Resilience in The Ruins: a Systems Thinking Approach to Economic Survival under Israeli Occupation in Palestine

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Abstract

Amid the devastation caused by the Israeli occupation, the Palestinian economy faces profound systemic challenges, including trade restrictions, widespread unemployment, and collapsing infrastructure. This study adopts a systems thinking approach to explore economic survival under such conditions, bridging the gap in understanding the interconnected dynamics of macroeconomic and microeconomic factors. Using causal loop diagrams, the analysis uncovers reinforcing loops of poverty, aid dependency, and infrastructure collapse alongside balancing loops driven by community resilience and policy interventions. Key findings reveal that trade restrictions have caused GDP contractions of up to 35 percent, while unemployment in Gaza has surged to 45 percent due to disrupted labor markets. Furthermore, only 33 percent of hospitals remain operational, exacerbating health crises and food insecurity. The study emphasizes the critical need for targeted infrastructure investments to restore market functionality and reduce unemployment by 15–20 percent, paired with community empowerment to strengthen resilience. The systems thinking framework offers policymakers actionable insights to navigate the socio-economic complexities of occupation and promote sustainable survival strategies for Palestine.

Keywords*: causal loop diagrams, economic resilience, occupation, Palestine, Systems Thinking.*

Abstrak

Di tengah kehancuran akibat pendudukan Israel, ekonomi Palestina menghadapi tantangan besar seperti pembatasan perdagangan, pengangguran tinggi, dan kerusakan infrastruktur. Penelitian ini menggunakan pendekatan sistem berpikir untuk mengkaji kelangsungan ekonomi dalam kondisi tersebut, mengisi kesenjangan pemahaman tentang dinamika yang saling terkait antara faktor makroekonomi dan mikroekonomi. Dengan memanfaatkan diagram lingkaran kausal, analisis ini mengidentifikasi lingkaran penguat yang mencakup kemiskinan, ketergantungan bantuan, dan keruntuhan infrastruktur, serta lingkaran penyeimbang yang digerakkan oleh ketahanan komunitas dan intervensi kebijakan. Hasil menunjukkan pembatasan perdagangan menyebabkan kontraksi PDB hingga 35 persen, sementara tingkat pengangguran di Gaza melonjak hingga 45 persen akibat gangguan pasar tenaga kerja. Selain itu, hanya 33 persen rumah sakit yang tetap beroperasi, memperparah krisis kesehatan dan ketahanan pangan. Studi ini menekankan perlunya investasi infrastruktur yang terarah untuk memulihkan fungsi pasar dan menurunkan pengangguran hingga 15–20 persen, disertai pemberdayaan masyarakat untuk memperkuat ketahanan. Kerangka sistem berpikir ini menawarkan wawasan bagi pembuat kebijakan untuk menghadapi kompleksitas sosial-ekonomi pendudukan dan mendorong strategi bertahan yang berkelanjutan untuk Palestina.

Kata Kunci: ketahanan sosial, Palestina, pemulihan ekonomi, tata kelola inklusif, Systems Thinking

Introduction

This study examines the Palestinian territories, focusing on the West Bank and Gaza Strip, to analyze the dynamics of economic resilience amidst ongoing systemic challenges. Under Israeli occupation, the Palestinian economy has endured systemic disruptions that severely undermine development, economic stability, and social resilience (Kubursi & Naqib, 2008). Policies of restriction, trade barriers, and recurrent conflicts have devastated critical infrastructure, resulting in a 35% decline in Gross Domestic Product (GDP) in 2024 (World Bank, 2024). Gaza faces a staggering unemployment rate of 45% (International Labour Organization (ILO), 2024), while 33% of critical infrastructure has become non-functional. Limited access to markets has

entrenched poverty, with 24.5% of the population living below the poverty line, further deepening dependence on international aid (Rad, 2015; Dana, 2019).

The collapse of public services, including healthcare and education, has further exacerbated the humanitarian crisis (Lustick, 2024). Reports indicate that only 33% of hospitals in Gaza remain operational, leaving millions vulnerable to public health emergencies and food insecurity (World Health Organization (WHO), 2024; United Nations, 2024). This systemic breakdown illustrates the interconnectedness of macroeconomic and microeconomic challenges, underscoring the urgent need for an integrated and systemic approach to recovery, as depicted in Figure 1, which highlights the key economic impacts of conflict in Palestine (Ajl, 2024).

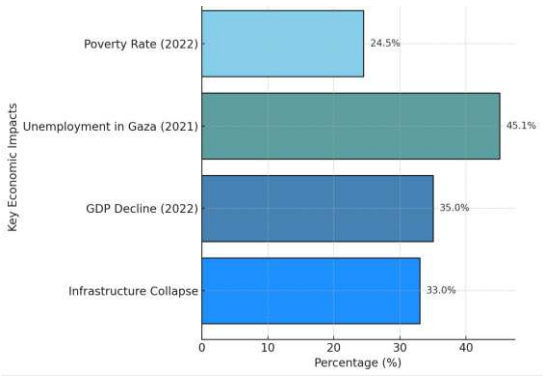

Figure 1. Key Economic Impacts of in Palestine

Source: Palestinian Central Bureau of Statistics (PCBS), 2024)

Trade restrictions and limited market access have significantly constrained economic activity, reducing household incomes and weakening community resilience. As Bhowmick and Khan (2023) observe, these barriers deepen reliance on international aid, creating a reinforcing cycle of economic vulnerability. Local industries, already fragile due to conflict, continue to struggle with achieving sustainability amidst ongoing instability (Mbah *et al.*, 2024).

While international aid has provided temporary relief, its long-term effectiveness remains limited without structural reforms (Aziz, Sari, and Efendi, 2024). Tartir, Dana and Seidel (2021) argue that sustainable recovery in Palestine requires empowering local communities and fostering innovation. Community-driven initiatives in agriculture (Panosetti & Roudart, 2024) and small-scale manufacturing have shown potential for resilience (Seidel, 2019), but they require consistent support through targeted policies

and investments that balance immediate needs with long-term development (Abu-Rmeileh & Iriqat, 2024; Hilal, 2007).

Despite these efforts, existing research has yet to fully explore the resilience dynamics within Palestine's economy under occupation (Rusanti *et al.*, 2025). This study aims to address this gap by applying a Systems Thinking approach to analyze mechanisms of economic survival. Using Causal Loop Diagrams (CLD), the research identifies feedback loops that sustain vulnerabilities while uncovering strategies to enhance resilience (Kunsch, Theys and Brans, 2007).

This study employs a qualitative methodology, including a literature review and secondary data analysis, to examine the interplay between economic policies, community-driven strategies, and systemic challenges (Vaggi, Missaglia, & Kattan, 2010). By bridging macroeconomic strategies with localized interventions, it offers actionable recommendations to strengthen resilience in the face of occupation (Abu Jamie, 2017). The article is structured as follows: the introduction outlines the research context and objectives, followed by a literature review, methodology, and analysis. The conclusion presents policy recommendations and implications for sustainable recovery amidst ongoing conflict (Wambrauw *et al.*, 2024).

Systems Thinking Method

Systems Thinking is an analytical approach used to understand the dynamics of complex system by focusing on the interconnectedness of various components and how their interactions create patterns and feedback loops (Sarasi, Yulianti, & Farras, 2021). The provided diagram exemplifies this approach by visualizing the relationships and feedback mechanisms among key variables, showcasing how they influence one another across different layers (Ricigliano & Chigas, 2011). This concept is effectively illustrated in Figure 2, which presents the Framework for Objectives, Scenarios, Strategic Planning, and Simulation, highlighting the intricate relationships and feedback loops that drive system behavior and decision-making processes.

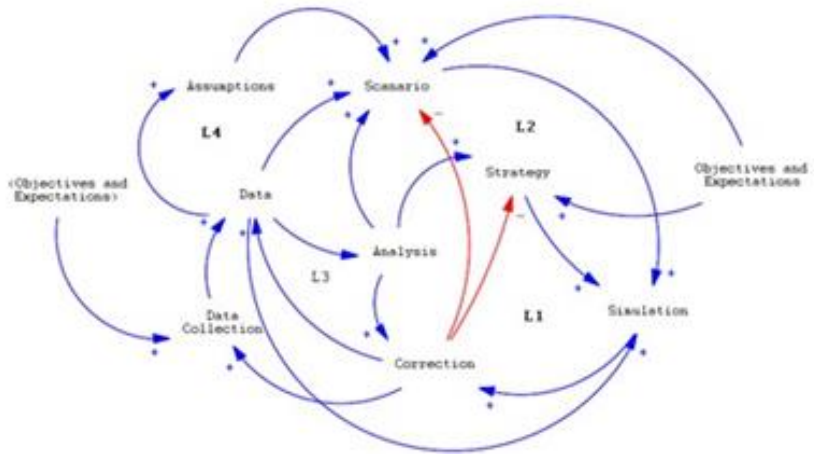

Figure 2. Framework for Objectives, Scenarios, Strategic Planning, and Simulation

Source: Prahasta (2018)

Figure 2 highlights two types of feedback loops, “reinforcing loops” and “balancing loops”. In reinforcing loops, variables work together to amplify changes. For example, as shown in Figure 1, Scenario and Strategy (L2) might mutually reinforce one another, driving the system toward continuous improvement or escalation. This is depicted by red arrows, indicating positive reinforcement that perpetuates the cycle. In contrast, balancing loops are designed to stabilize the system. For instance, Correction and Data Collection (L3) interact in ways that counteract imbalances, maintaining equilibrium in the system, as indicated by blue arrows showing negative or stabilizing effects.

The structure of the diagram, using a CLD framework, provides clarity on the interactions between components such as “Objectives and Expectations”, “Assumptions”, and “Simulation”. These elements feed into cycles that either amplify or regulate system behaviors. The arrows in the diagram represent causal relationships, with directional flow showing how one component impacts the next, either positively (+) or negatively (-).

This visualization emphasizes the holistic nature of “Systems Thinking,” making it easier to identify leverage points—areas where interventions like adjusting “Strategy” or refining “Analysis” can significantly influence the system. By understanding these loops and their interactions, decision-makers can design targeted solutions to break harmful cycles or enhance stabilizing mechanisms, leading to more effective and sustainable outcomes. One application of this approach can be seen in "Food Insecurity

during a Pandemic: Systems Thinking-Based Analysis" by Yulianti, Elmin, and Prahasta, (2021).

Applying Systems Thinking to the Palestinian Economy

The Palestinian economy, deeply affected by prolonged conflict and systemic constraints, serves as a compelling case for applying System Thinking (Botta, 2010). This approach enables a comprehensive analysis of the interconnected relationships between macroeconomic, microeconomic, and policy variables while identifying feedback loops that either reinforce economic vulnerability or promote resilience (Dana, 2020). By employing Systems Thinking, it becomes possible to understand how external pressures, such as trade restrictions and occupation policies, influence internal dynamics like household income, education, and food security (World Bank, 2024; Dana, 2021).

Using CLD, this study identifies two main patterns: “reinforcing loops” and “balancing loops”. Reinforcing loops, such as the poverty cycle, highlight how trade restrictions lower GDP, which in turn reduces household incomes, limits access to education, and worsens unemployment ILO (2024); Yoganandham (2023). Similarly, the aid dependency loop reveals how reliance on international aid undermines economic independence and reinforces dependency (Tartir, Dana, & Seidel, 2021). In contrast, balancing loops work to stabilize the system, as seen in community-driven initiatives like small-scale agriculture and manufacturing, which help maintain household income. Policy interventions, such as investments in infrastructure and trade facilitation, also create opportunities to counteract economic challenges (Bhowmick & Khan, 2023).

This framework bridges macroeconomic factors—such as GDP, infrastructure, and international aid—with microeconomic realities like household income, education, and health. By simulating policy scenarios, Systems Thinking offers actionable strategies to address economic fragility. For example, infrastructure investments can enhance market access and reduce unemployment, while trade facilitation can mitigate the negative effects of restrictions. By identifying critical leverage points, such as rebuilding infrastructure and empowering local initiatives, Systems Thinking provides a roadmap for breaking cycles of poverty and fostering sustainable economic recovery in Palestine (Naqib, 2002; United Nations High Commissioner for Human Rights (UNHCHR), 2012).

Create a CLD Using a Source Triangulation

The first step in creating a CLD is to identify the main variable that influences the overall system dynamics. In this context, occupation is selected as the primary variable because it acts as the root cause, creating systemic impacts across various aspects, both at the macro level (such as economy, infrastructure, and trade) and the micro level (such as household income, employment opportunities, and access to education). Validation of occupation as the main variable is supported by Tartir, Dana, and Seidel (2021) and Forough (2023), which show that the effects of occupation are systemic, encompassing economic, social, and infrastructural aspects.

Next, data for identifying related variables is collected through source triangulation. This approach combines data from scientific journals, reports by international organizations, and other relevant documents. Triangulation ensures that the selected variables are empirically grounded. Other identified variables include macro factors such as trade restrictions, GDP decline, infrastructure collapse, and dependency on international aid. On the micro level, the variables include employment opportunities, household income, access to education, and food security.

To clarify the relationships between the main variable and other variables, a triangulation table is created. This table maps occupation as the central variable and connects it to the macro and micro variables it influences. Macro variables such as trade restrictions are validated by World Bank (2024) and Tartir, Dana, and Seidel (2021), linking them to reduced market access and economic growth. GDP decline, reflecting the direct effects of conflict and infrastructure damage, is validated by World Bank (2024) and ILO (2024). Meanwhile, infrastructure collapse, including damage to roads, healthcare facilities, and energy systems, is supported by WHO (2024) and World Bank (2024). Dependency on international aid is also a critical factor validated by Tartir, Dana and Seidel (2021) and Forough (2023), demonstrating how short-term aid exacerbates dependency cycles and hampers long-term (Sammamreh et al., 2021).

On the other hand, micro variables illustrate the direct impacts of occupation on individuals and communities. Employment opportunities are severely limited due to conflict and economic restrictions, as validated by ILO (2024) and WHO (2024). The decline in household income highlights the occupation's effect on daily livelihoods, supported by Tartir, Dana, and Seidel (2021) and World Bank (2024). Access to education also faces significant challenges due to infrastructure damage and high costs, as noted by Bhowmick and Khan (2023) and WHO (2024). Additionally, food security is worsened

by logistical disruptions and infrastructure damage, validated by WHO (2024) and World Bank (2024).

Table 1. Source Triangulation Table for Validating Variables in the CLD

	Variable (CLD)	Category	Source	Validation Focus
1.	Occupation	Main Variable	Tartir et al. (2021), Forough (2023), Cali & Miaari (2015)	System-wide impacts of occupation
2.	Trade Restricions	Macro	Mbah et al. (2024), World Bank (2023), Bhowmick & Khan (2023)	Impact on trade and economy
3.	GDP Decline	Macro	Yoganandham (2023), World Bank (2024), ILO (2024)	Economic outcomes and GDP trends
4.	Infrastructure Collapse	Macro	World Bank (2024), WHO (2024), Wambrauw et al. (2024)	Critical Infrastructure destruction and needs
5.	International Aid Dependency	Macro	Tartir et al. (2021), Forough (2023)	Dependency cycles and economic vulnerability
6.	Economic Recovery	Macro	Tartir et al. (2021), World Bank (2024)	Pathways to post-conflict recovery
7.	Market Access	Macro	Bhowmick & Khan (2023), World Bank (2023), Panosetti & Roudart (2023)	Reducing trade barriers to enhance market access
8.	Economic Growth	Macro	World Bank (2023), Yoganandham (2023), Tartir et al. (2021)	Stimulating growth through targeted investments
9.	Logistical Disruption	Macro	WHO (2024), World Bank (2024)	Effects of disrupted supply chains and infrastructure
10.	Humanitarian Aid Dependency	Macro	Economic and Social Commission for Western Asia & UNDP (2024)	Dependency on foreign aid
11.	International Pressure	Macro	Forough (2023), Tartir et al. (2021)	Global diplomatic and policy shifts
12.	Unemployment	Macro	ILO (2024), Abu-Rmeileh & Iriqat (2024), World Bank (2024)	Structural challenges in labor market and rising unemployment
13.	Employment Opportunities	Micro	ILO (2024), WHO (2024)	Labour market and job opportunities

14.	Household Income	Micro	Tartir et al. (2021), World Bank (2024)	Income reduction at the household level
15.	Access to education	Micro	Bhowmick & Khan (2023), WHO (2024)	Barriers to education and skill development
16.	Food Security	Micro	WHO (2024),Panosetti & Roudart (2023), Tartir et al. (2021)	Food insecurity due to trade and logistics issues
17.	Community Resilience	Micro	Bhowmick & Khan (2023), Tartir et al. (2021)	Role of local initiatives in building resilience
18.	Daily Livelihoods	Micro	ILO (2024), Tartir et al. (2021)	Sustaining livelihoods amidst systemic challenges
19.	Skill Development	Micro	ILO (2024), WHO (2024)	Skill development under resources constraints
20.	Community Health	Micro	WHO (2024), ILO (2024), Abu-Rmeileh & Iriqat (2024)	Health crises and public health access
21.	Community-Based Resilience	Micro	Dana (2020), Abu-Rmeileh & Iriqat (2024), Seidel (2019)	Community resilience initiatives
22.	Access to Basic Services	Micro	WHO (2024), World Bank (2023)	Access to public services
23.	Local Business Operations	Micro	Bhowmick & Khan (2023)	Business challenges and dependencies
24.	Small-scale Agriculture	Micro	Dana (2021), Panosetti & Roudart (2023), Hilal (2007)	Role in community resilience and food security
25.	Manufacture	Micro	Bhowmick & Khan (2023)	Challenges in small-scale manufacturing sectors

Source: Author's Analysis, 2024

The triangulation table in Figure 1 consists of several columns: Variable (CLD), which lists the main variables used in the CLD; Category, which groups the variables based on their level of analysis, such as macro (systemic) or micro (local); Source, which references the literature or data supporting each variable; and Validation Focus, which describes the specific aspects or impacts of the variable being validated within the research context. These columns serve to ensure data accuracy, consistency in relationships between variables, and the relevance of the variables in the analyzed model. For example, the variable Trade Restrictions is categorized under macro, with

references from Mbah *et al.* (2024), World Bank (2023) and Bhowmick and Khan (2023). Its validation focus, Impact on trade and economy, ensures the analysis captures how trade restrictions affect overall trade performance and economic outcomes.

Building on this foundation, the triangulated variables need to be synthesized into a dynamic framework to reveal their interconnections and feedback mechanisms. To achieve this, the triangulated variables must be translated into a CLD. To translate the triangulation table into a CLD, the first step is identifying the main variable that serves as the root cause of the systemic challenges, which in this case is *occupation*. This process is further illustrated in Figure 3, which visually maps the relationships and feedback loops stemming from occupation and its impact on key macro-level variables.

CLD Macro: Systemic Decline and Reinforcing Loops

The macro-level dynamics of the Palestinian economy reveal a system heavily influenced by occupation, characterized by reinforcing loops that exacerbate existing vulnerabilities. Core variables such as trade restrictions, GDP decline, infrastructure collapse, and unemployment create a cyclical pattern of systemic decline, where negative changes in one area amplify challenges in another. These interactions highlight the structural fragility of the system, necessitating a holistic approach to address the root causes of economic instability. This complexity is illustrated in Figure 3, which maps the interconnections and feedback loops at the macroeconomic level.

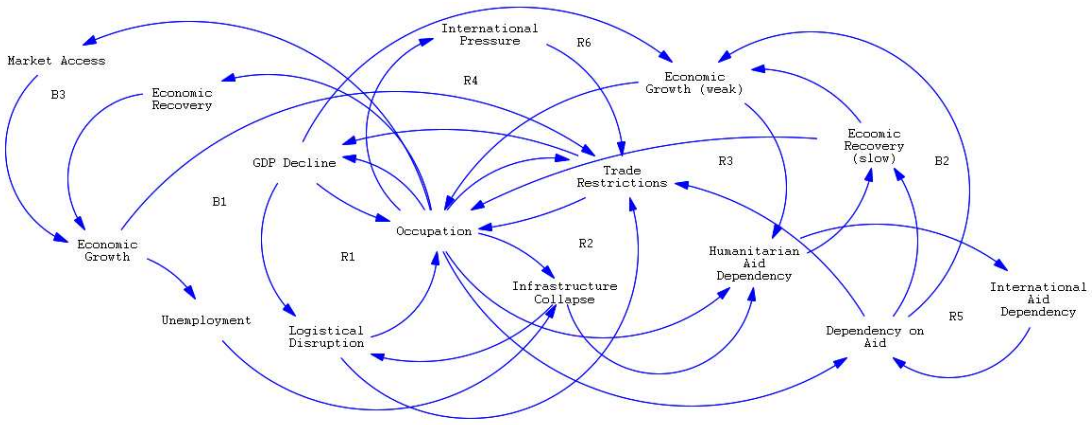

Figure 3. Macro-Level CLD

Source: Author's Analysis, 2024

This CLD illustrates the complexity of relationships between factors influencing the occupation of Palestine and its impact on the economy, infrastructure, and dependency on international aid. At the core of the system, "Occupation" serves as the central variable, triggering several reinforcing loops (R) that exacerbate socio-economic conditions. For example, in R1 (Economic Poverty Loop), occupation leads to logistical disruption, causing a decline in Gross Domestic Product (GDP). This GDP decline further worsens the occupation, creating a cycle of poverty that is difficult to break.

Next, in R2 (Infrastructure Collapse Loop), occupation causes damage to critical infrastructure such as roads, electricity, and access to clean water. The collapse of infrastructure triggers trade restrictions, which hinder economic growth. These restrictions ultimately reinforce the occupation. This factor continues in R3 (Economic Isolation and Aid Dependency Loop), where limited trade weakens economic growth, slows recovery, and increases reliance on humanitarian aid. This dependency forms a cycle that exacerbates Palestine's economic isolation.

Furthermore, R4 (International Pressure and Occupation Loop) highlights how global pressure on the occupation leads to responses that intensify the occupation itself. This, in turn, triggers an economic crisis (GDP decline), which strengthens international pressure. Meanwhile, R5 (Long-Term Aid Dependency Loop) explains how reliance on humanitarian aid creates a systemic International Aid Dependency. This dependency reinforces a long-term aid pattern, slowing economic independence. A similar situation occurs in R6 (Global Pressure on the Economy Loop), where global pressure slows economic recovery, increases aid dependency, and further intensifies international pressure.

Meanwhile, balancing loops (B) such as B1 (Economic Recovery Efforts) and B3 (Market Access as Hope) attempt to balance the system through economic growth and market access. However, their effectiveness is highly limited due to external factors like trade blockades and infrastructure collapse. These balancing loops have the potential to drive gradual economic recovery but remain vulnerable to disruptions from the stronger reinforcing loops.

Overall, this diagram shows that occupation creates cycles that worsen economic crises, infrastructure collapse, and dependency on international aid. Breaking this cycle requires effective intervention through international policies, infrastructure recovery, and broader economic access. Without significant intervention, the reinforcing loops will continue to dominate, further strengthening the occupation and Palestine's economic isolation. This dynamic is clearly reflected in the CLD Micro, which illustrates

how localized impacts such as unemployment, weakened community resilience, and declining livelihoods contribute to escalating vulnerabilities at the community level.

CLD Micro: Localized Impacts and Community Vulnerability

At the micro level, the impacts of occupation manifest through localized disruptions that directly affect household income, food security, education access, and community health. These variables are tightly interconnected, creating feedback loops that perpetuate community vulnerability and hinder resilience. Addressing these challenges requires a focused analysis of how individual and community-level factors interact within the broader systemic constraints. This dynamic is visualized in Figure 4.

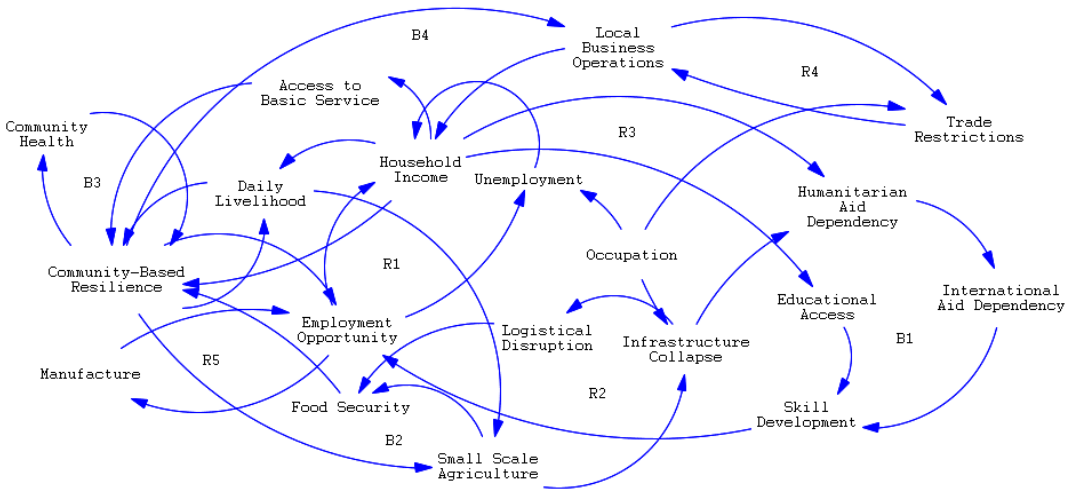

Figure 4. Micro-Level CLD

Source: Author's Analysis, 2024

This micro-level CLD illustrates the complex interrelations among various interconnected variables. R1 (Structural Poverty Cycle) describes how occupation triggers a rise in unemployment, leading to decreased household income and a decline in daily livelihoods. This decline weakens community resilience, further reducing employment opportunities and perpetuating the negative feedback loop. Interventions such as access to education and skill development can help break this cycle.

R2 (Infrastructure and Logistics Breakdown) highlights the impact of occupation on infrastructure collapse, which disrupts logistics and weakens food security. Reduced community resilience decreases the productivity of small-scale agriculture, further worsening infrastructure conditions. Addressing this loop requires investment in basic infrastructure rehabilitation and support for the local agricultural sector.

On the other hand, R3 (Sustained Dependency on Aid) emphasizes how dependency on humanitarian aid undermines skill development, reducing employment opportunities and household income. This deepens the reliance on aid, creating a challenging cycle to escape. Sustainable community-based programs focused on self-reliance could serve as a solution to break this dependency.

To counterbalance these reinforcing loops, balancing loops like B1 (Recovery Through Education) offer a way out. Access to education enables individuals to develop skills, unlock job opportunities, and increase household income. Improved income, in turn, facilitates better access to education, creating a positive feedback loop that enhances community well-being. Additionally, B2 (Community Food Security) highlights the role of small-scale agriculture in strengthening food security and daily livelihoods, gradually improving community resilience.

Community Health directly contributes to enhancing community resilience, while Manufacture generates more employment opportunities, strengthening the local economy. These relationships provide a more comprehensive view of how micro-level variables are interconnected and how well-designed interventions can drive sustainable change. This understanding becomes even more critical when examining the Combined CLD, which highlights the interface between macro and micro dynamics, showing how global policies influence and are influenced by localized systems.

Combined CLD: Interface Between Macro and Micro Dynamics

To achieve this transformation, it is essential to integrate macro- and micro-level analyses, as their interface reveals the interconnected pathways driving systemic challenges. The combined CLD Macro and Micro (Figure 5) provides a holistic view of how occupation influences both structural and community-level dynamics, highlighting leverage points for coordinated interventions that bridge national policies with grassroots resilience.

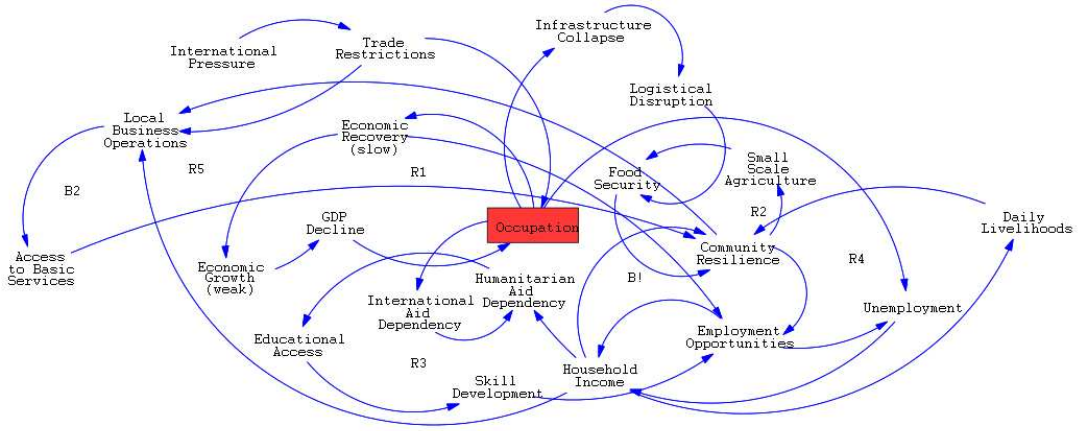

Figure 5. Combined Macro and Micro- CLD

Source: Author's Analysis, 2024

The combined macro-micro CLD highlights the intricate dynamics between global pressures and localized impacts, with “Occupation” as the central interface driving systemic vulnerabilities. At the macro level, International Pressure leads to Trade Restrictions, which reinforce Occupation, slowing Economic Recovery and leading to Weak Economic Growth and GDP Decline. This forms a reinforcing cycle that traps the system in stagnation, amplifying the occupation's economic and social consequences. The continuous decline in economic performance limits the capacity for recovery and investment, feeding back into occupation as both a cause and consequence of global isolation.

At the micro level, Occupation triggers multiple reinforcing loops that exacerbate community-level vulnerabilities. For example, occupation causes Infrastructure Collapse, leading to Logistical Disruption that reduces Food Security and weakens Community Resilience. This disruption negatively affects Small-Scale Agriculture, further diminishing food security and creating a cycle of dependency. Similarly, occupation increases Unemployment, which lowers Household Income and worsens Daily Livelihoods. This decline weakens Community Resilience, reducing Employment Opportunities and perpetuating the cycle of unemployment. These feedback loops show how macro-level occupation policies cascade into persistent micro-level challenges.

A critical reinforcing loop involves Humanitarian Aid Dependency. Occupation increases reliance on International Aid, fostering Humanitarian Aid Dependency and reducing access to Educational Systems. Limited access to education undermines Skill Development, decreasing Employment Opportunities and shrinking household income,

which, in turn, deepens dependency on aid. This cycle not only weakens economic independence but also erodes the community's capacity to build resilience and achieve long-term self-sufficiency.

However, balancing loops offer pathways for systemic recovery and resilience. For instance, improving Educational Access can enhance Skill Development, leading to increased Employment Opportunities and rising Household Income. This improvement strengthens Daily Livelihoods and Community Resilience, creating a positive feedback loop that counters the negative effects of occupation. Similarly, macro-level Economic Recovery Programs can boost Employment Opportunities, increase Household Income, and support Local Business Operations, improving Access to Basic Services and reinforcing community resilience.

In conclusion, the integrated macro-micro CLD demonstrates that Occupation serves as the key interface linking global pressures to local vulnerabilities. Reinforcing loops such as Unemployment Cycles, Infrastructure Collapse, and Aid Dependency perpetuate systemic challenges, while balancing loops like Education and Skill Development and Economic Recovery Initiatives offer potential solutions. Breaking these reinforcing cycles requires coordinated interventions at both macro and micro levels to address root causes, restore resilience, and foster sustainable recovery for communities impacted by occupation.

CLD with Policies: Breaking Negative Loops for Sustainable Recovery

To achieve sustainable recovery, it is essential to integrate targeted policies that disrupt reinforcing loops and enhance balancing mechanisms within the system. By addressing both macro and micro-level variables, policies can create pathways for resilience, enabling communities to transition from dependency to self-reliance. These interventions must bridge systemic challenges at the national level with localized impacts, ensuring a comprehensive approach to recovery. By identifying leverage points within the system, policymakers can design strategies that foster long-term stability and growth. This integration is illustrated in Figure 6, Combined Macro and Micro CLD with Specific Policies and Interface (Occupation), showcasing how targeted interventions can address interconnected challenges across multiple levels.

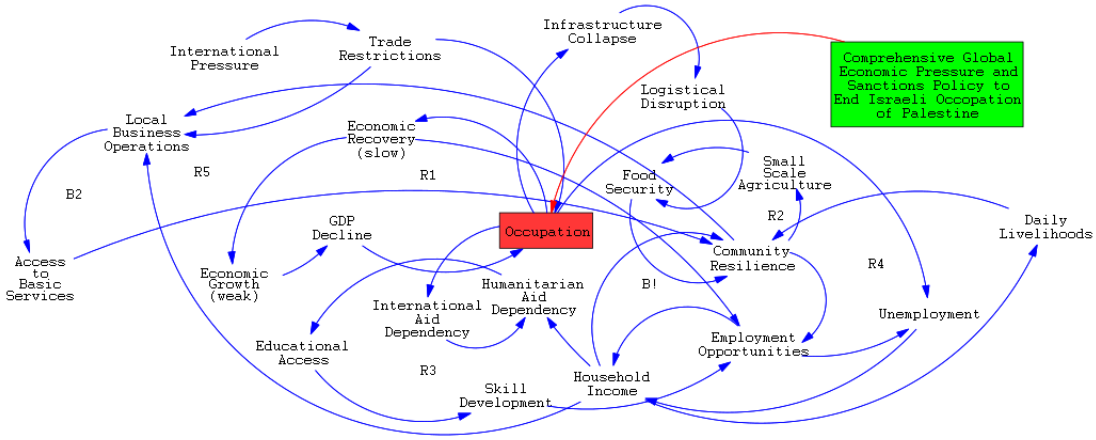

Figure 6. Combined Macro and Micro CLD with Specific Policies and Interface (Occupation)

Source: Author's Analysis, 2024

The most effective economic-political strategy to address the root cause of Israel's occupation of Palestine is through the mobilization of global support via the Boycott, Divestment, and Sanctions (BDS) campaign, which systematically targets Israel's economy. This campaign focuses on severing trade relations, withdrawing investments from companies that support the occupation, and implementing economic and political sanctions by the international community, thereby exerting financial and diplomatic pressure on Israel. Through strategic alliances with Palestine-supporting nations, strengthened diplomacy in international forums such as the United Nations, and global media campaigns to build public opinion, this movement can increase international pressure, forcing Israel to end its policies of occupation. By weakening the economic foundations that sustain the occupation, this strategy not only disrupts Israel's resources but also paves the way for Palestine to reclaim its sovereignty and build a sustainable economic foundation.

The Role of Occupation as a Central Interface

The integrated CLD demonstrates that Occupation acts as the central interface connecting macro-level forces, such as Trade Restrictions and International Pressure, with micro-level vulnerabilities, including Food Security and Community Resilience. This finding aligns with Dana (2020), who highlights that occupation structures economic dependency and limits Palestinian agency in resisting systemic economic control. The

interconnected feedback loops illustrate how occupation perpetuates poverty, unemployment, and humanitarian aid dependency, underscoring the need for global intervention to address occupation as the root cause. This conclusion also resonates with Botta (2010), who identifies structural imbalances in Palestinian trade as a deliberate outcome of Israeli policy. Effective international efforts targeting occupation could dismantle these feedback loops, enabling recovery.

The Impossibility of Economic Diversification under Blockade

The CLD highlights that Trade Restrictions, a direct outcome of occupation, have rendered economic diversification nearly impossible. Bhowmick and Khan (2023) illustrate that the blockade enforces a system where Palestinian businesses are unable to access alternative trade routes, further embedding economic dependence on Israeli policies. This reinforces findings by Kubursi and Naqib (2008), who describe the situation as "econocide," where systemic barriers prevent any meaningful economic growth or diversification. The feedback loops in the CLD show how trade restrictions directly undermine Local Business Operations, Household Income, and Community Resilience, necessitating international action to lift the blockade as a prerequisite for economic recovery.

Policies as Potential Balancing Mechanisms

While the CLD suggests that policies such as Infrastructure Development and Educational Initiatives could counteract negative feedback loops, their implementation remains highly constrained under occupation. According to Calì and Miaari (2015), these structural constraints prevent external aid from achieving its full impact, as material and resources are controlled by Israel. Similarly, Farsakh (2021) emphasizes that political barriers, more than financial limitations, hinder infrastructure projects. In the CLD, policies aimed at improving Logistical Disruption or Skill Development are blocked by the reinforcing loop of occupation, emphasizing the necessity of political change as a foundation for effective policy implementation.

Conclussion

Israel's occupation of Palestine has caused significant economic losses at both macro and micro levels. At the macro level, Israel's blockade and trade restrictions have weakened Palestine's economy, reduced GDP growth, and created a high dependency on international aid. This has hindered Palestine's ability to access global markets

independently, undermining long-term economic stability. At the micro level, the occupation has led to infrastructure collapse, logistical disruptions, and food insecurity, worsening poverty, unemployment, and declining household incomes. These cycles of economic loss are reinforced by Israel's control mechanisms, which prevent local economic recovery and limit initiatives for sustainable development.

Therefore, these ongoing economic losses can only be addressed by tackling the root cause: Israel's occupation of Palestine. This requires a coordinated global effort through economic-political policies, such as international pressure, boycotts, divestments, and sanctions against Israel, aimed at permanently ending the occupation. By removing the occupation, Palestine can restore its sovereignty, unlock economic potential, and build an independent and sustainable system for the well-being of its people.

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