Available online at https://www.asjp.cerist.dz/en/PresentationRevue/85

Economic Researcher Review

ISSN: 2335-1748, EISSN: 2588-235X VOL 12,N^{O} 01 (Year 2024),PP56-72

Strategic Alliances of Institutions Between Motives for Improving Production Performance and Requirements for Entering International Markets: Case Study of Algerian Cement Industrial Group GICA

Madani AOURAGH[1], Djamel BOUTELDJA[2]

[1] Economy, Finance, and Management Lab (ECOFIMA), University of 20 August 1955 Skikda, (Algeria), m.aouragh@univ-skikda.dz

[2] Start-ups Financing Lab in light of the Knowledge Economy (SFKE),), University of 20 August 1955 Skikda, (Algeria), d.bouteldja@univ-skikda.dz

Received:04 /28 /2024 ;**Accepted :**06/ 05/2024; **Published :**06/30 /2024

Abstract :

This study investigates the role of strategic alliances in enhancing productive performance and facilitating international market adaptation for the Algerian Cement Industrial Group (GICA). Through a detailed examination of GICA's strategic partnerships, this research explores how alliances with international firms have contributed to GICA's operational efficiency, production capacity, and expansion into global markets. Utilizing descriptive-analytical approach, the research relied on company documentation and interviews for data collection, the study offers an in-depth examination of GICA's strategic alliances, their contribution to production enhancement, and international market penetration.

Findings indicate that strategic alliances have significantly boosted GICA's production volumes and enabled its successful pivot towards exporting, in response to domestic market saturation. Practically, the research offers insights for industry practitioners on leveraging strategic alliances for competitiveness and growth. Recommendations for future research and policy implications are also discussed, emphasizing the importance of strategic management and environmental sustainability in alliance formation.

Keywords: Strategic Alliances; Cement Industry; Production Performance; International Market Adaptation; GICA.

Jel Classification Codes :L6; F23; O32.

How to cite this article by the APA method:

Madani AOURAGH, Djamel BOUTELDJA(2024), **Strategic Alliances of Institutions Between Motives for Improving Production Performance and Requirements for Entering International Markets: Case Study of Algerian Cement Industrial Group GICA,** Economic Researcher Review,Volume12(issue01),Algeria: University of skikda, pp56-72

*Corresponding author: **Madani AOURAGH**,Email:m.aouragh@univ-skikda.dz*

1. Introduction

In an era where global competition and rapid technological advancements define the business landscape, strategic alliances have emerged as a pivotal tool for firms seeking to navigate these challenges and seize new opportunities. Strategic alliances, characterized by voluntary collaborations between firms to achieve shared objectives, have become crucial in today's competitive and technologically evolving business environment. The Algerian Cement Industrial Group (GICA) exemplifies the strategic use of these alliances.

This study explores how GICA's strategic alliances have enhanced its production performance and facilitated its adaptation to international markets. Given the capital-intensive and energy-consuming nature of the cement industry, these strategic collaborations are crucial to improve agility and resource allocation, enabling firms to respond effectively to global trade challenges, including rising protectionism and stringent environmental regulations (Bowersox et al., 2020).

Despite the significant role of strategic alliances, focused research on their impact within the cement sector in emerging markets like Algeria remains limited. This industry's critical contribution to infrastructure development, coupled with the necessity for market adaptability amidst a fluctuating global economic landscape, underscores the need for detailed investigation. This study aims to fill this research gap by providing empirical evidence on the impact of strategic alliances in the Algerian cement industry, an area that has been underexplored in the extant literature.

1.1 Research Problem

While developed countries currently seek strategic allies across different nations to position themselves and expand their influence across various fields, this extends to economic institutions, particularly the larger ones. Despite some advantages that these institutions possess, they still require strategic alliances to improve their performance and enhance their competitive positioning in both local and international markets. In this context, the main issue of this research can be formulated as follows:

- To what extent does the international strategic alliance impact the production performance of the Algerian Cement Industrial Group (GICA), and how has this contributed to its entry into international markets?

1.2 Objectives and Importance

This study aims to analyze and understand the impact of the international strategic alliance on the production performance of the Algerian Cement Industrial Group (GICA) and how this has facilitated its access to international markets. The study's main objective includes several specific goals:

- To highlight the role of the international strategic alliance.
- To explore the conditions and nature of the international strategic alliance engaged by the Algerian Cement Industrial Group (GICA).
- To identify the motivations behind the Algerian Cement Industrial Group (GICA)'s strategy of resorting to this alliance, through its various institutions.

_ To determine the extent to which the international strategic alliance has helped achieve self-sufficiency in cement and reduced the need for imports.

_ To examine the role of the international strategic alliance in guiding the Algerian Cement Industrial Group (GICA) towards export activities.

The significance of this study lies in the urgent need to understand how international strategic alliances affect the production performance of the Algerian Cement Industrial Group (GICA) and its entry into international markets. This is crucial given the significant role it plays as one of the national institutions contributing substantially to the national economy.

1.3 Methodology

To address the research problem and cover all aspects of the topic, this study relies on a descriptive and analytical approach. This approach is deemed suitable for establishing facts and understanding the components of the study with precision and detail to identify its various dimensions.

2. Theoretical and Applied Literature on Strategic Alliances

Strategic alliances are pivotal in today's global business environment, serving as essential mechanisms for firms to access resources, enter new markets, share risks, and enhance competitive advantages. This section explores the theoretical foundations and practical applications of strategic alliances, focusing on their definitions and objectives.

2.1 Definition of Strategic Alliances

Strategic alliances are dynamic partnerships where firms voluntarily combine resources, investments, and expertise to achieve mutual objectives. As outlined by Das and Teng (2000), these alliances enable organizations to collaborate on specific goals while maintaining their autonomy in other operational areas. The structure of these partnerships can be diverse, ranging from joint ventures and licensing agreements to research and development collaborations.

2.2 Objectives of Strategic Alliances

Strategic alliances are formed with various aims, key among them being to bolster competitive standing and tap into new markets and technologies. A fundamental objective is to cultivate strategic competitiveness within the intricate landscape of global markets. Contemporary research supports that such alliances furnish companies with avenues to harness new technologies, penetrate different geographical markets, capitalize on collective skills, and mitigate risks linked to innovations.

A. Resource Sharing and Risk Reduction:

Strategic alliances facilitate the sharing of expenses and risks linked to the development of new products and technologies, offering a significant advantage in capital-intensive sectors like pharmaceuticals and aerospace. This collaborative approach allows for the dilution of financial and

operational risks, making ambitious projects more manageable and less daunting (Hitt, Hoskisson, & Ireland, 2020).

B. Access to New Markets:

Alliances often empower companies to utilize the market knowledge and networks of local partners, thus smoothing the process of entering new markets. This strategy is particularly effective for global technology firms seeking to customize their offerings to meet local demands and preferences, thereby enhancing market penetration and acceptance (Hill, Jones, & Schilling, 2020).

C. Innovation through Collaboration:

Collaborative ventures are pivotal in pooling diverse skills and knowledge, thereby boosting the innovative output of the participating firms. This is crucial in industries characterized by swift technological progress, such as information technology and biotechnology, where continual innovation is key to maintaining competitive advantage (Grant & Baden-Fuller, 2004).

2.3 Importance of Strategic Alliances

Strategic alliances are essential in today's dynamic business environment for several compelling reasons:

A. Competitive Advantage: Collaborations allow firms to amalgamate resources and capabilities, thus securing a competitive edge. This is particularly vital in sectors driven by rapid technological advancements (Rajapathirana& Hui, 2018).

B. Speed to Market: Strategic partnerships facilitate the rapid development and deployment of innovations, giving companies a first-mover advantage in their respective industries (Tidd & Bessant, 2018).

C. Cost Reduction: Alliances can significantly cut costs through shared infrastructure, joint purchasing, and optimized resource utilization, which are crucial in industries like aerospace and pharmaceuticals (O'Cass&Weerawardena, 2010).

D. Access to New Markets and Resources: Alliances are often instrumental in overcoming barriers to entry in new markets, making them invaluable for global market expansion (Peng & Meyer, 2016).

E. Learning and Innovation: Partnerships foster a sharing of knowledge and expertise, which often leads to breakthrough innovations, especially in high-tech industries (Lee, Park, & Lee, 2005).

F. Risk Sharing: They also help in distributing the financial and operational risks associated with new ventures, especially under uncertain market conditions.

2.4 Types of Strategic Alliances

Strategic alliances vary in form, each tailored to specific strategic needs:

A. Joint Ventures: These are formal entities created between two or more firms to manage a cooperative venture, often utilized to access new markets or share large project costs (Shenkar& Luo, 2020).

B. Equity Strategic Alliances: In these alliances, one company acquires an equity stake in another, strengthening the partnership without fully merging the companies.

C. Non-equity Strategic Alliances: These are based on contractual agreements rather than equity stakes, offering flexibility and ease of termination.

D. Global Strategic Alliances: These involve firms from various countries collaborating to leverage their strengths across national borders, often addressing international market challenges.

E. Innovation Partnerships: Specifically crafted to spearhead development in new products or technologies, these alliances are prevalent in sectors like biotechnology and information technology (Spencer, 2003).

3. Literature Review

In examining the dynamic landscape of strategic alliances and their impact on firm performance, a plethora of research has underscored the multifaceted nature of this relationship. This literature review synthesizes findings from several seminal studies to provide a comprehensive understanding of the factors that sustain and enhance performance within strategic alliances.

Muthoka, Kilika, and Muathe (2022) highlight the critical role of active collaboration in strategic alliances among Small and Medium Enterprises (SMEs) in the manufacturing sector. Their research, utilizing a model of inter-organizational network structures, revealed that the level of collaboration has a significant partial mediating effect on the relationship between strategic alliances and firm performance. This study underscores the importance of collaboration in enhancing the efficacy of strategic alliances, suggesting that the strength of the relationship between strategic alliance and firm performance is contingent upon the level of collaboration.

Similarly, Ayad and Redjouani (2022) explore strategic alliances within the oil sector, emphasizing the management tool's utility in leveraging production capabilities, technological portfolios, capital importance, and know-how. Their findings resonate with the broader consensus that strategic alliances, especially in competitive environments like the oil market, are critical for sustaining and improving company performance.

Abdalkrim and Guizani (2022) delve into the strategic internal critical factors influencing strategic alliance performance in Saudi Arabia, identifying environmental complexity as a moderating factor. Their study aligns with the notion that strategic alliances can serve as vital mechanisms for navigating the complexities of emerging markets, enhancing strategic performance through improved organization outcomes, productivity, efficiency, and profitability.

Chen, Zheng, Peng, and Shao (2022) explore the role of absorptive capacity as an antecedent to the international strategic alliance performance of multinational enterprises (MNEs). Their research confirms the positive relationship between absorptive capacity, strategic alliance, and international performance, highlighting the importance of knowledge acquisition and integration.

Emami, Welsh, Davari, and Rezazadek (2022) extend the discussion to the telecommunications industry, demonstrating how strategic alliances significantly impact small entrepreneurial firms' performance. Their findings suggest that pre-alliance and post-alliance issues such as partner similarity, alliance experience, and commitment to improving trust and skill are pivotal in boosting performance within strategic alliances

In summary, the consensus in the literature underscores the significance of strategic alliances in sustaining and enhancing firm performance across various industries and markets. Key determinants of successful alliances include collaboration level, strategic internal factors, environmental complexity, and absorptive capacity. Moreover, the strategic management of alliances, including partner selection, knowledge integration, and leveraging complementary skills, is paramount for capitalizing on the benefits of these collaborative relationships.

4. Case Study

This study utilized a descriptive-analytical approach and a case study method. The research relied on company documentation and interviews for data collection to thoroughly explore the strategic alliances formed by the Algerian Cement Industrial Group (GICA). It also assessed their effects on the organization's performance and international market strategies. The case study approach was chosen for its effectiveness in providing detailed insights into complex phenomena within their real-life contexts (Yin, 2009).

Given the intricate nature of strategic alliances and their nuanced impacts on firm performance and market adaptation, a case study design enables an in-depth exploration of GICA's experiences, strategies, and outcomes.

4.1 Overview of the Algerian Cement Industrial Group GICA

The Algerian Cement Industrial Group (GICA) is the abbreviation for "Groupe Industriel des Cimentsd'Algérie." This Group, which is considered the parent company of all national cement institutions, was established in November 2009 to replace the state's share management company in the cement industry (SGP-GIC).

GICA, with a share capital of 25,358,000,000 DZD, was founded to specialize in the production of cement and building materials, as part of Algeria's new industrial strategy. This strategy aims to increase national cement production and establish a monitoring and distribution network to meet domestic demand and eliminate speculation.

The Algerian Cement Industrial Group (GICA) comprises 23 specialized subsidiaries, including:

- 14 cement plants.
- 3 companies for aggregates and ready-mix concrete.
- One distribution company.
- Two industrial maintenance companies.
- A technical assistance center.
- A training and development center.
- A security company.

4.2 Introduction to the Study Institutions

There are five allied institutionswithin the GICA, out of a total of 14 cement manufacturing entities in the group:

- **HadjarSoud Cement Institutions(SCHS):**

Located on National Road 44 between Constantine and Annaba, in the municipality of BekkouchLakhder, Beni Azzouz district, Skikda province, about 50 km from Annaba. Spanning 19 hectares, its activity began in 1973, with two production lines capable of producing around one million tons of cement annually, and a social capital of 1.55 billion DZD.

- **Sour El-Ghozlane Cement Institutions(SCSEG):**

Situated approximately 120 km southeast of Algiers, in the Sour El-Ghozlane district, Bouira province, covering 41 hectares. Strategically located between the Tell Atlas and the high plateaus, it plays a significant economic role in central Algeria and meets the cement needs of several provinces. Established on November 26, 1979, through a contract with the Danish company Flsmidth, it started selling cement on December 5, 1983, with a social capital of 1.9 billion DZD.

- **Beni Saf Cement Institutions(SCIBS):**

Located in western Algeria, 30 km from the capital of Aïn Témouchent province and 4 km from the port of Beni Saf, spanning 42 hectares. It began construction in 1975 by the National Building Materials Corporation and was completed in 1978. Initially part of the regional enterprise for cement production in the west, it has a production capacity of 1.2 million tons of cement annually, with social capital of 1 billion DZD, later increased to 1.8 billion in 1999.

- **Zahana Cement Institutions(SCIZ):**

Positioned in the north of Mascara province near National Road 13 and the railway connecting Sidi Bel Abbès and Oran. With a capital of 1.92 billion DZD and an annual production capacity of 1.2 million tons of cement, its history includes:

- Construction of two production lines with a capacity of 200,000 tons each by the French company Lafarge from 1947 to 1953.
- Expansion in 1977 by adding a new production line with a capacity of one million tons annually by the French company FCB.
- Renovation of one old production line with a capacity of 200,000 tons in 1995 by the Danish company Flsmidth.

- **Metidja Cement Institutions(SCMI)**

The Metidja Cement Enterprise, located in Meftah, Blida province, was established as part of the 1970/1973 development plan. Its headquarters are in Meftah municipality, along National Road 29, connecting Meftah and Khemis El Khechna to the east, and Larbaâ to the west. Situated 27 km from Algiers and 10 km from the nearest railway station at Oued Smar, and 15 km from Algiers International Airport, it has an annual production capacity of one million tons and a social capital of 1.4 billion DZD.

4.3 Relative Contribution of Subsidiary Enterprises and Foreign Companies to the Social Capital

Legally, all enterprises are public economic entities with shares and joint social capital with foreign shareholders. The table below illustrates the relative contributions of the subsidiaries and foreign companies to the social capital:

Table No. 01 Relative Contributions to the Social Capital by Subsidiary Institutionsand Foreign Companies

Institutions	Establishment/Qualification	Location	Social Capital (DZD)	Group's Share Percentage	Partner's Share Percentage	Foreign Partner	Country
SCHS	1973	Hadjar Soud - Skikda	1 billion and 550 million	65%	35%	BUZZI UNICEM	Italy
SCSEG	1979	Sour El-Ghozlane - Bouira	1 billion and 900 million	65%	35%	BUZZI UNICEM	Italy
SCIBS	1975	Beni Saf - Ain Temouchent	1 billion and 800 million	65%	35%	Farfoun Group	Saudi Arabia
SCIZ	1977	Zahana - Mascara	1 billion and 920 million	65%	35%	ASEC	Egypt
SCMI	1973	Meftah - Blida	1 billion and 400 million	65%	35%	LAFARGE	France

Source: Prepared by researchers based on Group data.

The table No. 01 shows that the establishment and qualification of the cement plants of the study institutions date back to the 1970s, which reflects on their production capacity. Given the costly nature of the cement industry, international strategic alliances based on share transfer agreements were formed, reaching 35% of the institutions' capital while the Group retained a 65% majority share. Agreements were also made to delegate management to the foreign partner for a specified period between 4 to 10 years depending on the institution, with the possibility of renewal.

4.4 Motives and Terms of International Strategic Alliance Contracts

The primary motives for forming these alliances, as outlined in the contracts, aimed to improve and increase the institutions performance, including:

- Upgrading the institutions to reach their nominal production capacities for Hadjar Soud (SCHS), Sour El-Ghozlane (SCSEG), Zahana (SCIZ), Meftah (SCMI), and Beni Saf (SCIBS).
- Enhancing overall performance through cost reduction and profitability improvement.
- Maintaining employment levels.
- Human resource development.
- Prioritizing the national market's needs.
- Complying with Algerian laws, especially environmental protection.

The terms of the strategic alliance contracts relate to the management contract date, the number and price of transferred shares, and the contract's validity and duration.

The following table provides detailed information about these conditions.

Table No. 02: Terms of Management and Alliance Contracts

Institutions	Share Transfer Date	Management Contract Date	Number of Transferred Shares	Sale Price in Foreign Currency	Value Equivalent (million DZD)	Total Transferred Value (million DZD)	Contract Effective Date	Management Contract Duration
SCHS, Hadjar Soud	08/01/16	08/01/16	50% and 2712 of undivided shares	58 million EUR	5693.494	542.4	08/02/01	**4 years**
SCSEG, Sour El-Ghozlane	08/01/16	08/01/16	6650 shares	52 million EUR	5104.512	665	08/02/01	**4 years**
SCIBS, Beni Saf	05/07/16	05/07/16	6300 shares	35 million USD	2264.867	630	05/07/18	**10 years**
SCIZ, Zahana	07/12/31	07/12/31	6720 shares	32.6 million EUR	3154.174	672	08/01/02	**10 years**
SCMI, Meftah	08/06/21	08/06/21	4900 shares	43.5 million EUR	4191.068	490	08/07/01	**10 years**

Source: Prepared by researchers based on the 2021 Annual Audit Council Report

Table No. 02 reveals variations in total sale values among institutions, ranging from 5963.49 million DZD for Hadjar Soud to 2264.87 million DZD for Beni Saf, attributed to the differing economic values of each enterprise, which determine the share sale price, limited to 35% of the social capital. The group's retention of a 65% majority allows it management rights, which it has relinquished in favor of foreign allies through timed management delegation contracts of 4 to 10 years, subject to renewal.

This strategy reflects the group's desire to benefit from the allies' management expertise, fully entrusting them with achieving the set objectives, with the implication that failing to meet these objectives obliges the international allies to pay financial penalties for each unproduced ton, whereas achieving production targets results in financial rewards.

5. Results and Discussion:

5.1Analysis of the Strategic Alliance's Role in Enhancing the Production Performance of Algeria's Industrial Cement Group

5.1.1 Production Development Before and After the International Strategic Alliance

Production development is the primary motive behind this alliance, achieved through either improving the institutions ' performance to reach their nominal value or increasing it. The following table illustrates the evolution of the production performance of the studied institutions in the years following the international strategic alliance compared to the period before it:

Table No. 03 Production Development Before and After the International Strategic Alliance

Unit: Thousand Tons

Institutions	Average Production Performance Before Alliance		Average Annual Production After Alliance 2008-2012		Average Annual Production After Alliance 2013-2020	
	Cement	Clinker	Cement	Clinker	Cement	Clinker

SCHS Hadjar Soud	871	688	999.60	792.20	1047.62	842.87
SCSEG Sour El-Ghozlane	1003	803	972.60	830.80	965	772.5
SCIBS Beni Saf	750	600	1157.20	1028	1045.62	951.75
SCIZ Zahana	770	675	751.40	670.20	761.62	651.5
SCMI Meftah	758	620	812.80	656.60	1195.25	874.62
Total	4152	3386	4693.60	3977.80	5015.11	4093.24

Source: Prepared by researchers based on the annual report of the Court of Accounts for 2021.

From table No. 03, it is clear that the total production of strategic alliance institutions from 2008 to 2012 achieved positive growth compared to the years before the alliance, where the total cement production increased from 4.152million tons to 4.693million tons, an increase of 13%, and from 3.693million tons of clinker to 3.977million tons, a growth rate of 17.47%. This growth is due to the considerable increase in production at all allied institutions except for the Zahana institution, where it reached up to 71% for clinker and 54% for cement for the Beni Saf institution, followed by Hadjar Soud with a growth rate of 15.41% for clinker and 14.76% for cement.

This production growth was also recorded during the period from 2013 to 2020, where the average annual total production of the allied institutions reached 4.093 million tons of clinker and 5.015 million tons of cement, representing a 20% increase in both materials compared to the annual production performance before the alliance. The upward trend in individual production performance was maintained at three institutions: Hadjar Soud, Beni Saf, and Meftah.

5.1.2 Annual Production Development of the International Alliance Institutions from 2017-2022

Starting in 2017, the Algerian cement sector experienced significant developments that greatly impacted the national market for this material. The total local production capacity increased from 22 million tons in 2016 to 28 million tons in 2017, a rise of 6 million tons of cement, with this increase continuing in subsequent years. (annexe1)

This was due to new factories coming into operation, particularly those owned by private investors, leading to increased supply of the material and intensified competition. The following table shows the annual production development of the international alliance institutions from 2017 to 2022.

Table No. 04 Annual Production Development of the International Alliance Institutions from 2017-2022

Unit: Thousand Tons

Institutions	**Product**	**Production**					
		2017	**2018**	**2019**	**2020**	**2021**	**2022**
SCHS Hadjar Soud	**Clinker**	849	809	847	908	829	814
	Cement	1104	1010	1082	911	764	506
SCSEG Sour El-	**Clinker**	905	840	777	743	763	812

Ghozlane	**Cement**	1175	1120	806	877	779	816
SCIBS Beni Saf	**Clinker**	990	982	808	711	743	712
	Cement	1123	1020	986	650	572	522
SCIZ Zahana	**Clinker**	762	605	478	641	728	1328
	Cement	818	728	611	633	706	676
SCMI Meftah	**Clinker**	847	909	930	945	1001	948
	Cement	1124	1273	1269	1296	1171	1215
Total	**Clinker**	4353	4145	3840	3948	4064	4614
	Cement	5344	5151	4754	4367	3992	3735
GICA Production	**Clinker**	11232	11501	10852	10789	11237	12793
	Cement	13951	13587	11582	11103	9874	9592
Percentage	**Clinker**	38.75%	36.04%	35.38%	36.59%	36.16%	36.06%
	Cement	38.30%	37.91%	41.04%	39.33%	40.42%	38.93%

Source: Prepared by researchers based on the annual report of the Court of Accounts for 2021 and Group data.

From table No. 04 above, we observe the following:

- ✓ The year 2017 stands out as a pivotal reference year for most companies, during which they achieved considerable growth in production. However, this period of expansion was followed by a gradual decline, largely due to the entry of new competitors into the market. This influx of competitors led to a notable decrease in market share and adversely affected the production performance of the Group. Notably, the Miftah company (SCMI) was an exception to this trend. Positioned strategically near the capital and away from its competitors, SCMI sustained an upward production trajectory over the years, consistently exceeding its nominal production capacity.
- ✓ Despite these challenges, the standard production output at the Zahana company (SCIZ) reached 1.328million tons of clinker in 2022, a milestone made possible by the introduction of a new production line that came online, enhancing the facility's overall production capacity.
- ✓ From 2019 onwards, the Group struggled to reach its nominal production capacity, a setback precipitated by the saturation of the national market. The situation was further exacerbated by the onset of the COVID-19 pandemic in 2020, which led to a significant downturn in sales due to the accompanying economic recession.
- ✓ The production share of the institutions within the strategic alliance fluctuated between 37.91% to 41.04% of the total cement production and between 35.38% to 38.75% of the clinker material produced by the Group. These figures underscore the crucial role these institutions play in the overall production performance of the Group.
- ✓ The decrease in cement production for the Group was accompanied by a development in clinker production in recent years, explaining the new export strategy adopted by the Group, which involves exporting clinker.

5.2Analysis of the Strategic Alliance's Role in Accessing International Markets

Meeting the national market's demand for cement is a fundamental condition of the international strategic alliance contracts. This was achieved with significant contributions from these enterprises, reaching up to 41% of the total production of the Algerian Industrial Cement Group in 2019.

5.2.1 Contribution of International Strategic Alliances to Achieving Self-Sufficiency and Reducing Imports

The cement market has experienced significant fluctuations in the past due to imbalances in supply and demand, leading to increased imports to address the recorded deficit. This situation incurred substantial costs in foreign currency for the public treasury. The following table details the quantities of cement imported during the period from 2013 to 2017.

Table No. 05: Cement Imports 2013-2017

Unit: Thousand tons

Years	2013	2014	2015	2016	2017
Imports	4430	5720	6600	4800	-

Source: Prepared by researchers based on customs statistics.

From Table No. 05, we can deduce the extent of the gap and shortfall in the local production of cement between 2013 and 2016, attributed to the developmental programs launched during that period affecting nearly all sectors (infrastructure, public works, housing programs, etc.), which primarily relied on cement.

This made local demand for cement exceed supply by large quantities, explaining the peak in imports reaching 6.6 million tons. However, these quantities decreased in 2016 to 4.8 million tons, a difference of 1.8 million tons.

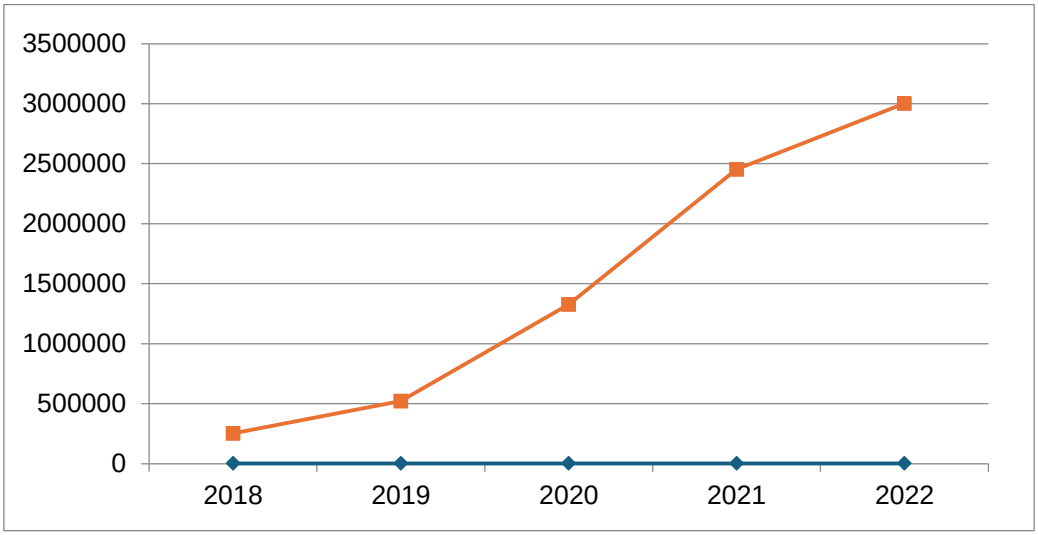
In 2017, due to the development of local production capacity, cement imports were banned as shown in the table above. The strategic alliance enterprises played a significant role in reducing imports by contributing to increased national production and achieving self-sufficiency, leading to a substantial local surplus of the material.

5.2.2 Contribution of International Strategic Alliances to Export Orientation.

Initially, fulfilling the national market's demand for cement was a primary condition for international strategic alliances. However, after achieving self-sufficiency and with the Industrial Cement Group contributing significantly to this, which was greatly aided by the international alliance enterprises, the situation changed, especially after the saturation of the local market and the generation of a significant surplus.

This led the Group to turn to international markets to sell its excess production, capitalizing on Algeria's new policy aimed at encouraging the diversification of exports beyond the hydrocarbon sector. This change was also driven by various international crises that increased global demand for cement. The following figure illustrates the development of exports by the Algerian Industrial Cement Group.

Figure No. 01 Development of Exports for the Algerian Industrial Cement Group



Source: Prepared by researchers based on data from appendix

Figure No. 01 illustrates the rapid and significant growth in the export activities of Algeria's Industrial Cement Group. Starting with the first export operation in 2018, where 250 thousand tons of clinker were exported, the quantity increased to 519 thousand tons in 2019, marking a 107.6% growth. In 2020, exports doubled, reaching 1.325 million tons, a 155.29% increase. In 2021, the Group exported approximately 2.45 million tons, and in 2022, it achieved a record export volume of 3 million tons.

The Industrial Cement Group of Algeria focuses its export operations on clinker rather than finished cement due to the high international demand for clinker. As an organizational strategy, the Group has delegated the export task to its subsidiary, SODISMAC, a building materials distribution company. SODISMAC aggregates the export-targeted quantities from the Group's production plants and handles the remaining procedures. The strategic orientation of the international alliance institutions aligns with the Group's direction, contributing to the export operations as detailed in the following table.

Table No. 06 Export Share of Strategic Alliance Institutions

Unit: Thousand Tons

Institutions	**2020**	**2021**	**2022**
SCHS Hadjar Soud	41	109	92
SCSEG Sour El-Ghozlane	-	92	153
SCIBS Beni Saf	5	20	42
SCIZ Zahana	9	58	30
SCMI Meftah	-	-	38
Total	55	279	355

Group Exports	1325	2450	3000
Export Share	4.15%	11.38%	11.83%

Source: Prepared by researchers based on Group data.

Based on Table No. 06 above, we notice the evolution of the strategic alliance institutions' contribution to the export quantities of Algeria's Industrial Cement Group. Starting with modest amounts that did not exceed 55 thousand tons in 2020, they reached 355 thousand tons in 2022, marking a 545% increase. The most significant contribution over these three years came from the Sour El-Ghozlane institution with 245 thousand tons, followed by Hadjar Soud with 242 thousand tons.

The smallest contribution was from the Meftah cement institution with 38 thousand tons in 2022, despite often exceeding its estimated production and its proximity to the port. This explains the institution's orientation towards the local market, capitalizing on the previously mentioned opportunity of its strategic location near the capital and distance from competitors.

6. Conclusion

This study has meticulously analyzed the role of strategic alliances in bolstering the production capabilities and facilitating international market entry for the Algerian Cement Industrial Group (GICA). Our results indicate a significant positive impact of these alliances on GICA's operational performance, particularly in terms of increased production of clinker and cement. The strategic alliances have not only expanded GICA's production capacity but also provided a crucial pivot towards exports, addressing the challenge of domestic market saturation effectively.

These findings highlight the strategic agility of GICA's management in leveraging alliances to access new markets, embrace innovative technologies, and improve operational efficiencies. This approach has proven essential in enhancing GICA's resilience, especially in navigating the disruptions caused by external shocks such as the COVID-19 pandemic.

From an academic perspective, this investigation contributes to the strategic alliance literature by offering empirical evidence of the advantages of such partnerships within the cement industry—a sector that typically receives less focus in strategic alliance research. The study corroborates theoretical assertions regarding the utility of strategic alliances in enhancing organizational performance and adaptability, particularly in emerging market contexts.

For industry practitioners, this research emphasizes the critical importance of strategic alliances as effective mechanisms for growth, resilience, and international market penetration. The experience of GICA illustrates that well-selected and meticulously managed alliances can be transformative, granting firms a competitive advantage by facilitating access to essential resources and new markets.

7. Recommendations

Based on the insights derived from this study, specific recommendations are proposed to optimize the benefits of strategic alliances for GICA, policymakers, and the academic community:

7.1 For GICA and Similar Entities:

- **Strategic Management of Alliances:** Continuously evaluate and strategically manage existing alliances while seeking new partnerships that are in line with GICA's long-term strategic objectives, particularly those that enhance technology access and market expansion.
- **Knowledge and Innovation Focus:** Place a higher emphasis on the transfer of knowledge and expertise within alliances to drive innovation and operational improvements.
- **Sustainability and Compliance:** Prioritize forming alliances with partners committed to sustainable practices and adherence to international environmental standards, reflecting the global shift towards sustainability.

7.2 For Policymakers:

- **Supportive Regulatory Frameworks:** Craft policies and regulations that facilitate the creation and successful operation of strategic alliances, including incentives for foreign direct investment and international cooperation.
- **Enabling Industrial Growth:** Implement policies that promote industry growth, such as favorable trade terms, export facilitation, and sustainability measures, to bolster the competitive edge of domestic industries on a global scale.

7.3 For Future Research:

- **Sustainability of Alliances:** Further investigate the long-term viability and evolution of strategic alliances in the cement industry and other sectors, taking into account the rapidly changing global economic and environmental conditions.
- **Impact of Cultural and Regulatory Dynamics:** Explore how cultural, regulatory, and economic variables influence the success and efficiency of strategic alliances across different industries and geographical contexts.

References:

Abdalkrim, G., &Guizani, M. (2022). Analyzing external environmental, strategic alliance, and strategic alliance of Kingdom of Saudi Arabia firms–an empirical research. *Arab Gulf Journal of Scientific Research, 40*(4), 347-363.

Ayad, K., &Redjouani, Y. (2022). Les alliances stratégiques au sein de l'Amont SONATRACH. Maaref Journal, (17), 22, 461-481.

Chen, Z., & Peng, M. Y. P. (2022). How do MNEs shape their international strategic alliances to facilitate higher alliance performance? Absorptive capacity as an antecedent. *Frontiers in Psychology, 13*, 955117.

Das, T. K., & Teng, B.-S. (2000). A resource-based theory of strategic alliances. *Journal of Management, 26*(1), 31-61.

Emami, A., Welsh, D. H. B., Davari, A., et al. (2022). Examining the relationship between strategic alliances and the performance of small entrepreneurial firms in telecommunications. International Entrepreneurship and Management Journal, 18,637-662.

Grant, R. M., & Baden-Fuller, C. (2004). A knowledge accessing theory of strategic alliances. *Journal of Management Studies*, 56(1), 62-84

Hill, C. W., Jones, G. R., & Schilling, M. A. (2020). Strategic Management: Theory & Cases. Cengage Learning.

Hitt, M. A., Hoskisson, R. E., & Ireland, R. D. (2020). Strategic management: Competitiveness and globalization. Cengage Learning.

Lee, S. M., Park, S. H., & Lee, S. (2005). Employee knowledge sharing capabilities in public & private organizations: Does organizational context matter? *Public Administration Review*, 74(1), 85-94.

Muthoka, R., Kilika, J., &Muathe, S. (2022). What sustains performance in a strategic alliance? The role of level of collaboration. *Journal of Business and Management Sciences*, 10(3), 113-123.

O'Cass, A., &Weerawardena, J. (2010). The effects of perceived industry competitive intensity and marketing-related capabilities: Drivers of superior brand performance. *Industrial Marketing Management*, 39(4), 571-581.

Peng, M. W., & Meyer, K. E. (2016). International business. Cengage Learning.

Rajapathirana, R. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44-55.

Shenkar, O., & Luo, Y. (2020). International business. Wiley.

Spencer, J. W. (2003). Global gatekeeping, representation, and network structure: a longitudinal analysis of regional and global knowledge-diffusion networks. *Journal of international business studies*, 34, 428-442.

Tidd, J., & Bessant, J. (2018). Managing innovation: Integrating technological, market, and organizational change. Wiley.

Yin, R. K. (2009). Case study research: Design and methods (Vol. 5). sage.

Appendices:

Appendix No. 01 Development of Domestic Production Capacity for Cement

Unit: Thousand Tons

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Algerian Cement Industrial Group	11,500	11,500	11,500	11,500	13,500	13,500	15,500	19,500	19,500	19,500
Lafarge	8,600	8,600	8,600	8,600	11,300	11,300	11,300	11,300	11,300	11,300
Biskria Cement	-	-	-	2,000	2,000	5,000	5,000	5,000	5,000	5,000
Hamel Cement Group	-	-	-	-	1,500	1,500	1,500	1,500	1,500	1,500
Amouda Cement Group	-	-	-	-	-	2,500	2,500	2,500	2,500	2,500
Total	20,100	20,100	20,100	22,100	28,300	33,800	35,800	39,800	39,800	39,800

Source: Prepared by researchers based on data and websites of cement institutions.

Appendix No. 02 Development of Exports by the Algerian Cement Industrial Group

Unit: Thousand Tons

Years	2018	2019	2020	2021	2022
Exports (Tons)	250	519	1,325	2,450	3,000
Development %	-	107.60	155.29	84.90	22.44

Source: Prepared by researchers based on data from the Group and interviews.