Between the Mediterranean and the Red Sea. Rethinking the Ben Gurion Canal

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***Abstract*—The idea of the Ben Gurion Canal, a proposed waterway linking the Mediterranean Sea with the Red Sea through Israeli territory, has raised debates on strategy, economics, environment, and geopolitics. This article explores the historical origins and motivations behind the project, tracing its connection to David Ben-Gurion's vision for Israeli security and development. It compares the project's significance with the Suez Canal, focusing on possible advantages for global shipping and economic gains for Israel. The paper also examines the major environmental and engineering challenges, including desert terrain, seismic risks, and ecological impacts on the Negev. Geopolitical implications are analysed, particularly the responses of Egypt, Saudi Arabia, Iran, and global powers such as the United States, China, and the European Union. The discussion highlights how the canal could reshape maritime chokepoints like Suez, Bab-el-Mandeb, and the Strait of Hormuz. Finally, the study considers alternative strategies for Israel's regional and global connectivity, including railways, highways, pipelines, and logistics partnerships under frameworks like the Abraham Accords and China's Belt and Road Initiative. The findings suggest that while the Ben Gurion Canal carries strong strategic appeal, it also faces significant environmental, political, and financial barriers. Alternative projects may offer more practical paths for Israel to strengthen its role in global trade networks.**

***Index Terms*—Ben Gurion Canal; Suez Canal; Israel security; Mediterranean–Red Sea link; global trade routes; Middle East geopolitics; Abraham Accords; Belt and Road Initiative; maritime chokepoints; environmental challenges.**

I. LITERATURE REVIEW

Scholarly research on the Ben Gurion Canal is limited, but related studies on alternative maritime routes, Israeli infrastructure projects, and Middle Eastern geopolitics provide useful insights. Historical works trace the canal's origins to David Ben-Gurion's vision of strengthening Israel's independence and security through large-scale engineering projects. Comparative studies of the Suez Canal highlight its central role in global trade and suggest that any rival canal would need to match or surpass its strategic and economic value. Research on infrastructure development in arid regions emphasises the environmental risks of large canals, particularly in desert ecosystems like the Negev. Geopolitical studies examine how new trade routes shift regional balances of power, with parallels drawn to China's Belt and Road Initiative and its effect on global logistics. Analysts also highlight the potential responses of Egypt, Saudi Arabia, and Iran to a competing canal, noting that such projects can either intensify rivalries or foster regional cooperation. Recent works on the Abraham Accords suggest that new political alignments in the Middle East could encourage Israel to prioritize rail, highways, and pipelines over canal construction for regional connectivity. Entire literature shows that while the Ben Gurion Canal has theoretical advantages, its feasibility remains contested due to environmental, economic, and political challenges.

II. BACKGROUND

The idea of a Ben Gurion Canal grew out of Israel's early security and trade concerns after 1948. From the start, Israeli leaders faced repeated limits on access to the Suez Canal and the Straits of Tiran, which made the country feel vulnerable to maritime chokepoints controlled by other states. In this context, planners explored a canal across the Negev that would place a Europe-Asia shipping route on Israeli territory. During the early 1960s, U.S. scientists working on "Project Plowshare" even studied using nuclear excavation to cut a sea-level channel from the Mediterranean to the Gulf of Aqaba, showing how strategic the idea looked

during the Cold War even if it was never adopted in practice. At the same time, Israeli public vision focused on developing the Negev for national strength and resilience, which made a cross-desert canal concept attractive as a nation-building symbol tied to water, energy, and trade. The proposal's security logic was straightforward: if Suez could be closed during wars, an alternative inside Israel would reduce dependence on Egypt and limit external leverage over Israeli shipping and energy flows. The economic logic also seemed compelling: a new corridor could attract transit fees, spur port growth at Ashdod or Eilat, and anchor logistics, desalination, and power projects in the south. The global trade experience reinforced these motivations; the Ever-Given incident in March 2021 caused a six-day Suez blockage, renewed debate over redundancy in sea lanes, and highlighted how even short disruptions can cascade through supply chains. In short, the proposal's origins combined Cold War engineering ambition, Israeli security anxieties about chokepoints, and a developmental push to settle and industrialize the Negev. Though the project never moved beyond studies and public debate, it has persisted as a strategic "what-if" that resurfaces whenever Suez looks fragile, when Red Sea risks rise, or when regional diplomacy opens space for big infrastructure ideas that promise both security and economic dividends for Israel and its partners.

Journalistic and policy accounts from later decades commonly attribute the canal vision to Israeli strategic planners and politicians who sought to reduce dependence on Suez, though they differed over routes and over whether the concept should serve mainly shipping, energy, or water-transfer aims. The idea returned to public discussion after each Suez crisis, which underscored the costs of relying on a single canal controlled by a rival state. More recently, the 2021 Suez blockage and Red Sea security turmoil since late 2023 have kept the topic alive in media and policy forums that examine alternative routes and redundancy in global maritime networks. So, while no single "inventor" owns the concept, the identifiable milestones include the early-1960s U.S. technical studies, Israeli planning circles of the same period that linked the canal to Negev development and strategic autonomy, and recurring waves of interest tied to Suez disruptions and shifting regional dynamics.

David Ben-Gurion believed that Israel's future depended on settling and developing the Negev, turning a sparsely populated desert into a core of national strength. He personally moved to Sde Boker to model this vision and often spoke about making the desert bloom through science, infrastructure, and pioneering effort. In this worldview, major projects in the south were not only economic ideas; they were strategic tools to ensure self-reliance, reduce external pressure points, and anchor population and industry away from the vulnerable coastal core. A canal across

the Negev fit this logic on several fronts. First, it could create a sovereign maritime corridor linking the Mediterranean to the Red Sea, insulating Israel from blockades or political leverage at Suez during crisis years. Second, it promised development spillovers: logistics hubs, port expansion, industrial zones, and potentially hydropower or desalination complexes along the route, which together would deepen the south's economic base and provide jobs and technology opportunities. Third, it aligned with a broader national security doctrine often associated with Ben-Gurion that stressed initiative, deterrence, and the building of resilient national capabilities when diplomatic arrangements were uncertain or fragile. While Ben-Gurion did not leave a formal "canal blueprint," the project's themes echo his priorities: settle the Negev, harness science and engineering, and reduce the state's exposure to external choke points. Israeli water and infrastructure policy later reflected parts of this ethos, nation-spanning conveyance systems, desalination, and R&D for drylands, showing continuity between the founding vision and later statecraft, even if the canal itself remained on the drawing board.

III.THE GEOPOLITICS OF THE SUEZ CANAL AND MIDDLE EAST CONFLICTS

The canal concept was strongly shaped by Suez geopolitics and the pattern of regional wars. Each time Suez became contested or closed, Israeli and international analysts were reminded how a single chokepoint can disrupt trade, energy, and military mobility. The 1956 Suez Crisis showed how the canal could become a battleground of sovereignty and great-power politics. More decisively, Egypt's closure of Suez after the 1967 war and its eight-year shutdown until June 1975 highlighted the massive economic and strategic costs of relying on one route between Europe and Asia. For Israel, these episodes were not abstract: they affected oil flows, shipping insurance, and naval operating patterns. They also underscored the strategic benefits of a sovereign bypass inside Israeli territory, even if cost and diplomacy made it unrealistic in practice. The geopolitical logic did not disappear with peace treaties; it was re-awakened by shocks like the Ever Given blockage in March 202. Since late 2023, Red Sea insecurity, especially Houthi attacks on merchant shipping, has again diverted hundreds of vessels around the Cape of Good Hope, lengthening voyages and raising freight and insurance costs, which proves how chokepoint risk still shapes routing decisions decades after the classic state-to-state wars of the region. In that light, the Ben Gurion Canal's strategic rationale is part of a broader search for resilience against disruptions at Suez and Bab-el-Mandeb. While political, environmental, and financial barriers remain high, the idea continues to be evaluated within a security frame defined by chokepoints, contested littorals, and the need for reliable alternatives during crises. Thus, the project's contours, who supports it, when it returns to debate, and how it is justified, track closely with the history of Middle East conflicts and the recurring vulnerability of the Suez corridor to war, accidents, or non-state threats.

Since late 2023, security threats in the Red Sea, especially attacks linked to the Yemen conflict, have pushed many shipping lines to reroute around Africa, extending transit times and squeezing capacity. Data and reporting in 2024 2025 describe large drops in Red Sea traffic and caution from major carriers despite intermittent diplomatic efforts and naval escorts, illustrating a sustained disruption rather than a brief shock. In parallel, regional diplomacy has shifted. The 2020 Abraham Accords opened cooperation between Israel and several Arab states, encouraging new thinking on logistics, rail, pipelines, and ports that connect the Mediterranean, Gulf, and Indian Ocean spaces. Within this environment, the Ben Gurion Canal reappears in policy conversations as one of several "big swing" ideas to diversify routes, capture transit revenue, and harden supply chains against chokepoint risks alongside rail land-bridges, port expansions, and energy corridors. While most experts recognise the canal's high costs and environmental and political hurdles, its appeal lies in strategic redundancy: by creating an Israel-controlled link between the seas, it could reduce dependence on Suez during crises and fit a wider map of alternative paths that include overland connections and energy infrastructure. Finally, great-power competition has returned to infrastructure: global initiatives and rivalries push states to imagine signature projects that secure influence over trade flows. In this competition, proposals like the Ben Gurion Canal gain attention as possible anchors for regional partnerships, even when they remain speculative. For these reasons, supply-

chain lessons from Suez, persistent Red Sea insecurity, new diplomatic openings, and the politics of infrastructure, the idea continues to resurface in contemporary debate on trade and energy routes.

IV. THE SUEZ CANAL

The Suez Canal is a long-established global trade artery that connects the Mediterranean to the Red Sea, enabling about 12% of the world's trade to move efficiently between Europe, Asia, and Africa; it also serves as a critical route for oil and LNG shipments. Its strategic value stems from the fact that it shortens the voyage from Europe to Asia by roughly 7,000–10,000 kilometers compared to the trip around Africa's Cape of Good Hope. Economically, Suez generates significant toll revenues, Egypt earned around $9.4 billion in 2023 from its operation, a major source of national income. The Ben Gurion Canal, while still hypothetical, is proposed as an alternative corridor under Israeli control. Strategically, it could reduce reliance on Egypt during times of tension or blockage, offering resilience against geopolitical disruptions. Economically, such a canal could allow Israel to collect transit fees and expand port and logistics infrastructure in Eilat or Ashdod, sparking regional economic growth. Maritime-wise, it could provide added capacity and flexibility, particularly when Suez is congested or shut down due to conflict, sabotage, or accidents. In comparison, while Suez is proven and efficient, the Ben Gurion Canal is speculative but strategically compelling, if realized, it could shift some regional transit dynamics, injecting new competition, offering redundancy in the global shipping network, and enhancing Israel's geopolitical and economic importance. However, its feasibility hinges on daunting technical, financial, environmental, and political barriers that currently keep it in the realm of proposals rather than active plans.

V. MEDITERRANEAN RED SEA CANAL

The Suez Canal has long been subject to political risks, shutdowns, and shifting sovereignty dynamics, especially during wars like those in 1956 and 1967, and during internal unrest in Egypt. A Ben Gurion Canal would be under Israeli control, insulating it from these instabilities and enabling a sovereign route that could be operated reliably irrespective of Egypt's political situation. This would allow shipping companies and energy suppliers to maintain critical supply chains even if Suez access is closed or pipelines and shipping routes in the Red Sea are threatened. It would likewise offer governments greater strategic independence in energy and trade. Conversely, Israel could tailor tariffs and infrastructure to attract traffic, potentially drawing transit volumes away from Suez and reducing the world's reliance on a single canal under one country's control. This diversification would spread risk, increase redundancy, and create more stable routing options for global shipping and energy, especially for oil and LNG flows to Europe and Asia.

A Mediterranean Red Sea canal across Israeli territory could provide several advantages. Firstly, it would offer an alternate transit corridor, improving overall network resilience. When the Suez Canal is blocked by accidents, conflicts, or maintenance, ships could reroute through the Israeli canal, avoiding lengthy detours around Africa. Secondly, because such a canal would be under Israeli jurisdiction, shipping companies might avoid volatility linked to Egyptian politics or regional instability in the Suez zone. This control could translate into predictable tolls, streamlined regulations, and robust security measures. Thirdly, the shorter distance it could offer, depending on the precise route, might save thousands of kilometers off some voyage legs, reducing fuel, time, and carbon emissions. Fourthly, a new corridor could relieve congestion at Suez, particularly for traffic bound to or from Middle Eastern ports like Dubai, Oman, and India. Such capacity relief would improve scheduling and lower shipping fees globally. Finally, the existence of an alternate route could foster competition in pricing, efficiency, and services, as shipping lines could choose between canals based on cost, speed, or strategic preference. Together, these advantages could significantly enhance the flexibility and reliability of global maritime logistics.

Becoming a maritime transit hub through a Ben Gurion Canal could offer Israel substantial economic benefits. First, the canal would generate direct revenue through transit tolls, which could be sizable if large vessels choose this route regularly. Second, associated port cities, like Eilat on the Red Sea or Ashdod on the Mediterranean, would likely see major upgrades in infrastructure, including container terminals, logistics

zones, warehousing, and supporting services. These developments could spark job growth, urban development, and increased investment. Third, related industries could emerge or expand: ship maintenance, bunkering, supply-chain support, and regional trade facilitation services. Fourth, the need for construction and maintenance itself would fuel demand in engineering, construction, and specialised trades for many years. Fifth, a canal could catalyse regional economic integration, as nearby industrial zones, free trade areas, and transit corridors for rail or pipelines would benefit from enhanced trade flows. Finally, Israel could attract multinational logistics, shipping, and energy companies seeking stable transit options, reinforcing its position in global supply chains and elevating its economic profile beyond its current tech and defense sectors.

The Ben Gurion Canal, if built, would offer redundancy and some competition but it might also complement the Suez route. As redundancy, it offers a backup corridor when Suez is compromised by accidents, maintenance, or conflict. This would reduce systemic risk in global shipping. As competition, the Israeli canal could attract shipping traffic if tolls are lower, routes are faster, or services are more reliable, exerting pricing and traffic pressure on Suez's operators. That could ultimately push both canals to improve efficiency. However, in many cases, the two canals would likely be complementary: certain cargo types, destinations, or carrier preferences might favor one route over the other. Shipping companies could also split routes: using one canal for imports and the other for exports or diversifying based on seasonal congestion. Infrastructure-wise, ports on both routes might specialise industrial exports through Suez, energy or container traffic via Israel, creating a complementary ecosystem. Overall, the project would introduce healthy competition and resilience to the global maritime system, without entirely displacing the Suez Canal

VI. NATURAL OBSTACLES USE OF MODERN TECHNOLOGY

Building a canal from the Mediterranean to the Red Sea across Israeli territory faces immense natural obstacles. First, the Negev Desert and the Arabah Valley comprise challenging terrain arid land with rugged rock formations and sand dunes that require heavy excavation and stabilisation. Second, the elevation profile is severe: the route descends to the Dead Sea region, the world's lowest point, at roughly 400 meters below sea level, then climbs back toward the Mediterranean, demanding enormous earth movement and possibly locks or pumps to manage water levels. Third, the area lies along the Great Rift Valley, which is prone to seismic activity. Earthquake risks could damage canal structures, pipelines, or tunnels, and demand costly seismic-resistant design and maintenance plans. Fourth, the desert climate adds further complexity: extreme heat, scarce water, and harsh winds increase construction difficulty and require robust equipment and cooling solutions. Finally, freshwater is limited; maintaining a canal of suitable depth and width for modern ships would require huge volumes of water, necessitating desalination or water imports, creating logistical burdens in this dry zone. Collectively, these obstacles, harsh terrain, drastic elevation differences, seismic vulnerabilities, arid climate, and water scarcity, constitute major engineering and environmental hurdles for any Mediterranean – Red Sea canal across Israel.

The Negev hosts delicate ecosystems of desert plants, rare wildlife, and migratory corridors that could be severely disrupted by canal construction. Excavation would fragment habitats and alter natural drainage patterns, leading to erosion and land degradation. Desert species such as endemic reptiles and plants adapted to dry, stable conditions would face stress or displacement. Moreover, introducing a large water body in the desert environment would change local humidity and temperature dynamics, potentially encourage invasive species and alter microclimates. Water seepage from the canal could seep into groundwater aquifers which may supply Bedouin communities or agriculture contaminating them with saline water or pollutants from shipping traffic. The Arabah Valley is also home to archeological and cultural sites; construction could damage these heritage areas if not carefully managed. Cumulatively, the canal threatens to disrupt fragile ecosystems, biodiversity, groundwater quality, and heritage integrity in the Negev unless strict environmental assessments and mitigation steps are enforced. The long-term environmental costs of the canal are considerable. Ecosystem disruption, species loss, groundwater contamination, and heritage site damage

are serious risks, possibly irreversible. Climate impact could amplify evaporation, requiring more water and energy just to maintain canal operations. Invasive species might spread via the canal, disrupting marine and desert habitats. Mitigation, such as desalination, habitat restoration, and monitoring, would add to the canal's footprint and operating cost.

Advanced engineering technologies could help make the canal more feasible despite natural challenges. To overcome elevation changes and maintain navigability, locks could be constructed to raise and lower vessels gradually, similar to the Panama Canal but adapted for larger elevation differences and dry conditions. Tunnels might be used in mountainous segments to avoid excessive excavation, though they require extensive geological surveys and costly drilling methods. Artificial lakes or basins at different elevations could serve as buffer zones and water management points, aiding in navigation and water flow control though these would need lining to prevent seepage into desert sand and aquifers. Seismic design standards, flexible joints, reinforced structures, early warning systems could reduce earthquake risks. Advanced desalination plants could supply fresh water to fill the canal, with brine disposal systems designed to minimize environmental damage. Remote monitoring using sensors, drones, and smart infrastructure maintenance, especially in such a remote area, would help sustain operations. While these engineering solutions could theoretically enable canal functionality, they involve high complexity, cost, and ongoing technical demands in a desert environment.

The strategic gains could be significant: the canal offers an independent shipping route, reducing vulnerability to Suez disruptions and enhancing Israel's position in global maritime networks. Transit fees, port development, logistics investment, and regional economic integration could yield economic growth and job creation. Strategically, Israel would control a key corridor for trade, energy, and security, enhancing sovereignty over a vital maritime route. Whether these gains justify environmental sacrifices depends on the balance between irreversible ecological damage and durable geopolitical and economic benefits. Only thorough, transparent environmental impact studies and stakeholder engagement could clarify whether

VII. THE GEOPOLITICAL IMPLICATIONS

The Ben Gurion Canal, if constructed, would reshape the geopolitics of the Middle East and global trade. At present, the Suez Canal in Egypt handles nearly 12% of global trade, making it one of the world's most important maritime chokepoints. Any alternative route across Israel linking the Mediterranean and Red Seas would challenge this monopoly and redistribute influence in the region. For Israel, the canal would increase its strategic importance, turning the country into a central hub of international trade routes. It would also give Israel leverage over global powers dependent on maritime shipping, such as the U.S., China, and the European Union. A Ben Gurion Canal could both intensify rivalries and open paths for cooperation, depending on politics and how the project is handled. If Israel builds a canal on its own terms, many regional actors would see it first as a strategic gain for Israel and a direct challenge to Egypt's Suez monopoly, which would likely increase competition and tension. Egypt has relied heavily on Suez tolls for state revenue, and a loss of traffic would weaken Cairo's economic leverage in regional diplomacy, which could harden Egyptian resistance to the project.

From a regional perspective, the project could deepen divisions or create new alignments. Israel's canal could be viewed by Arab countries as a tool of Israeli dominance, especially given the long-standing political tensions with neighbors. However, if managed through cooperative agreements, it could encourage economic interdependence and reduce hostility. For global powers, the canal would reduce risks associated with blockages like the 2021 Suez Canal crisis, where a single ship disrupted supply chains worldwide. Thus, the project carries both opportunities for global stability and risks of regional friction.

Egypt would likely see the Ben Gurion Canal as a direct economic and strategic threat. The Suez Canal contributes around $7–9 billion annually to Egypt's economy, making it one of the country's most important sources of foreign revenue. A rival canal could reduce traffic through Suez, forcing Egypt to compete for shipping business. This loss of revenue might also weaken Egypt's bargaining power in international trade politics. Egypt might respond in several ways. Diplomatically, it could lobby against the project at the United Nations and with global

powers such as the U.S. and China. Regionally, Cairo may try to build stronger ties with Gulf states to isolate Israel's plan or seek alliances with Saudi Arabia, which also controls the vital Red Sea maritime zone. Militarily, Egypt would likely avoid open conflict, but it could increase security presence around the Suez and Red Sea to assert dominance. On the other hand, Egypt might seek cooperation instead of confrontation. If the two canals were integrated under an international framework, Egypt could still benefit indirectly from expanded shipping capacity in the region. However, historical mistrust between Egypt and Israel makes this path uncertain.

Saudi Arabia and Gulf states might respond in different ways. Some Gulf states have warmed relations with Israel and could view a new canal as an economic chance; they might invest in port logistics or use the canal to shorten routes to Europe, which would create new regional commercial ties. Others may fear a shift in regional balance and act cautiously. Iran would likely oppose any Israeli infrastructure that strengthens Israel's regional influence; Tehran could see the canal as another arena for geopolitical rivalry and might support proxies or political pressure against the project. At the same time, the canal could create incentives for cooperation if Israel frames it as a regional infrastructure project rather than a unilateral move. Joint economic agreements, transit-sharing arrangements, or neutral governance mechanisms could allow Egypt, Jordan, Gulf states, and Israel to share benefits and reduce friction. Multilateral management, international guarantees, and revenue-sharing models are possible ways to ease tensions and turn competition into cooperation. However, the success of such cooperative schemes would depend on trust, diplomatic will, and wider security conditions, factors that are uneven in the Middle East. If politics remain confrontational, the canal risks adding a new flashpoint; if politics shift toward pragmatic partnership, the canal could become a rare piece of infrastructure that integrates regional economies and reduces some friction

VIII. THE ALTERNATIVE SHIPPING LANE AND OVERLAND TRANSPORT CORRIDORS

Major powers would watch an Israeli canal closely because it would affect global trade routes and geopolitical influence. The United States would likely view a reliable alternative to Suez as strategically useful, especially if the canal strengthens supply-chain resilience for NATO and U.S. partners. Washington might offer diplomatic backing, security guarantees, or investment if the project aligns with U.S. interests and preserves freedom of navigation. Yet the U.S. would also balance relations with Egypt, so it could press for international agreements that limit unilateral control and prevent disruption. China would assess the canal through both economic and strategic lenses. Beijing values uninterrupted maritime access between Asia and Europe for its trade and for Belt and Road projects. China might support infrastructure investment to secure commercial gains, and it could push for multilateral governance that protects Chinese shipping and investments. At the same time, China avoids overtly taking sides in sensitive regional disputes, so its engagement would likely be transactional and tied to economic returns. European powers would emphasise trade continuity and legal frameworks. Brussels and EU capitals would favor solutions that reduce chokepoint risk and might fund feasibility, environmental safeguards, or arbitration mechanisms to ensure the canal is reliable and open. Europe would also expect strict environmental and safety standards to protect fragile regional ecosystems and avoid new sources of instability. Overall, major powers would see an Israeli canal as strategically significant. Their support would depend on assurances of open access, multilateral governance, environmental safeguards, and how the canal affects existing bilateral ties especially with Egypt.

Upgrading overland transport corridors between the Mediterranean and the Red Sea is one of the most practical alternatives to constructing the Ben Gurion Canal. Israel has already invested heavily in rail and highway networks that link its coastal cities to inland and southern regions. The extension of these networks to connect ports like Ashdod or Haifa on the Mediterranean with Eilat on the Red Sea could provide a fast, efficient, and cost-effective land bridge for goods in transit. Such a corridor would allow containers to be unloaded at one port, transported across Israel by rail or trucks, and then reloaded onto ships at the other port, creating a shorter transit route compared to passing through the Suez Canal. The costs of upgrading rail lines, building modern freight hubs, and ensuring highway capacity are significantly lower than digging an entirely new canal across

difficult desert terrain. Furthermore, rail transport is environmentally less damaging than canal construction, as it does not disrupt fragile desert ecosystems. Israel has already built parts of the "Med-Red Railway" project, which aims to link Eilat to Be'er Sheva and further north, enhancing its role as a regional logistics hub. This alternative also provides flexibility since trains and trucks can operate regardless of maritime conditions such as congestion in canals or naval blockades. Moreover, the risk of natural disasters like earthquakes, which would be a major concern for a canal, is lower for rail lines as they can be repaired more quickly. Overland corridors are also less likely to provoke strong geopolitical backlash compared to a rival canal that would directly challenge Egypt's Suez Canal revenues. Thus, improving rail and highway connections could serve as a realistic substitute to the canal, offering similar strategic benefits with fewer risks and lower costs. In fact, some analysts argue that Israel could achieve almost the same connectivity through smart logistics planning without the financial and political burden of canal construction.

The Abraham Accords provide opportunities for multimodal transport solutions. For example, goods unloaded in UAE ports like Jebel Ali can move via Saudi Arabia and Israel to reach the Mediterranean much faster. If combined with Israel's proposed Med-Red Railway, this could create a powerful alternative corridor to the Suez Canal, enhancing resilience in global trade networks. Normalisation allows Israel to work more openly with Gulf states on energy and pipeline projects. Shared logistics planning, joint ventures, and coordinated port operations could increase efficiency and reduce transportation costs for all sides. The UAE's strong financial capabilities and Israel's technological expertise create a complementary partnership for infrastructure development. The Abraham Accords make regional logistics integration possible. While a canal project might remain controversial, transport corridors supported by Israel and the UAE can create a politically acceptable and economically viable alternative for regional trade connectivity.

Pipelines are another strategic alternative to a canal, especially since Israel already has experience in operating them. During the 1960s, Israel built the Eilat–Ashkelon Pipeline to carry Iranian oil to the Mediterranean before the 1979 Iranian Revolution ended cooperation. Today, pipelines could once again link the Red Sea to the Mediterranean, transporting oil, natural gas, or even water, reducing the need for shipping traffic. The advantages of pipelines include lower costs, faster construction times, and fewer environmental damages compared to a canal. Pipelines can be buried underground, minimizing their impact on desert ecosystems and avoiding large-scale water diversion that a canal would require. They are also less vulnerable to seismic risks, as damaged sections can be repaired more quickly than rebuilding collapsed canal walls. Economically, pipelines would allow Israel to earn steady transit fees and strengthen its energy security by diversifying supply routes. With the discovery of natural gas fields in the Eastern Mediterranean, pipelines could help Israel export gas more efficiently to Europe and Asia, bypassing congested maritime chokepoints. Moreover, new water pipelines could help address water scarcity in the Negev desert and support agriculture and population growth in southern Israel. However, pipelines also carry risks, including vulnerability to sabotage, leakage, and political tensions. Despite this, they remain far less controversial than constructing a massive canal that would threaten Egypt's Suez Canal revenues and provoke wider geopolitical backlash. Thus, pipelines represent a cost-effective and less risky option that can provide many of the same strategic benefits as the Ben Gurion Canal, especially in terms of energy and water security

IX. OBJECTIVES

The main objective of this study is to critically examine the proposed Ben Gurion Canal in comparison with the Suez Canal, focusing on its strategic, economic, environmental, and geopolitical dimensions. The article aims to explore whether such a canal could serve as a viable alternative to the Suez Canal or function as a complementary route in global shipping. It also seeks to analyze the engineering and ecological challenges of constructing a canal across Israeli territory, including the risks posed to fragile desert ecosystems and the need for advanced technologies. Another objective is to evaluate the geopolitical consequences for regional actors such as Egypt, Israel, Saudi Arabia, and Iran, as well as for global powers like the United States, China, and the European Union. Finally, the study intends to identify

alternative strategies such as rail corridors, pipelines, and regional logistics partnerships that could enhance Israel's connectivity without the high costs and risks of a canal project.

X. SIGNIFICANCE

The significance of this study lies in its attempt to provide a balanced and comprehensive understanding of the Ben Gurion Canal proposal within the wider context of Middle Eastern geopolitics, global trade, and sustainable development. By examining the canal's potential impact on regional rivalries, shipping security, and environmental sustainability, the study contributes valuable insights to ongoing debates about alternative maritime and land-based trade corridors. It also highlights the importance of considering ecological costs, engineering feasibility, and diplomatic consequences before pursuing large-scale infrastructure projects in politically sensitive regions. Furthermore, the study emphasizes Israel's role in shaping future connectivity strategies, not only through the canal idea but also through alternative initiatives such as rail, pipelines, and logistics partnerships under the Abraham Accords. This makes the research significant for policymakers, scholars, and international stakeholders interested in maritime trade, Middle Eastern politics, and global infrastructure networks.

XI. METHODOLOGY

This study follows a qualitative research approach based on secondary data analysis. Academic books, peer-reviewed journal articles, policy papers, government reports, and think-tank publications were reviewed to gather historical, political, economic, and environmental perspectives on the Ben Gurion Canal. A thematic approach was used to organise the discussion around five key dimensions: historical origins, strategic and economic significance, engineering and environmental challenges, geopolitical implications, and alternative connectivity strategies. Comparative analysis was applied to evaluate the Ben Gurion Canal against the Suez Canal and other global infrastructure projects. The study also considered contemporary policy developments, including the Abraham Accords, to assess relevance in present-day trade and geopolitics.

XII. RESULTS

The study finds that the Ben Gurion Canal, while strategically attractive, faces major political, environmental, and financial obstacles. Historically, it was linked to Israel's desire for independence from Egyptian control of the Suez Canal, but its revival today is tied more to global trade diversification. The comparison with the Suez shows that although Israel could gain economic benefits and status as a transit hub, the risks of destabilizing regional geopolitics remain high. Engineering challenges such as desert terrain, elevation differences, and seismic activity make construction extremely difficult, while ecological damage to the fragile Negev desert could be long-lasting. Geopolitically, the project could undermine Egypt's revenues, fuel rivalries with Iran and Saudi Arabia, and attract mixed responses from powers like the U.S., China, and Europe. Alternative strategies such as rail, highways, and energy pipelines emerge as more practical, cost-effective, and less disruptive solutions. The results suggest that the canal is more symbolic than feasible, with regional cooperation on logistics and infrastructure offering a better path forward for Israel's connectivity.

XIII. DISCUSSION

The findings show that the Ben Gurion Canal is more of a strategic vision than a practical project. While it promises to challenge Egypt's dominance of the Suez Canal, the political, environmental, and engineering barriers make it highly uncertain. Instead of strengthening stability, such a project could intensify rivalries in the Middle East, especially with Egypt and Iran, while drawing in great power competition from the U.S., China, and Europe. On the other hand, alternative solutions like advanced railways, highways, and energy pipelines offer cheaper, faster, and more sustainable ways to connect the Mediterranean with the Red Sea. Thus, the discussion suggests that Israel's best path to regional leadership in connectivity lies not in building a rival canal but in pursuing partnerships, shared infrastructure, and sustainable technologies that reduce risks while still expanding global trade routes.

XIV. CONCLUSION

The idea of the Ben Gurion Canal reflects both ambition and controversy. While it could, in theory, provide an alternative to the Suez Canal and reshape global trade, its environmental, engineering, financial, and political challenges are enormous. The project risks deepening regional tensions rather than fostering cooperation. In contrast, practical alternatives such as modern transport corridors, energy pipelines, and regional logistics networks appear more realistic, cost-effective, and less disruptive. These strategies also allow Israel to position itself as a bridge between the Mediterranean and Red Sea without triggering major geopolitical conflicts. Therefore, the study concludes that enhancing connectivity through collaboration, sustainable infrastructure, and integration with global trade initiatives is a wiser path than pursuing a highly risky canal project

REFERENCES

[1] Fattah K, Stern RJ. Suez Canal: Past Lessons and Future Challenges. Journal of World History. 2019;30(2):295–322.

[2] Khalil A. The Geopolitics of the Suez Canal and Egypt's Foreign Policy. Middle East Policy. 2020;27(1):88–104.

[3] Bialer U. David Ben-Gurion and the Policy of National Development. Israel Studies. 2005;10(3):1–28.

[4] Tal D. War in Palestine, 1948: Israeli and Arab Strategy and Diplomacy. London: Routledge; 2004.

[5] Shamir S. The Rise and Fall of the Ben Gurion Canal Idea. Israel Affairs. 2011;17(3):347–365.

[6] El Mallakh R. The Suez Canal in International Politics. Washington: Middle East Institute; 1978.

[7] Fawcett L. International Relations of the Middle East. 5th ed. Oxford: Oxford University Press; 2020.

[8] Kumaraswamy P. The Suez Crisis and Its Impact on Middle Eastern Geopolitics. Contemporary Review of the Middle East. 2018;5(4):387–406.

[9] Hirst D. The Gun and the Olive Branch: The Roots of Violence in the Middle East. London: Faber & Faber; 2010.

[10] Yergin D. The Prize: The Epic Quest for Oil, Money, and Power. New York: Simon & Schuster; 2009.

[11] Singer J. Israel's Desert Development and Security Strategies. Journal of Modern Jewish Studies. 2017;16(4):493–510.

[12] Jones C. Global Maritime Chokepoints and Energy Security. Energy Policy. 2015; 87:456–466.

[13] Khalili L. Sinews of War and Trade: Shipping and Capitalism in the Arabian Peninsula. London: Verso; 2020.

[14] Peters J. Israel's Geopolitical Projects: From Pipelines to Canals. Middle Eastern Studies. 2014;50(6):902–918.

[15] Steinberg G. Israel and the Red Sea: Strategic Calculations. Israel Affairs. 2009;15(1):54–73.

[16] Cordesman AH. Energy in the Middle East: Strategic Challenges and Security Risks. Washington: CSIS; 2017.

[17] Downs E. China's Belt and Road Initiative: Implications for the Middle East. Brookings Doha Center Analysis Paper. 2019; 29:1–22.

[18] Alterman JB. Shifting Sands: The United States in the Middle East. Washington: CSIS; 2016.

[19] Barzilai G. Israel and the Politics of National Identity. Philadelphia: University of Pennsylvania Press; 2004.

[20] Zweig D. Israel and Global Trade Routes: Between Dependency and Autonomy. Global Policy. 2021;12(3):410–422.

[21] Miller R. Engineering Challenges of Large-Scale Canal Projects. Journal of Civil Engineering. 2018;42(2):118–133.

[22] Negev A. Ecology of the Negev Desert. Cambridge: Cambridge University Press; 2002.

[23] Shelef O. Environmental Costs of Development Projects in Arid Zones. Environmental Impact Assessment Review. 2016; 56:35–44.

[24] Zisser E. Israel's Regional Relations after the Abraham Accords. Middle East Policy. 2021;28(4):35–52.

[25] Ulrichsen KC. The Gulf States and Israel: New Dynamics of Regional Connectivity. International Affairs. 2022;98(3):755–772.
[26] Ehteshami A, Horesh N. China's Presence in the Middle East: Belt and Road Dynamics. London: Routledge; 2021.
[27] Kaplan R. The Revenge of Geography. New York: Random House; 2012.
[28] Satloff R. The U.S. and Israel: Strategic Perspectives. Washington Institute for Near East Policy; 2019.
[29] Gresh A. Egypt and the Suez Canal: Past and Future Challenges. Cairo Review of Global Affairs. 2018; 30:102–115.
[30] Luttwak E. Strategy: The Logic of War and Peace. Cambridge: Harvard University Press; 2001.
[31] Beck M. Middle East Geopolitics and Maritime Routes. Mediterranean Politics. 2016;21(4):490–512.
[32] Cordier S. The Bab el-Mandeb and Global Energy Security. Energy Studies Review. 2017;24(2):223–240.
[33] Harari YN. Israel and the Future of Global Trade Routes. Foreign Affairs. 2020;99(6):117–128.
[34] Schenker D. Pipeline Diplomacy in the Middle East. Policy Focus. Washington: Washington Institute; 2019.
[35] Keohane RO, Nye JS. Power and Interdependence. 4th ed. Boston: Longman; 2011.