Project Politics in Public Housing in Small Island Developing States: A Case Study of Cost and Revenue



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Project Politics in Public Housing in Small Island Developing States: A Case Study of Cost and Revenue

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Abstract

Purpose: This research aims to explore the intricate dynamics of project politics in public housing development within Small Island Developing States (SIDS), with a particular focus on the interplay between costs and revenue.

Methodology: Utilizing a detailed case study approach, this paper investigates a specific public housing project in a SIDS, analyzing the political dynamics surrounding its cost and revenue aspects.

Findings: The study reveals that political factors significantly influence decision-making processes, resource allocation, and the financial viability of public housing projects in SIDS. Political interference often results in resource misallocation, cost overruns, and inefficiencies in revenue generation. Additionally, patronage and nepotism lead to housing resource distribution based on political favoritism rather than genuine need, undermining the effectiveness and fairness of public housing initiatives.

Contribution to Theory, Policy, and Practice: This research underscores the critical importance of addressing project politics to ensure sustainable and effective housing solutions in SIDS. By highlighting the need for enhanced financial viability, transparency, and accountability in public housing projects, this study contributes valuable insights to the theoretical understanding of development politics. It also offers practical recommendations for policymakers to mitigate political interference, thereby fostering equitable and sustainable public housing solutions in SIDS.

Keywords: Project Politics, Public Housing, Small Island Developing States (SIDS), Cost, Revenue



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1. Introduction:

Small Island Developing States (SIDS) encompass a group of countries and territories characterized by their unique geographical, economic, and social circumstances. These states, located primarily in the Caribbean, Pacific, and Indian Ocean regions, face a myriad of challenges in providing adequate public housing for their populations. The challenges stem from several factors, including limited land availability, susceptibility to natural disasters, and financial constraints.

Firstly, one of the most prominent challenges faced by SIDS in the realm of public housing is their limited land availability. Many of these islands have small landmasses, which restrict the space available for housing development. Additionally, population densities in SIDS tend to be relatively high, further exacerbating the pressure on available land. As a result, finding suitable sites for public housing projects becomes a significant challenge for policymakers and urban planners.(Chadee et al., 2023)

Secondly, SIDS are highly vulnerable to natural disasters, including hurricanes, earthquakes, tsunamis, and sea-level rise. These environmental hazards pose a constant threat to existing housing infrastructure and make the task of building resilient and disaster-resistant housing even more critical. (Pinto, 2000) The need for stringent building codes, resilient infrastructure, and disaster preparedness measures adds complexities and costs to public housing projects in these regions.

Thirdly, SIDS often grapple with constrained financial resources, limiting their ability to invest in large-scale housing initiatives. Economic challenges, including small and open economies, limited revenue streams, and high levels of debt, can hinder government spending on public housing. Additionally, reliance on tourism, remittances, or a narrow range of export commodities as primary sources of income can lead to budgetary constraints for housing development. (Pelling & Uitto, 2001)

Within this challenging context, project politics emerges as a significant factor shaping the planning, implementation, and outcomes of public housing initiatives in SIDS. Project politics refers to the various political factors, interests, and power dynamics that influence decision-making processes within development projects. In the case of public housing, project politics can manifest in multiple ways, including competing political agendas, bureaucratic inefficiencies, patronage networks, and electoral considerations.

This paper aims to explore how project politics influences the cost and revenue aspects of public housing projects in SIDS. Understanding these dynamics is essential for devising effective strategies to address the housing needs of SIDS populations.(Hodgson & Cicmil, 2007) To achieve this goal, the paper adopts a detailed case study approach, focusing on a specific SIDS and examining the political dynamics surrounding a public housing project. By analyzing the interplay between project politics, cost considerations, and revenue generation strategies, this research seeks to provide insights into the challenges and opportunities for improving public housing outcomes in SIDS.

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2. Understanding Project Politics:

Project politics encompasses a broad spectrum of political factors and influences that shape decision-making processes and resource allocation within development projects. In the context of public housing initiatives in Small Island Developing States (SIDS), project politics plays a significant role in determining the course and outcomes of these endeavors. (Hodgson & Cicmil, 2007)This section explores the multifaceted nature of project politics in the context of public housing in SIDS, highlighting key elements such as political competition, patronage, electoral considerations, and the influence of interest groups.

Political Competition:

Political competition, a hallmark of democratic systems, holds considerable sway over public housing projects in Small Island Developing States (SIDS). In these nations, elected officials, political parties, and candidates frequently leverage housing initiatives to win favor with constituents and showcase their competence in governance. This section explores how political competition influences the prioritization of housing projects, resource allocation, and decision-making processes in SIDS, often with the aim of gaining electoral advantage. (Chadee et al., 2023)

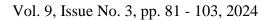
Elected officials, whether at the local, regional, or national level, are acutely aware of the electoral benefits that come with successful housing projects. By championing these initiatives, they not only address a pressing need within their communities but also enhance their political capital. Housing projects serve as tangible evidence of their commitment to improving living conditions and addressing social inequalities, thus strengthening their popularity and support base among voters.

Political parties, too, recognize the significance of housing issues in garnering public support. During election campaigns, parties often include housing policies and promises in their platforms to appeal to voters. Such pledges may range from commitments to increase affordable housing stock to promises of infrastructure development in underserved areas. The ability to deliver on these promises can significantly influence election outcomes, as voters assess parties based on their perceived effectiveness in addressing housing needs.(Altshuler & Luberoff, 2004)

Candidates running for office also engage in promoting housing initiatives as part of their electoral strategies. Whether vying for local council seats or higher government positions, candidates emphasize their plans for housing development to distinguish themselves from their opponents. By presenting concrete proposals and advocating for specific projects, candidates aim to demonstrate their leadership capabilities and commitment to community welfare, thereby earning voter trust and support.

The prioritization of housing projects and allocation of resources are often influenced by political calculations aimed at maximizing electoral advantage. Governments may allocate funding and resources to housing projects in areas with high electoral significance, such as swing districts or regions where their political base is strongest. Similarly, the timing of project announcements and

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implementation may coincide with election cycles to capitalize on positive publicity and voter goodwill. (Ghina, 2003)

Decision-making processes related to public housing projects can also be subject to political pressures and considerations. Elected officials may prioritize projects that have greater visibility and potential for electoral impact over those that are more urgently needed but less politically advantageous. Additionally, the composition of decision-making bodies, such as housing committees or councils, may reflect political affiliations, leading to decisions influenced by party agendas rather than objective criteria.

In summary, political competition profoundly shapes the landscape of public housing projects in SIDS. Elected officials, political parties, and candidates strategically leverage housing initiatives to gain electoral support and demonstrate their effectiveness in governance. As a result, the prioritization of projects, allocation of resources, and decision-making processes are often driven by political considerations aimed at maximizing electoral advantage. Recognizing these dynamics is crucial for understanding the complex interplay between politics and housing development in SIDS.(Chadee et al., 2023)

Patronage:

In the context of public housing projects in Small Island Developing States (SIDS), patronage plays a significant role in shaping decision-making processes and resource distribution. Patronage refers to the practice of distributing housing resources and benefits based on loyalty, personal connections, or political affiliation rather than merit or need. This section explores how patronage networks operate within public housing initiatives in SIDS, its implications, and its effects on the equitable distribution of resources.

Political leaders and elites often use public housing projects as a tool to consolidate power and maintain political dominance. By directing housing resources towards loyal supporters, they can reward political allegiance, secure voter loyalty, and strengthen their political base. In doing so, however, they may prioritize the interests of a select few over the broader needs of the population.

One of the most significant consequences of patronage in public housing is the potential for favoritism and nepotism. Housing benefits may be allocated to individuals or groups with close ties to those in power, regardless of their actual housing needs. This can result in the unequal distribution of housing opportunities, where those with political connections receive preferential treatment while others are left without adequate housing support. Such favoritism undermines the principles of fairness and equity in resource allocation, perpetuating social inequalities and disenfranchising marginalized communities.

Furthermore, the practice of patronage can lead to inefficiencies and misallocation of resources within public housing projects. Instead of prioritizing projects based on their impact and feasibility, decisions may be influenced by political considerations aimed at rewarding political allies or securing electoral support. This can result in the mismanagement of public funds, delays in project implementation, and the delivery of substandard housing solutions.(Jiang et al., 2020)

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The unequal distribution of housing resources due to patronage networks exacerbates existing social disparities and undermines efforts towards sustainable development in SIDS. It perpetuates a cycle of dependency on political patronage, where access to essential services such as housing becomes contingent on political allegiance rather than genuine need. This not only erodes trust in government institutions but also hampers socio-economic progress and stability.

To address the challenges posed by patronage in public housing projects, it is essential to promote transparency, accountability, and good governance practices. (Bang, 2009) This includes implementing clear criteria for housing allocation based on need and eligibility rather than political affiliation. Strengthening institutional mechanisms to monitor and regulate housing distribution processes can help mitigate the influence of patronage networks. Moreover, fostering citizen participation and civil society engagement can empower communities to demand greater accountability and transparency in public housing initiatives, ensuring that resources are allocated fairly and equitably to those who need them most.

***** Electoral Considerations:

In Small Island Developing States (SIDS), public housing projects are frequently influenced by electoral considerations, especially during election cycles. Political parties and candidates often leverage promises of housing development as electoral incentives to attract voter support and bolster their electoral prospects. This phenomenon is particularly pronounced in SIDS due to the close-knit nature of communities and the significant impact of housing policies on people's lives.

During election campaigns, political rhetoric often emphasizes the importance of addressing housing needs, promising new construction, renovations, or other housing-related initiatives. These promises serve not only to mobilize support but also to create expectations among voters for tangible improvements in their living conditions. (Hodgson & Cicmil, 2007)

The timing and nature of housing initiatives are often shaped by electoral calendars. Governments may strategically plan the announcement or implementation of housing projects to coincide with key milestones in the electoral cycle, such as the run-up to elections or major political events. By doing so, they aim to capitalize on housing achievements as part of their electoral platform, showcasing their commitment to improving living standards and fulfilling promises made to the electorate. (Allam & Jones, 2019)

However, this focus on short-term electoral gains can sometimes lead to decisions that prioritize immediate political objectives over long-term planning and sustainability in public housing development. For instance, there may be pressure to prioritize projects that yield visible results quickly, even if they are not the most cost-effective or sustainable options in the long run. Similarly, there may be a tendency to allocate resources to areas with high electoral significance, potentially neglecting the housing needs of marginalized or less politically influential communities. (Byers & Shay, 2023)

Furthermore, the intensity of electoral competition can exacerbate these tendencies, leading to a focus on short-term projects that deliver immediate benefits to targeted voter demographics. This

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can result in a fragmented approach to housing policy, with resources allocated unevenly and without a comprehensive long-term vision for addressing housing challenges.

In some cases, public housing projects initiated for electoral purposes may lack proper planning, consultation, and consideration of environmental or social sustainability factors. This can result in poorly designed or located housing developments that fail to meet the long-term needs of residents and contribute to environmental degradation or social inequality.

Electoral considerations can serve as a catalyst for public housing development in SIDS, they also present challenges in terms of ensuring sustainable, equitable, and effective housing solutions. Balancing short-term electoral imperatives with long-term planning considerations is crucial for policymakers to address housing needs in a way that benefits communities over the long term. (Landa & Pevnick, 2021)

Influence of Interest Groups:

Interest groups play a crucial role in shaping public housing projects in Small Island Developing States (SIDS), exerting significant influence on policy decisions and project outcomes. These groups encompass a diverse range of stakeholders, including developers, construction companies, housing advocates, and community organizations, each with their own interests and agendas. Understanding the influence of these interest groups is essential for comprehending the complexities of public housing development in SIDS.

- **I. Developers and Construction Companies:** Developers and construction companies often hold considerable sway over public housing projects in SIDS due to their expertise, financial resources, and vested interests in project success. These entities may lobby policymakers to advocate for policies favorable to their industry, such as streamlined regulations or incentives for private investment in housing development. Additionally, developers may seek to secure contracts for construction projects through competitive bidding processes or direct negotiations with government agencies. Their influence can extend to project design, materials selection, and construction methods, potentially impacting project costs and quality.
- **II. Housing Advocates:** Housing advocates, including NGOs, community-based organizations, and academic institutions, play a vital role in advocating for the rights of marginalized communities and promoting affordable housing solutions. These groups often mobilize public support for housing initiatives, raise awareness about housing issues, and campaign for policy reforms to address housing inequality. Housing advocates may push for increased government funding for public housing, stronger tenant protections, and the inclusion of social housing provisions in development plans. Their advocacy efforts can shape public discourse on housing policy and influence decision-makers to prioritize affordable housing options.
- **III.** Community Organizations: Local community organizations, representing residents and neighborhood associations, also wield influence over public housing projects in SIDS.

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These organizations provide a grassroots perspective on housing needs and preferences, advocating for community-driven development approaches that empower local residents. Community organizations may engage in consultations with government agencies and developers to voice community concerns, propose alternative project designs, and negotiate community benefits agreements. However, the interests of community organizations may sometimes conflict with those of other stakeholders, leading to tensions over project priorities and resource allocation.

IV. Competing Priorities and Tensions: The interests and agendas of interest groups can sometimes diverge, leading to competing priorities and tensions in the planning and implementation of public housing initiatives. For example, developers may prioritize profit maximization and cost efficiency, while housing advocates may prioritize affordability and social equity. Similarly, community organizations may prioritize neighborhood revitalization and community ownership, potentially conflicting with the profit-driven objectives of developers. These competing priorities can create challenges for policymakers in balancing the interests of various stakeholders and achieving consensus on housing policy decisions.

Interest groups play a significant role in shaping public housing projects in SIDS, influencing policy decisions, resource allocation, and project outcomes. (Chadee et al., 2021)

By understanding the motivations and dynamics of these interest groups, policymakers can better navigate the complexities of public housing development and work towards solutions that meet the diverse needs of communities in SIDS.

Overall, project politics in public housing in SIDS is characterized by a complex interplay of political dynamics, including competition, patronage, electoral considerations, and the influence of interest groups. Recognizing and understanding these political factors are essential for policymakers, stakeholders, and researchers seeking to navigate the challenges and opportunities associated with public housing development in SIDS. (Altshuler & Luberoff, 2004)

By addressing the underlying political dynamics, it becomes possible to foster more transparent, inclusive, and effective approaches to housing provision that prioritize the needs and interests of communities.

3. The Case of Barbados:

Solution Background of the Public Housing Project:

In Barbados, public housing has been a critical component of the government's efforts to provide affordable housing to its citizens, particularly those with low incomes. The Barbados public housing project under scrutiny in this case study commenced in 2018 with the aim of addressing the pressing housing needs of vulnerable populations across the island. The project aimed to construct a mix of single-family homes and multi-story apartment complexes in urban and periurban areas.

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Political Stakeholders Involved:

The public housing project in Barbados involved a range of political stakeholders, including government officials, policymakers, and elected representatives. The Ministry of Housing and Lands played a central role in project planning and implementation, collaborating closely with local government authorities and relevant regulatory agencies. Additionally, political parties, community leaders, and advocacy groups exerted influence on housing policies and resource allocation decisions.

✤ Cost Estimation and Budget Allocation:

A. Cost Estimation

Cost estimation for the public housing project in Barbados involved a meticulous process to anticipate and allocate funds for various aspects of the project. This included:

- **I. Construction Expenses:** The estimation of construction costs involved detailed assessments of materials, labor, equipment, and construction methods required for building homes and infrastructure. Engineers and construction experts analyzed blueprints and project specifications to provide accurate cost estimates for each phase of construction.
- **II.** Land Acquisition Costs: Land acquisition expenses accounted for a significant portion of the project budget. The government identified suitable parcels of land for housing development and negotiated with landowners for acquisition. Costs included land purchase prices, legal fees, surveys, and land preparation expenses.
- **III.** Infrastructure Development: Infrastructure development encompassed the construction of roads, utilities (water, electricity, sewage), drainage systems, and other essential services to support the housing project. Costs were estimated based on engineering assessments and projected infrastructure requirements for the housing developments.
- **IV.** Administrative Expenditures: Administrative expenses covered a range of costs associated with project management, oversight, and coordination. This included salaries for project managers and staff, office rentals, transportation, communication, and other operational expenses.

B. Budget Allocation:

The government of Barbados allocated a substantial portion of its annual budget to finance the public housing project, recognizing the importance of addressing housing needs for its citizens. The budget allocation process involved:

- 1) **Domestic Revenue Sources:** Barbados utilized revenue generated from taxes, fees, and other domestic sources to fund the public housing project. These revenues contributed to the overall budget earmarked for housing development, ensuring a steady flow of funds for construction and related activities.
- 2) External Financing Mechanisms: In addition to domestic revenue, Barbados leveraged external financing mechanisms to supplement its budget for the housing project. This

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included loans and grants from international development agencies, bilateral agreements with foreign governments, and participation in regional development programs.

Challenges:

Despite meticulous cost estimation and budget allocation, the public housing project in Barbados encountered several challenges:

- **I. Cost Overruns:** The project experienced cost overruns due to factors such as inflation, which increased the prices of construction materials and labor over time. Fluctuations in exchange rates and economic conditions also impacted project costs.
- **II. Fluctuating Material Prices:** Prices of construction materials such as cement, steel, and lumber fluctuated, affecting the project's budget. Sudden spikes in material prices could strain the allocated funds and require adjustments to the project's financial planning.
- **III.** Unforeseen Site Challenges: Unforeseen site conditions, such as unstable soil, environmental hazards, or archaeological discoveries, led to additional costs for site preparation and mitigation measures. These unexpected challenges required adaptive management and supplementary funding.

Expense Category	Estimated Budget Allocation (in Barbadian Dollars)
Construction Expenses	\$15,000,000
Land Acquisition Costs	\$8,500,000
Infrastructure Development	\$5,000,000
Administrative Expenditures	\$2,500,000
Contingency Reserve	\$3,000,000
Total Budget Allocation	\$34,000,000

Table 1: Estimated Budget Allocation for the Public Housing Project in Barbados

***** Explanation of Expense Categories:

- **i. Construction Expenses:** Includes costs associated with building homes, such as materials, labor, equipment, and construction management.
- **ii.** Land Acquisition Costs: Covers the purchase of land for housing development, including land purchase prices, legal fees, surveys, and site preparation.
- **iii.** Infrastructure Development: Budget for constructing roads, utilities (water, electricity, sewage), drainage systems, and other necessary infrastructure to support housing developments.

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- **iv.** Administrative Expenditures: Includes salaries for project managers and staff, office rentals, transportation, communication, and other operational expenses related to project management.
- **v. Contingency Reserve:** A reserve fund set aside to address unforeseen expenses or changes in project scope. This provides flexibility to accommodate unexpected challenges without disrupting project progress.

The total budget allocation of \$34,000,000 represents the estimated funds allocated to the public housing project in Barbados. It's important to note that actual expenses may vary, and the contingency reserve is designed to address any unforeseen circumstances during project implementation.

Revenue Generation Strategies:

To offset the costs of public housing development, Barbados employed various revenue generation strategies. These strategies aimed to ensure financial sustainability while providing affordable housing options to its citizens.

- I. Housing Sales: One of the primary revenue streams for the public housing project in Barbados was the sale of government-owned housing units. These units were sold to eligible beneficiaries at subsidized rates. The revenue generated from these sales contributed significantly to covering the costs of construction and infrastructure development. However, challenges arose due to affordability issues for some potential buyers and fluctuations in market demand.
- **II. Government Subsidies:** Barbados relied on government subsidies to supplement the costs of housing construction and maintenance, particularly for low-income families. These subsidies aimed to make housing more affordable for those who couldn't afford market rates. Additionally, international aid and development assistance were sought to bolster the subsidy programs, ensuring that vulnerable populations had access to adequate housing.
- **III. Public-Private Partnerships (PPPs):** Recognizing the need for additional financing and expertise, Barbados explored public-private partnerships (PPPs) for certain housing projects. These partnerships involved collaboration between the government and private developers, with the latter providing investment capital, construction expertise, and management services. In return, private developers often gained a stake in the project's revenues or future returns.

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Table 2: Revenue Generation Strategies



Revenue Generation Strategy	Description	Benefits	Challenges
Housing Sales	Sale of government- owned housing units	I. Generates revenue for project funding	I. Affordability issues for buyers
		II. Helps in recovering construction costs	II. Fluctuations in market demand
Government Subsidies	Financial support for housing costs	I. Makes housing more affordable for low-income families	I. Dependency on government funding
		II. Assists vulnerable populations in accessing housing	II. Sustainability of subsidy programs
Public-Private Partnerships (PPPs)	Collaboration with private developers	I. Access to additional financing and expertise	I. Complex negotiation and management processes
		II. Faster project implementation	II. Potential for private interests to override public priorities

This table provides a visual representation of the revenue generation strategies employed by Barbados in its public housing development. It outlines the benefits and challenges associated with each strategy, offering insights into the dynamics of financing and sustainability in such projects.

Political Interference and Its Impact on Project Costs and Revenues:

Political interference emerged as a significant determinant of project costs and revenues in Barbados' public housing initiative. Political considerations, including electoral cycles, partisan interests, and patronage networks, influenced decision-making processes and resource allocation. Political pressure to prioritize certain constituencies or regions sometimes led to inefficient use of resources and skewed distribution of housing benefits. Moreover, allegations of corruption,

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favoritism, and bureaucratic red tape undermined public trust and transparency in the housing project, impacting revenue generation efforts and project outcomes.(Aureli, 2008)

The case of Barbados exemplifies the complex interplay between political dynamics, cost considerations, and revenue strategies in public housing development within Small Island Developing States. By examining these challenges and lessons learned, policymakers can better navigate the intricacies of project politics to ensure the equitable and sustainable provision of housing for all citizens. (Dornan, 2014)

4. Factors Influencing Cost:

***** Construction Costs:

Construction costs are a primary component of any public housing project and include expenses related to materials, labor, and infrastructure.

- I. Materials: The cost of building materials can vary significantly depending on factors such as quality, availability, and transportation logistics. In SIDS, where certain materials may need to be imported due to limited local resources, prices can be higher due to shipping costs and tariffs. Additionally, the quality of materials used can impact both initial construction costs and long-term maintenance expenses.
- **II.** Labor: Labor costs are influenced by wage rates, productivity levels, and availability of skilled workers. In some SIDS, there may be a scarcity of skilled labor, leading to higher wages or the need to import workers, which can increase costs. Furthermore, labor productivity can be affected by factors such as poor working conditions or inadequate training, resulting in inefficiencies and higher expenses.
- **III. Infrastructure:** Infrastructure costs include expenses related to utilities, roads, and other necessary facilities to support the housing development. In SIDS, where infrastructure may be underdeveloped or prone to damage from natural disasters, the costs of building and maintaining infrastructure can be considerable. Moreover, the need for resilience measures to mitigate against risks like flooding or hurricanes can further inflate infrastructure expenses.

Land Acquisition:

Land acquisition costs involve the purchase or lease of suitable land for housing projects, and it is influenced by factors such as availability, location, and pricing.

- **I. Availability:** SIDS often face land scarcity due to their small size and high population density. This limited availability of land can drive up prices and make it challenging to find suitable sites for public housing projects. Competition for land use, particularly in urban areas, can further constrain options and increase acquisition costs.
- **II. Pricing:** The cost of land can vary widely depending on factors such as location, proximity to urban centers, infrastructure availability, and zoning regulations. In some cases, government-owned land may be available for public housing at subsidized rates, while in other instances, developers may need to purchase land from private owners at market prices.

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Land speculation and inflation can also inflate land prices, adding to project costs.(Pelling & Uitto, 2001)

Corruption and Mismanagement:

Corruption and mismanagement can significantly impact project costs by diverting resources, inflating prices, and fostering inefficiencies.

- I. Political Corruption: In SIDS, where political systems may be vulnerable to corruption, public housing projects can become targets for corrupt practices such as kickbacks, bribery, and embezzlement. Corrupt officials may award contracts to favored companies at inflated prices, siphon off funds intended for the project, or manipulate procurement processes to benefit cronies.
- **II. Mismanagement:** Ineffective project management, lack of oversight, and poor decisionmaking can lead to cost overruns and waste. Incompetence, nepotism, and patronage can result in the selection of contractors or suppliers based on personal connections rather than qualifications, leading to substandard work or inflated prices. Additionally, inadequate monitoring and control mechanisms can allow for the misuse of resources and delays in project completion.
 - ***** Bureaucratic Delays:

Bureaucratic delays refer to administrative hurdles and red tape that can prolong the project timeline and increase costs.

- I. Permitting and Approvals: Obtaining necessary permits, approvals, and environmental clearances can be a time-consuming process in SIDS, where bureaucratic systems may be slow or inefficient. Delays in securing permits for construction, land use, or environmental compliance can lead to project delays and cost overruns.
- **II. Regulatory Compliance:** Compliance with building codes, zoning regulations, and other legal requirements adds complexity to public housing projects. Inadequate infrastructure or regulatory frameworks may require costly modifications or upgrades to meet standards, increasing project costs.
- **III.** Administrative Bottlenecks: Administrative bottlenecks, such as lengthy procurement processes, cumbersome contract negotiations, and slow disbursement of funds, can impede project progress. These delays not only prolong the construction phase but also increase overhead costs and financing charges.

The cost of public housing projects in Small Island Developing States is influenced by a combination of factors, including construction costs, land acquisition expenses, corruption and mismanagement, and bureaucratic delays. Understanding and addressing these factors are essential for ensuring the efficiency and affordability of public housing initiatives in SIDS.

- **4.** Revenue Generation Strategies:
- A. Housing Sales:

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Housing sales represent one of the primary revenue streams for public housing projects. This strategy involves the sale or rental of public housing units to generate revenue. In this model, eligible individuals or families purchase or rent housing units at subsidized rates set by the government or housing authority. The revenue generated from these sales or rentals is reinvested into the development, maintenance, and improvement of public housing infrastructure.

* Advantages:

- 1) Provides a sustainable source of revenue for ongoing maintenance and development.
- 2) Allows for greater flexibility in housing options, catering to varying income levels.
- 3) Encourages a sense of ownership and responsibility among residents.

Challenges:

- 1) Setting appropriate pricing to balance affordability for residents with revenue generation.
- 2) Ensuring equitable access to housing units for all eligible individuals or families.
- 3) Managing the impact of fluctuating real estate markets on revenue projections.

B. Government Subsidies:

Government subsidies constitute financial support provided by governmental budgets or international aid agencies to fund public housing projects. These subsidies are allocated to cover various costs associated with land acquisition, construction, infrastructure development, and operational expenses. Subsidies can be provided in the form of grants, low-interest loans, or tax incentives.

* Advantages:

- 1) Provides essential financial support, particularly in resource-constrained environments.
- 2) Helps to bridge the gap between construction costs and affordable housing prices.
- 3) Enables the implementation of social housing programs targeting low-income populations.

Challenges:

- 1) Dependence on government budgets, which may be subject to political fluctuations.
- 2) Ensuring efficient allocation and utilization of subsidy funds to maximize impact.
- 3) Balancing the need for subsidies with fiscal sustainability concerns.

C. Public-Private Partnerships (PPPs):

Public-private partnerships (PPPs) involve collaboration between government entities and private sector developers to finance, construct, and manage public housing projects. Under this model, private developers may invest capital, expertise, and resources in exchange for revenue-sharing arrangements, development rights, or long-term leases. PPPs can take various forms, including joint ventures, build-operate-transfer (BOT) agreements, or lease arrangements.

***** Advantages:

- 1) Access to private sector expertise and resources, enhancing project efficiency and innovation.
- 2) Sharing of financial risks and responsibilities between public and private partners.
- 3) Accelerates project delivery and expands the capacity for large-scale housing development.
- * Challenges:

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- 1) Ensuring transparency and accountability in PPP agreements to safeguard public interests.
- 2) Balancing profit motives of private developers with the social objectives of public housing.
- 3) Addressing potential conflicts of interest and power imbalances between public and private partners.

D. Innovative Financing Mechanisms:

Innovative financing mechanisms encompass a range of strategies to raise funds for public housing projects beyond traditional sources. These mechanisms include bond issuance, community contributions, and crowdfunding campaigns.

- **I. Bond Issuance:** Governments or housing authorities can issue bonds to raise capital for public housing projects. Investors purchase these bonds, providing upfront funding that is repaid with interest over time. Bond proceeds are used to finance construction, infrastructure, or renovation projects.
- **II. Community Contributions:** Community contributions involve mobilizing resources and support from local residents, businesses, and organizations to fund public housing initiatives. This may include donations, volunteer labor, or in-kind contributions such as materials or services.
- **III. Crowdfunding:** Crowdfunding platforms can be utilized to raise funds for specific public housing projects through online donations from individuals or organizations. These campaigns leverage technology and social media to reach a wide audience and solicit support for housing initiatives.

✤ Advantages:

- 1) Diversifies funding sources, reducing reliance on government budgets or subsidies.
- 2) Engages communities in the development and ownership of public housing projects.
- 3) Taps into the potential of technology and social networks to mobilize support and resources.

* Challenges:

- 1) Ensuring regulatory compliance and transparency in fundraising activities.
- 2) Overcoming skepticism or resistance from potential donors or investors.
- 3) Managing the administrative and logistical complexities of crowdfunding campaigns.

These revenue generation strategies offer diverse approaches to finance public housing projects in Small Island Developing States, each with its own advantages and challenges. By leveraging a combination of these strategies, policymakers can enhance the financial sustainability and effectiveness of public housing initiatives.

6. Impact of Project Politics on Cost and Revenue:

Political Interference:

Political interference refers to the influence of political agendas on budget allocation and resource distribution within public housing projects. In Small Island Developing States (SIDS), where political landscapes can be highly competitive and often fragmented, political interference can significantly impact the financial aspects of public housing initiatives. (Chadee et al., 2023)

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In many instances, government officials or political parties may prioritize certain housing projects over others based on electoral considerations, personal interests, or ideological agendas. This can lead to skewed budget allocations, with more resources being directed towards projects that are politically advantageous rather than those that are most needed by the population.(Pulicharla, 2024)

For example, a ruling party may allocate a larger portion of the budget to public housing projects in areas where it enjoys significant support, while neglecting regions where its electoral base is weaker. (El Haddad et al., 2008)Similarly, political interference can manifest in the form of preferential treatment for certain contractors or suppliers who have close ties to political elites, leading to inflated costs and reduced efficiency in project execution.(Altshuler & Luberoff, 2004)

The consequence of political interference on project costs is twofold. Firstly, it can result in the misallocation of funds, where resources are directed towards projects that are not necessarily the most cost-effective or beneficial for the community. Secondly, it can create an environment of uncertainty and instability, making it difficult for project managers to plan and execute projects efficiently.(Pinto, 2000)

Patronage and Nepotism:

Patronage and nepotism play a significant role in public housing projects in SIDS, with housing resources often being allocated based on political favoritism rather than genuine need. This phenomenon is particularly pronounced in societies where informal networks of influence, often based on familial or tribal connections, hold considerable sway over decision-making processes.

In such environments, public housing units may be distributed to individuals or families with close ties to political elites, regardless of their actual socio-economic status or housing needs. This practice not only undermines the principles of fairness and equity but also leads to inefficiencies in resource allocation. (El Haddad et al., 2008)

For instance, qualified and deserving applicants may be overlooked in favor of those who have political connections, resulting in a mismatch between housing supply and demand. Moreover, the allocation of housing units based on patronage and nepotism can exacerbate social tensions and inequalities within communities, as marginalized groups are sidelined in favor of the politically connected.(Chadee et al., 2021)

From a financial perspective, patronage and nepotism contribute to increased project costs by diverting resources towards individuals or groups who may not genuinely require public housing assistance. This can strain the project budget and limit the number of housing units that can be provided to those in genuine need.

✤ Lack of Accountability:

A lack of accountability is a common challenge in public housing projects in SIDS, stemming from the absence of transparent processes and oversight mechanisms. In many cases, project budgets and expenditures are not subject to rigorous scrutiny, allowing for financial mismanagement and corruption to thrive.

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Without proper accountability mechanisms in place, public officials and project managers may engage in practices such as embezzlement, kickbacks, and fraudulent invoicing, all of which contribute to inflated project costs. Moreover, the lack of transparency makes it difficult for stakeholders, including citizens and donor agencies, to assess the efficiency and effectiveness of public housing initiatives.

Furthermore, the absence of accountability erodes public trust in government institutions and undermines the legitimacy of public housing programs. When citizens perceive that public funds are being mismanaged or misappropriated, they are less likely to support government-led initiatives, leading to decreased participation and cooperation in future projects.(Effendi, 2020)

To address the issue of accountability, there is a need for strengthened governance structures and institutional reforms that promote transparency, integrity, and oversight in public housing projects. This includes measures such as regular financial audits, disclosure of project information to the public, and the establishment of independent oversight bodies to monitor project implementation.

Inefficient Decision-Making:

Inefficient decision-making is a consequence of political pressures and interests that often lead to suboptimal project planning and implementation in public housing initiatives. In SIDS, where political cycles can be short and decision-making processes highly politicized, the need to demonstrate quick results and satisfy political constituencies can overshadow long-term planning and strategic considerations.

As a result, public housing projects may be rushed or hastily conceived, without adequate feasibility studies or consultations with relevant stakeholders. This can lead to a range of inefficiencies, including cost overruns, delays in project completion, and inadequate housing quality.

For example, political pressures to deliver housing units within a specific timeframe may result in shortcuts being taken in the construction process, compromising the structural integrity and safety of the buildings. Similarly, decisions on project location and design may be influenced by political expediency rather than considerations of sustainability and suitability.

Furthermore, the lack of continuity in policy and planning due to changes in government leadership can disrupt ongoing projects and hinder long-term development goals. This creates uncertainty for investors and donors, making it difficult to secure the necessary funding and support for public housing initiatives.

To mitigate the impact of inefficient decision-making, there is a need for greater emphasis on evidence-based policy formulation, stakeholder engagement, and long-term planning in public housing projects. This requires political leaders to prioritize the long-term interests of their constituents over short-term political gains, and to invest in capacity-building initiatives that enhance the technical expertise and professionalism of those involved in project management.

7. Case Study Analysis:

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Barbados, a small island nation in the Caribbean, provides an insightful case study for understanding the impact of project politics on public housing development. In recent years, Barbados has faced challenges in providing affordable housing to its citizens due to limited land availability, rising construction costs, and political pressures. Analyzing the case of public housing projects in Barbados sheds light on how project politics influences both the cost and revenue aspects of such initiatives.

Political Stakeholders and Decision-making:

In Barbados, public housing projects often involve multiple political stakeholders, including government officials, elected representatives, and political parties.(Pelling & Uitto, 2001) The decision-making process regarding the allocation of resources, budgetary priorities, and project implementation is often influenced by political considerations. For instance, political leaders may prioritize housing projects in areas with high electoral significance to gain support from voters.

Cost Factors Influenced by Project Politics:

- I. **Construction Costs:** Political interference can lead to the selection of contractors based on political connections rather than expertise, resulting in inflated construction costs.
- II. Land Acquisition: Political pressures may influence decisions regarding land acquisition, leading to the selection of costly or unsuitable sites for housing projects.
- III. **Corruption and Mismanagement:** Political patronage and corruption can result in the mismanagement of funds, diversion of resources, and inflated project costs.
- IV. **Bureaucratic Delays:** Political interference in administrative processes can cause delays in project approvals and implementation, increasing costs over time.
 - ***** Revenue Generation Strategies:

Housing Sales: Revenue generated from the sale of public housing units can be influenced by political factors, such as pricing decisions and eligibility criteria.

Government Subsidies: Political priorities determine the allocation of government funds for housing subsidies, which may not always align with actual housing needs.

Public-Private Partnerships (PPPs): Political negotiations with private developers may result in unfavorable terms or delays in PPP agreements, affecting revenue generation.

Innovative Financing Mechanisms: Political support is crucial for implementing innovative financing mechanisms, but political instability or resistance can hinder their effectiveness.

***** Implications and Recommendations:

I. **Policy Implications:** There is a critical need for transparent and accountable governance structures in public housing development in Barbados. Policies should be formulated to ensure that housing projects are prioritized based on need rather than political considerations. Transparency in decision-making processes, budget allocations, and project implementation is essential to build public trust and confidence in the government's housing initiatives.

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- II. **Capacity Building:** Enhancing the capacity of local authorities to manage housing projects effectively is paramount. This includes providing training and resources to government agencies responsible for housing development, improving project management skills, and fostering a culture of accountability and professionalism.
- III. Stakeholder Engagement: Involving community stakeholders in decision-making processes is essential to ensure that housing projects meet the needs and aspirations of the people. Community consultations, participatory planning processes, and partnerships with local organizations can facilitate greater community engagement in public housing initiatives.
- IV. Regulatory Reforms: Strengthening regulations to minimize political interference and corruption is crucial for the success of public housing projects in Barbados. This may involve enacting laws to promote transparency, accountability, and integrity in the procurement process, as well as establishing independent oversight mechanisms to monitor project implementation and expenditure.

By addressing these implications and recommendations, Barbados can overcome the challenges posed by project politics and move towards more sustainable and effective public housing development, ultimately improving the quality of life for its citizens.

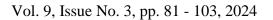
8. Conclusion:

The analysis of public housing projects in Small Island Developing States (SIDS) such as Barbados reveals the significant influence of project politics on both cost and revenue aspects. Throughout the case study, it becomes evident that political dynamics play a pivotal role in shaping the planning, implementation, and outcomes of public housing initiatives. Addressing these political factors is paramount to ensure the sustainability and effectiveness of housing initiatives in these unique contexts. (Chadee et al., 2022)

Project politics affects the cost aspects of public housing projects in several ways. Firstly, political interference often leads to inflated construction costs. Decisions on contractors and suppliers may be influenced by political connections rather than expertise, resulting in higher expenses. Secondly, land acquisition, a crucial component of housing projects, can be influenced by political considerations, leading to the selection of costly or unsuitable sites. Thirdly, corruption and mismanagement, fueled by political patronage, can result in the diversion of funds and inflated project costs. Lastly, bureaucratic delays, often caused by political interference in administrative processes, can escalate project costs over time.(Allam & Jones, 2019)

Similarly, project politics influences revenue aspects of public housing projects. Housing sales, a major revenue source, can be influenced by political decisions regarding pricing and eligibility criteria. Government subsidies, another revenue stream, may not always align with actual housing needs due to political priorities. Public-private partnerships (PPPs), which can contribute significantly to revenue generation, are subject to political negotiations and delays. Additionally, innovative financing mechanisms, crucial for financing housing projects, may face political resistance or instability.(Effendi, 2020)

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In conclusion, project politics significantly impacts the cost and revenue aspects of public housing projects in Small Island Developing States. Failure to address these political dynamics can lead to inefficiencies, cost overruns, and suboptimal outcomes in housing initiatives. Therefore, it is imperative to prioritize efforts to mitigate the influence of project politics and promote transparent, accountable, and efficient governance structures. By doing so, SIDS can ensure the sustainability and effectiveness of their housing initiatives, ultimately improving the quality of life for their citizens.

Reference

- Chadee, A. A., Martin, H. H., Gallage, S., Banerjee, K. S., Roopan, R., Rathnayake, U., & Ray, I. (2023). Risk Evaluation of Cost Overruns (COs) in Public Sector Construction Projects: A Fuzzy Synthetic Evaluation. Buildings, 13(5), 1116.
- Allam, Z., & Jones, D. (2019). Climate change and economic resilience through urban and cultural heritage: The case of emerging Small Island developing states economies. Economies, 7(2), 62.
- 3) Dornan, M. (2014). Access to electricity in Small Island Developing States of the Pacific: Issues and challenges. Renewable and Sustainable Energy Reviews, 31, 726-735.
- Allam, Z., & Jones, D. (2019). Climate change and economic resilience through urban and cultural heritage: The case of emerging Small Island developing states economies. Economies, 7(2), 62.
- 5) Pelling, M., & Uitto, J. I. (2001). Small island developing states: natural disaster vulnerability and global change. Global Environmental Change Part B: Environmental Hazards, 3(2), 49-62.
- Chittoo, H. B. (2011). Public administration in "Small and island developing states": A debate about implications of smallness. Global Journal of Management and Business Research, 11(9), 23-34.
- 7) Rehan, H. (2024). The Future of Electric Vehicles: Navigating the Intersection of AI, Cloud Technology, and Cybersecurity. Valley International Journal Digital Library, 1127-1143.
- 8) Chadee, A. A., Martin, H. H., Mwasha, A., & Otuloge, F. (2022). Rationalizing critical cost overrun factors on public sector housing programmes. Emerging Science Journal, 6(3), 647-666.
- 9) Pulicharla, M. R. (2023). Hybrid Quantum-Classical Machine Learning Models: Powering the Future of AI. Journal of Science & Technology, 4(1), 40-65.
- 10) Jiang, B., Seif, M., Tandon, R., & Li, M. (2021). Context-aware local information privacy. IEEE Transactions on Information Forensics and Security, 16, 3694-3708.
- 11) Chadee, A. A., Chadee, X. T., Ray, I., Mwasha, A., & Martin, H. H. (2021). When parallel schools of thought fail to converge: The case of cost overruns in project management. Buildings, 11(8), 321.
- 12) Pulicharla, M. R. (2024). Data Versioning and Its Impact on Machine Learning Models. Journal of Science & Technology, 5(1), 22-37.

ISSN 2520-0402 (Online)

Vol. 9, Issue No. 3, pp. 81 - 103, 2024



- 13) Asaju, B. J. (2024). Privacy Preservation Techniques in V2X Ecosystems: Safeguarding Individual Privacy in Connected Vehicle Environments. Journal of Artificial Intelligence Research, 4(1), 58-72.
- 14) Pinto, J. K. (2000). Understanding the role of politics in successful project management. International Journal of Project Management, 18(2), 85-91.
- 15) Bang, H. P. (2009). 'Yes we can': identity politics and project politics for a late-modern world. Urban Research & Practice, 2(2), 117-137.
- 16) Hodgson, D., & Cicmil, S. (2007). The politics of standards in modern management: Making 'the project'a reality. Journal of Management Studies, 44(3), 431-450.
- 17) Adeyeri, T. B. (2024). Enhancing Financial Analysis Through Artificial Intelligence: A Comprehensive Review. Journal of Science & Technology, 5(2), 102-120.
- 18) Altshuler, A. A., & Luberoff, D. E. (2004). Mega-projects: The changing politics of urban public investment. Rowman & Littlefield.
- 19) Aureli, P. V. (2008). The project of autonomy: politics and architecture within and against capitalism (Vol. 4). Princeton Architectural Press.
- 20) Asaju, B. J. (2024). Advancements in Intrusion Detection Systems for V2X: Leveraging AI and ML for Real-Time Cyber Threat Mitigation. Journal of Computational Intelligence and Robotics, 4(1), 33-50.
- 21) Singh, M. Machine Learning in Marketing Analytics.
- 22) Heston, T. F., & Pahang, J. A. (2019). Moral injury and the four pillars of bioethics. F1000Research, 8.
- 23) Zhang, W., Jiang, B., Li, M., & Lin, X. (2022). Privacy-preserving aggregate mobility data release: An information-theoretic deep reinforcement learning approach. IEEE Transactions on Information Forensics and Security, 17, 849-864.
- 24) Wong, P. P. (2011). Small island developing states. Wiley Interdisciplinary Reviews: Climate Change, 2(1), 1-6.
- 25) Briguglio, Lino. "Small island developing states and their economic vulnerabilities." World development 23.9 (1995): 1615-1632.
- 26) Ghina, F. (2003). Sustainable development in small island developing states. Environment, development and sustainability, 5, 139-165.
- 27) Heston, T. F., & Pahang, J. A. (2023). Moral injury and the four pillars of bioethics [version 4.
- 28) Weng, Y., & Wu, J. (2024). Fortifying the global data fortress: a multidimensional examination of cyber security indexes and data protection measures across 193 nations. International Journal of Frontiers in Engineering Technology, 6(2), 13-28.
- 29) Kelman, I., & West, J. J. (2009). Climate change and Small Island developing states: a critical review. Ecological and Environmental Anthropology, 5(1), 1-16.
- 30) Eastin, J. (2018). Climate change and gender equality in developing states. World Development, 107, 289-305.
- 31) Betzold, C. (2015). Adapting to climate change in small island developing states. Climatic change, 133(3), 481-489.

ISSN 2520-0402 (Online)

Vol. 9, Issue No. 3, pp. 81 - 103, 2024



- 32) Weng, Y. (2024). BIG DATA AND MACHINE LEARNING IN DEFENCE. International Journal of Computer Science and Information Technology, 16(2), 25-35.
- 33) Pelling, M., & Uitto, J. I. (2001). Small island developing states: natural disaster vulnerability and global change. Global Environmental Change Part B: Environmental Hazards, 3(2), 49-62.
- 34) Liang, Y., Wang, X., Wu, Y. C., Fu, H., & Zhou, M. (2023). A Study on Blockchain Sandwich Attack Strategies Based on Mechanism Design Game Theory. Electronics, 12(21), 4417.
- 35) Adeyeri, T. B. (2024). Automating Accounting Processes: How AI is Streamlining Financial Reporting. Journal of Artificial Intelligence Research, 4(1), 72-90.
- 36) Turvey, R. (2007). Vulnerability assessment of developing countries: the case of small-island developing states. Development Policy Review, 25(2), 243-264.
- 37) Barton, D. M., & Sherman, R. (1984). The price and profit effects of horizontal merger: a case study. The Journal of Industrial Economics, 33(2), 165-177.
- 38) Li, X., Wang, X., Chen, X., Lu, Y., Fu, H., & Wu, Y. C. (2024). Unlabeled data selection for active learning in image classification. Scientific Reports, 14(1), 424.
- 39) Ojo, L. O. (2020). Impact of tax administration on government revenue in developing economy: A case study of Nigeria. Advance Journal of Financial Innovation and Reporting, 4(4).
- 40) Lee, Z., Wu, Y. C., & Wang, X. (2023, October). Automated Machine Learning in Waste Classification: A Revolutionary Approach to Efficiency and Accuracy. In Proceedings of the 2023 12th International Conference on Computing and Pattern Recognition (pp. 299-303).
- 41) Jiang, B., Li, M., & Tandon, R. (2019, May). Local information privacy with bounded prior. In ICC 2019-2019 IEEE International Conference on Communications (ICC) (pp. 1-7). IEEE.
- 42) Adeyeri, T. B. (2024). Blockchain and AI Synergy: Transforming Financial Transactions and Auditing. Blockchain Technology and Distributed Systems, 4(1), 24-44.
- 43) rnest Adu-Gyamfi, E. (2014). E ffective Revenue Mobilisation by Districts Assemblies: A Case Study of Upper Denkyira E ast Municipal Assembly of Ghana. Public Policy and Administration, 2(1), 97-122.
- 44) Guo, H., Ma, Z., Chen, X., Wang, X., Xu, J., & Zheng, Y. (2024). Generating Artistic Portraits from Face Photos with Feature Disentanglement and Reconstruction. Electronics, 13(5), 955.
- 45) Wang, X., Wu, Y. C., & Ma, Z. (2024). Blockchain in the courtroom: exploring its evidentiary significance and procedural implications in US judicial processes. Frontiers in Blockchain, 7, 1306058.
- 46) Marn, M. V., & Rosiello, R. L. (1992). Managing price, gaining profit. McKinsey Quarterly, 18-18.
- 47) Liu, Y., Wu, Y. C., Fu, H., Guo, W. Y., & Wang, X. (2023). Digital intervention in improving the outcomes of mental health among LGBTQ+ youth: a systematic review. Frontiers in psychology, 14, 1242928.
- 48) Chandra, A. Privacy-Preserving Data Sharing in Cloud Computing Environments.
- 49) Manukondakrupa, Ajay Chandra. (2024). ENHANCED THREAT INTELLIGENCE NETWORK (EETIN): A UNIFIED APPROACH FOR IOT ATTACK DETECTION.
- 50) Jiang, B., Li, M., & Tandon, R. (2024). Online Context-aware Streaming Data Release with Sequence Information Privacy. IEEE Transactions on Information Forensics and Security.

ISSN 2520-0402 (Online)

Vol. 9, Issue No. 3, pp. 81 - 103, 2024



- 51) Manukondakrupa, Ajay Chandra. (2024). Fortifying Patient Privacy: A Cloud-Based IoT Data Security Architecture in Healthcare.
- 52) Alizamir, S., Iravani, F., & Mamani, H. (2019). An analysis of price vs. revenue protection: Government subsidies in the agriculture industry. Management Science, 65(1), 32-49.
- 53) Effendi, A. (2020). Sales volume and production costs against company revenue: a case study in the indonesia stock exchange 2014-2018. International Journal on Social Science, Economics and Art, 10(3), 144-152.
- 54) El Haddad, R., Roper, A., & Jones, P. (2008, October). The impact of revenue management decisions on customers attitudes and behaviours: A case study of a leading UK budget hotel chain. In EuroCHRIE 2008 Congress, Emirates Hotel School, Dubai, UAE, 11th-14th October. Retrieved April (Vol. 6, p. 2011).
- 55) Manukondakrupa, Ajay Chandra. (2024). A GREY WOLF OPTIMIZATION-BASED FEED-FORWARD NEURAL NETWORK FOR DETECTING INTRUSIONS IN INDUSTRIAL IOT. International Journal of Management IT and Engineering. 14. 65-91.
- 56) Xu, H., & Li, B. (2013). Dynamic cloud pricing for revenue maximization. IEEE Transactions on Cloud Computing, 1(2), 158-171.
- 57) Manukondakrupa, Ajay Chandra & Technical, M & Manager, Erp. (2024). A COMBINATION OF OPTIMIZATION-BASED MACHINE LEARNING AND BLOCKCHAIN MODEL FOR ENHANCING SECURITY AND PRIVACY IN THE MEDICAL SYSTEM. 12. 21-49.



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