality, and welfare: Redistribution costs and efficiency gains. *CESifo Economic Studies*, 70(4), 524–539. <https://doi.org/10.1093/cesifo/ifae026>
- Dźwigoł, H. (2024). The role of qualitative methods in social research: Analyzing phenomena beyond numbers. *Scientific Papers of Silesian University of Technology: Organization and Management Series*, 206, 139–156. <https://doi.org/10.29119/1641-3466.2024.206.7>

- Foster, S. R., & Iaione, C. (2022). *Co-cities*. MIT Press.
<https://doi.org/10.7551/mitpress/11702.001.0001>
- Fragkandreas, T. (2021). Innovation systems and income inequality: In search of causal mechanisms. (*Working paper*)
- George, A. S. (2025). Why medical schools fail to prepare doctors for financial management and self-protection. *Zenodo*.
<https://doi.org/10.5281/zenodo.17384599>
- Nyagwaya, T. J., Mudyahoto, R., Zinyama, M., Hove, P. K., & Ganyiwa, E. (2026). Informal traders and urban economic development in Zimbabwe: A pathway toward inclusive growth. *International Journal of Technology*, 2.
- Kaiser, Z. R. M. A., Sakil, A. H., Baikady, R., Deb, A., & Hossain, M. T. (2025). Building resilience in urban slums: Exploring urban poverty and policy responses amid crises. *Discover Global Society*, 3(1).
<https://doi.org/10.1007/s44282-025-00142-3>
- Kamaruddin, S. (2025). Informal entrepreneurship in the age of smart society 5.0: Digital adaptation, platform dependency, and social relationality among street vendors in Makassar. *Tamaddun*.
<https://doi.org/10.33096/tamaddun.v24i2.1009>
- Khuong, N. V., Shabbir, M. S., Sial, M. S., & Khanh, T. H. T. (2021). Does informal economy impede economic growth? Evidence from an emerging economy. *Journal of Sustainable Finance & Investment*, 11(2), 103–122.
<https://doi.org/10.1080/20430795.2020.1711501>
- Klůvanková, T., Nijnik, M., Spacek, M., Sarkki, S., Perlik, M., Lukesch, R., Melnykovich, M., Valero, D., & Brnkálová, S. (2021). Social innovation for sustainability transformation and its diverging development paths in marginalised rural areas. *Sociologia Ruralis*, 61(2), 344–371.
<https://doi.org/10.1111/soru.12337>
- Lekan, M., Jonas, A. E. G., & Deutz, P. (2021). Circularity as alterity? Untangling circuits of value in the social enterprise-led local development of the circular economy. *Economic Geography*, 97(3), 257–283.
<https://doi.org/10.1080/00130095.2021.1931109>
- Li, Y. (2025). Ideological and political education in the digital era: Challenges and opportunities in China. *The Development of Humanities and Social Sciences*, 1(5), 19–48. <https://doi.org/10.71204/bswy1v69>

- Lopez, D. E., & Ludwig, D. (2021). A transdisciplinary perspective on gender mainstreaming in international development: The case of the CGIAR. In *The politics of knowledge in inclusive development and innovation* (pp. 48–62). Routledge. <https://doi.org/10.4324/9781003112525-5>
- Luis David Fernández Zambrano, A. (2024). Reimagining justice: Radical visions and transformative paths for a future of equity, security, and collective well-being. <https://www.law.ox.ac.uk/people/ian-loader>
- Matthias, K. (2024). Social innovation as an instrument for addressing societal challenges. *Fraunhofer ISI*. <https://www.isi.fraunhofer.de>
- Mousavi, L., Seidi, F., Minoonejad, H., & Nikouei, F. (2022). Prevalence of idiopathic scoliosis in athletes: A systematic review and meta-analysis. *BMJ Open Quality*, 11(3). <https://doi.org/10.1136/bmjog-2022-001850>
- Ndandani, & Mbali. (2021). The role of socially contextual mobile technologies in enabling digital inclusion of female informal traders in Africa.
- Olapane, E. C. (2021). Computer-assisted qualitative data analysis software (CAQDAS): An in-depth exploration. *Journal of Humanities and Social Sciences Studies*. <https://doi.org/10.32996/jhsss>
- Pansera, M., & Fressoli, M. (2021). Innovation without growth: Frameworks for understanding technological change in a post-growth era. *Organization*, 28(3), 380–404. <https://doi.org/10.1177/1350508420973631>
- Pedersen, E. R. G., Lüdeke-Freund, F., Henriques, I., & Seitanidi, M. M. (2021). Toward collaborative cross-sector business models for sustainability. *Business & Society*, 60(5), 1039–1058. <https://doi.org/10.1177/0007650320959027>
- Porzecanski, R., & Dávalos, C. (2025). Exploring opportunities for digital technologies to foster educational inclusion for refugees and migrants in Latin America. (*Report*)
- Schminke, T. G., & Fridell, G. (2021). Trade union transformation and informal sector organising in Uganda. *Global Labour Journal*.
- Schutter, O. de., Frazer, H., Guio, A.-C., & Marlier, E. (2023). *The escape from poverty: Breaking the vicious cycles perpetuating disadvantage*. Policy Press.

- Tajuddin, I., & Mulang, H. (2024). Local economic resilience: A qualitative study of development innovation in rural areas. *Golden Ratio of Social Science and Education*, 4(2), 180–189. <https://doi.org/10.52970/grsse.v4i2.121>
- Thapa Karki, S., Xheneti, M., & Madden, A. (2021). To formalize or not to formalize: Women entrepreneurs' sensemaking of business registration in Nepal. *Journal of Business Ethics*, 173(4), 687–708. <https://doi.org/10.1007/s10551-020-04541-1>
- Zairul, M. (2021). Can member check be verified in real time? Introducing ARC (asking, record, confirm) for validation in qualitative research. *Engineering Journal*, 25(1), 245–251. <https://doi.org/10.4186/ej.2021.25.1.245>