

Public-Private Partnerships in the MENA Region: Realities, Determinants, and Prospects for Infrastructure Development

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Abstract:

Public-Private Partnerships (PPPs) are effective tools for achieving development. Such partnerships act as an approach through which the public and private sectors join efforts to achieve development goals. The reality of PPPs in the MENA region will be studied in this paper. This study finds that it is imperative for governments in the MENA region to develop a complete PPP policy with political support in addition to providing the right legal, institutional and operational environment conducive to private investment in infrastructure projects.

Keywords: infrastructures, investment policy, public–private partnership, survival analysis

JEL codes : F21, H54, H81

Introduction

For the purpose of development, including the generation of employment opportunities, market access, health care, educational facilities, environmental and climate policy objectives, and economic growth (Liddo, Rubino, & Somma, 2019), the presence of infrastructure becomes indispensable.

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Therefore, three out of the seventeen Sustainable Development Goals that have been set target infrastructure development, making it an important part of the 2030 Agenda for Sustainable Development (Lin & WangCambridge, 2018). Infrastructure finance has become more varied and extensive during the last century owing to population pressure, sustainable economic growth, and rapid advancements in science and technology. Hence, it has become important to increase the levels of investment in infrastructure development (Mapule, Alhassan, & Zeka, 2024). The concept of PPPs is now a crucial part of development policy. As such, there exist instances when a lot of countries, especially the developing ones, face situations when public finances are strained due to huge fiscal deficits and a large debt to GDP ratio (Mofokeng, Alhassan, & Zeka, 2023). This has made it necessary to focus on PPPs as a way to fund the infrastructure projects. PPPs are seen as one of the major trends in the public service industry across the globe, including sectors like transportation, energy, health, education, communication and more. They are linked to efficient public services, better risk management and employment levels. This, however, improves the welfare of the people economically and socially. According to data obtained from the World Bank Public Private Partnership (PPP) database, there have been over 9,381 projects funded through the use of this technique since its inception in the 1950s, totaling more than \$2.32 trillion. For the year 2024, PPP investments were recorded at \$100.7 billion from 314 projects (world bank , 2024). PPPs contribute about 10–15 percent of infrastructure investments in public infrastructure in OECD member states, while in developing countries, they represent about 25 percent of infrastructure investments (Burger & Hawkesworth, 2011). As far as contribution to investments in physical and social infrastructure is concerned, PPPs contribute about 10 percent of annual investments made by governments in developing countries (Engel, Fischer, & Galetovic, 2020).

The average level of infrastructure investment in the MENA region amounts to around 3% of GDP, largely funded through the use of funds from the public sector along with debt funding from various multilateral and bilateral institutions. However, due to budget constraints and high levels of debt as a result of borrowing, the ability of the government to finance these projects has been further compromised. In this regard, there is an urgent need for the MENA region to increase infrastructure investment to meet its varied economic requirements amounting to over 7% of GDP or in excess of €106 billion annually (OECD, 2021).

The article is divided into four parts. After the introductory part, the second part reviews the literature on institutional factors behind the development of Public-Private Partnerships (PPPs). The third part examines the present situation of PPPs in the region. The last part discusses the factors necessary for the successful implementation of PPP projects.

1. Previous Literature

Public-Private Partnership (PPP) is a concept without a standard definition. Different countries have different PPP models depending on the kind of activity being done. One definition states that PPPs are any “contractual agreement between a government agency or public authority and a private sector organization, to deliver a public good or service where the private partner carries management responsibility and financial risk, and payment is dependent on performance.” (Arezki & Belhaj, 2019) Another way of defining PPPs is construction works where a private firm or investor takes part of the running costs and risks in the business (Iossa & Martimort, 2015).

There is an inadequate amount of applied research on how public-private partnerships (PPPs) influence economic growth, and the bulk of the research conducted relates to the case studies of specific projects. From the results obtained, it is clear that while PPPs involve increased costs, the economic value achieved by them is similar to that of other procurement methods. In light of the lack

of information on the quality of the facilities created through PPPs, there is a need for a comprehensive evaluation model to guide policy makers in their choice of procurement methods (PETERSEN, 2019).

Kumar, Kannan, Keshavammaiah, and Parayitam (2025) carried out a synthesis of 69 research papers that were written from 2009 to 2024 with the objective of analyzing the link between public-private partnerships (PPPs) and their impact on infrastructure development, economic growth, and institutionalization (Kumar, Kannan, Keshavammaiah, & Parayitam, 2025). Their findings suggest that governance structures and collaboration strategies are very important in making PPPs more effective. In a somewhat related study, Matteis, Borgonovi, Notaristefano, and Striani (2025), as well as Mofokeng, Alhassan, and Zeka (2023), found that there are positive effects on economic growth through PPP investments, especially in the energy sector which was seen as the key contributor to economic growth (Matteis, Borgonovi, Notaristefano, & Striani, 2025).

In their literature review, Fabre and Straub (2023) assessed the impacts of PPPs on several key sectors, including infrastructure (energy, transportation, water, and telecommunication) as well as education and healthcare. According to the literature review, PPPs have positive impacts on labor productivity in the infrastructure sector, even though evidence supporting this impact is scarce. In the education sector, the involvement of PPPs positively influences enrollment rates, owing to an increase in demand. However, when it comes to healthcare, there is little evidence about the impacts of PPPs. (Fabre & Straub, 2023)

In contrast, Cheng et al. (2021) adopted four major dimensions, namely driving forces, subject matters, process, and goal to study PPPs in China. The results show that the sustainability-based framework takes into consideration the evolution and directions of these PPPs, which not only satisfies their developmental requirements in China but is also an important yardstick for other developing countries. (Cheng, Wang, Xiong, Zhu, & Cheng, 2021)

On the other hand, according to Leigland (2018), PPPs have been evaluated and found to contain inaccuracies. In this regard, it has been observed that, in developing nations, especially the poorest, the cost estimates involved in the PPP projects used to be higher compared to the actual, while the estimated return was lesser than the projected one. This made the application of such PPP projects impractical in these scenarios. There are various reasons, among which, the complexities associated with the legal and regulatory process in the beginning is a noteworthy factor. Therefore, as per the recommendations of the World Bank, a holistic approach is important in order to facilitate PPP projects (Leigland, 2018). It was observed by Zangouinezhad and Azar (2014) that the PPPs are able to develop reciprocal relationships that can lead to the growth of the economy or GDP based on the fulfillment of three major factors: the number of PPPs being implemented, the total value of PPPs, and the relevance of the type of contracts used (Zangouinezhad & Azar, 2014). The relationship that exists between infrastructure and economic development has been extensively researched by the World Bank from 1994 and is evidenced to be a strong correlation between both elements. There is also a strong link existing between economic development and infrastructure. Poor and ineffective infrastructure works against economic development, while effective infrastructure leads to the creation of employment opportunities, skill development, promotion of trade and investments, increased productivity, growth in business, and also the growth of financial markets. Current projects face many difficulties resulting from the lack of vital services such as electricity, water supply, communication networks, transport networks, and related utilities. (Calderón & Servén, 2004)

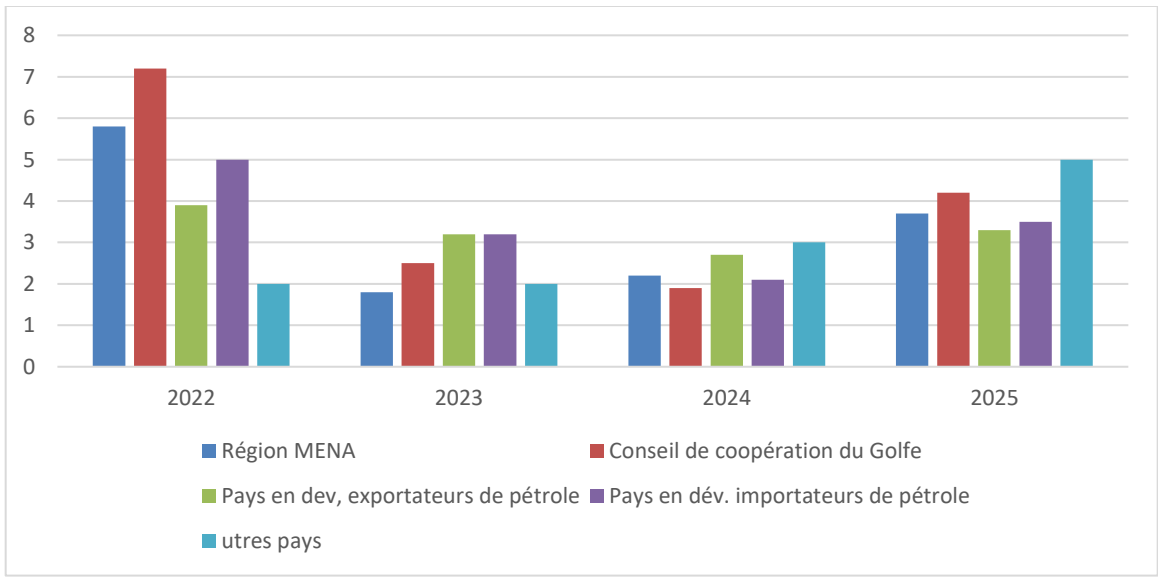
2. Infrastructure Sector in the Middle East and North Africa: Key Challenges

In 2022, the Middle East and North Africa region recorded considerable economic growth of 5.8%, boosted by rising oil prices resulting from the ramifications of the Russia-Ukraine conflict. While this

growth improved the economic performance of oil exporters, it also led to slowing down the growth rate of developing oil importers such as Djibouti, Egypt, Jordan, Lebanon, Morocco, and Palestine. This trend did not continue long because of the contraction in real GDP in the region in 2023 owing to falling oil prices and slowing down the global economy. Consequently, the growth rate in GCC countries slumped from 7.2% in 2022 to 2.5% in 2023. In the same way, growth in developing oil exporters declined from 3.9% to 3.2% in 2023 compared to 2022. The average growth rate in developing oil importers (except Egypt) also witnessed a decline from 5% to 3.2% (Figure 1). Geopolitical risks (such as the Gaza War) and uncertainty had a negative impact on the economies of Middle Eastern and North African countries. (Boulesnam, 2025)

In order to meet the diverse economic needs of the region, the MENA region must make huge infrastructural investments. The estimated cost of meeting such infrastructure investment requirement is above 7% of GDP, which translates to above \$106 billion every year. The need for investment is not only about building new infrastructure but also maintaining and sustaining the already built infrastructure. The historical expenditure in terms of infrastructure in the MENA region was around 3% of GDP and was mostly funded through government funds with the inclusion of huge multilateral and bilateral debts (World Bank, 2020).

Figure01 : Real GDP Growth in MENA (%)



Source: (Gatti, et al., 2024)

Government financial constraints resulting from previous borrowings have further constrained their ability to make such investments. Therefore, it has become important for the increase of PPP initiatives for meeting various regional challenges, which include the static private sector, inefficiency in public sector, need for creating millions of jobs and improved infrastructure and services in areas of water, energy, transportations, and solid waste management. The lack of funding for infrastructure is not the only reason for the use of PPP models by the MENA governments; PPP projects are often better in implementation compared to conventional projects. (Mustafa A. , 2015)

Table 01 : demand growth in the Middle East and North Africa and the world, 2000-2023

Region	GDP	ELECTRICITY	Railways	Telecoms
Asia Pacific	6.5	290.4	72.9	2707
Middle East & North Africa	3.5	177.4	71.9	6900
Latin America & Caribbean	2.25	76.9	8.6-	3011.1
OECD	1.5-2.2	8.1	5.2-	633

Source: Compiled by the author based on IMF (2024) and World Bank (2024) data.

Table 2: Impact of Infrastructure Shortages on Firms

Region	Electricity connection delay	Water connection delay	Days to obtain internet connection	index of transportation as a constraint
East Asia Pacific	18.1	16	4.4	20.8
Middle East & North Africa	59.8	13.7	3.4	28.6
Latin America & Caribbean	35.7	17.3	5.8	34
Europe & Central Asia	73.3	28.6	13	22.7
North America	35.1	10.5	6	22.6

Source: The data are derived from World Bank Investment Climate Assessments, and reported at www.enterprisesurveys.org

Table 2 demonstrates that there is underperformance among the countries in the MENA region concerning a number of infrastructure constraints, such as connection delays and electricity outages. According to the results, unlike other regional organizations, the MENA region faces a problem of the quality of infrastructure and not access to infrastructure. (Noumba Um, Straub, & Vellutini, 2009)

Table 03 – Infrastructure Access Indicators in MENA countries.

Country	Individuals using the Internet (% of population)	Quality of roads	Improved water source (% population with access)	People using safely managed sanitation services (% of population)	Access to electricity (% of population)
Algeria	77	4.0	69	62	100
Bahrain	100	5.2	98.8	93	100
Djibouti	65	-	-	40	69.2

Egypt	75	5.1	78.9	57	100
Iran	85	3.9	94.4	-	100
Iraq	81	-	59.8	51	100
Israel	88	4.9	99.5	97	100
Jordan	96	4.2	89	80	100
Kuwait	100	3.7	100	100	100.0
Lebanon	81	2.6	47.7	26	100
Libya	82	-	-	22	77.4
Morocco	91	4.7	80	8	100
Oman	95	+5.7	91.1	-	100
Qatar	98	5.5	95.3	100	100
K S A	100	5.2	-	84	100
Syria	34	-	-	-	89.3
Tunisia	77	3.6	65	80	100
U A E	100	6	98.6	98	100
Gaza	87	-	80.6	74	100
Yemen	17	2.1	-	43	86.3

Source: WDI, ourworldindata.org

Indeed, the MENA region ranks as one of the least integrated regions in the world because of considerable differences in political and economic development within the region. The fragility of the region is characterized by its poor performance according to the Logistics Performance Index and the fragility of trade in the region. Exports face significant barriers in terms of costs and processing time, where the average cost of exports reaches 442\$ and the processing time is about 53 hours. Such parameters indicate the existence of a big difference compared to the developed economies, in which the cost of export operations is three times more expensive and the processing time is four times longer. In addition, the decline in the quality of land and maritime transport infrastructure and poor quality of digital infrastructure hinders access to international markets and leads to frequent disruptions of supply chains. The financial cost of this problem is estimated at 5.5% of GDP annually, while intra-regional trade represents not more than 5% of the total trade, which is much less than the trade between European ports (more than 70%). (Lauria & fellow, 2024)

3. The Importance of Public-Private Partnership for the Middle East and North Africa

There are many difficulties related to infrastructure development in the Middle East and North African (MENA) region, including lack of investment as the most important one. Such lack of investment leads to a large funding gap, as there is an evident gap between financial requirements for infrastructure projects on one hand and available funds on another, especially for those countries that do not produce oil. Investment in infrastructure development and enhancement became crucial due to various reasons, such as population growth, urbanization, technological changes, economic diversification, sustainable development, and the need to use alternative energy sources. According to the current estimations, the

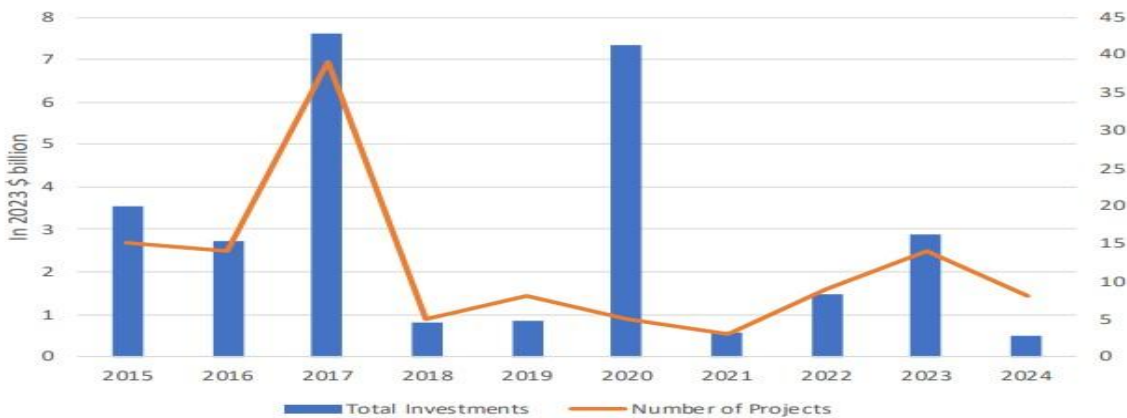
infrastructure funding gap in the MENA region over the period 2016-2040 will be equal to US\$993.9 billion, with roads sector being over 50% of the total amount. In this regard, taking into consideration that investment made by the government sector is predominant in infrastructure development, the involvement of the private sector became inevitable (Naiya & Sillah, 2025) , The concept of PPPs is not something new to the MENA region. The first PPP was created through a concession contract made in 1854 concerning the construction and maintenance of the Suez Canal in Egypt. (Mustafa A. , 2016)

Under these conditions, the data available show that the number of public-private partnership (PPP) projects launched within the Middle East and North Africa region was equal to 257 during the period of 1990-2024, with total investments amounting to US\$72.641 billion. Energy-related projects constituted the highest percentage among PPPs with a total number of 127 projects valued at US\$37.2 billion. Many countries in the region launched programs in order to ensure diversification of energy resources. (Hejazi M, et al., 2023)

The MENA region generates around 7% of the world's electricity generation but shows one of the highest levels of electricity use per capita in the world, particularly in the Gulf countries. From 2000 to 2024, the electricity demand in the region grew three times, making the MENA region the third-largest contributor to world electricity demand growth behind only China and India. Future projections show that there will be more growth in the future, where the electricity demand is expected to grow by 50% by 2035. (World Bank, 2025)

There was a significant downturn in the public-private partnership (PPP) initiatives in the MENA region, as seen in the total amount of investment valued at US\$0.5 billion and eight projects (Figure 02). The drop is equivalent to an 83% reduction compared to the amount of US\$2.9 billion from 2023 and 81% from the five-year average of US\$2.6 billion in 2019-2023. This can be attributed to various reasons such as regional instability and other limitations.

Figure 02: Infrastructure Investment Commitments with Private Participation – MENA (2015-2024)



Source : PPI Visualization Dashboard - The World Bank & PPIAF

Table 04 : Regional PPI(2024)

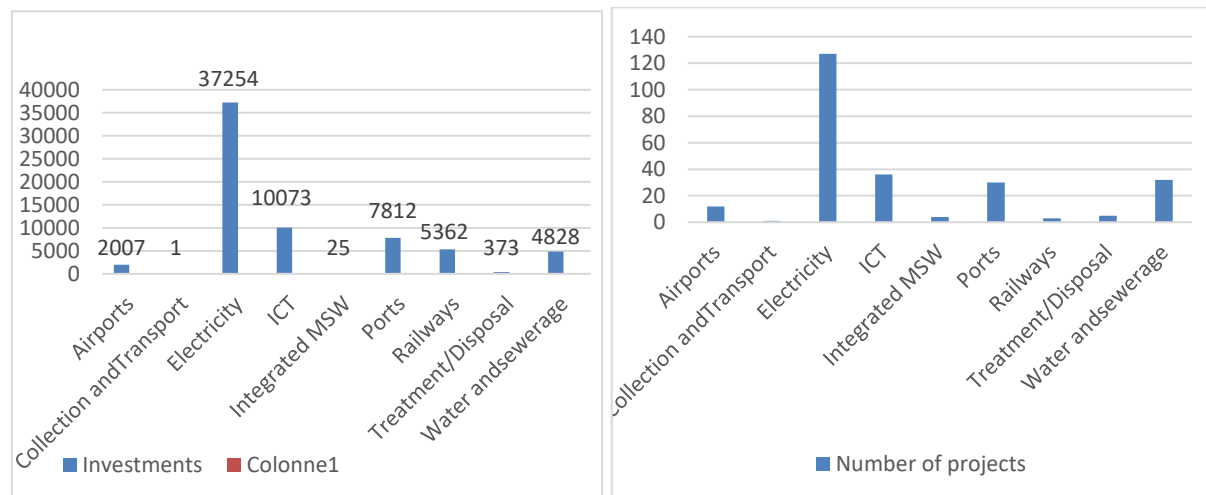
Region	PPI (\$, millions)	Number of Projects	PPI/Regional GDP	PPI/Regional GDP Percentage Change from 2023
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East Asia and Pacific	56959	99	0.27%	0.03%
Europe and Central Asia	7748	38	0.77%	0.36%
Latin America and the Caribbean	21865	95	0.36%	0.10%
Middle East and North Africa	491	8	0.02%	-0.09%
South Asia	5724	28	0.13%	-0.08%
Sub-Saharan Africa	7918	47	0.39%	0.22%

Source : (world bank , 2024)

Many of these countries have already launched their partnership programs, with quite some of them proving to be successful. At the moment, there are other countries that include Egypt, Iran, Iraq, and Lebanon that are working hard in attracting investments in their infrastructure. (Lipson, Ali, & Al-Kazzaz, 2014)

Figure 03 : Private Participation in Infrastructure (PPI) (1990-2024)



Source : PPI Visualization Dashboard - The World Bank & PPIAF.

As seen from Table 5, in the year 2024, public-private partnership projects were conducted in only four countries; these are Morocco, Egypt, Tunisia, and Jordan. In Morocco, the total investment reached US\$27.5 billion while in Egypt the total investment was US\$19.2 billion. The focus of such activities on these two countries implies a clear strategy to attract private investment to assist in public investments in infrastructure development.

In Morocco, PPPs have been strategically adopted to develop infrastructure in the country. According to Law No. 86-12, private organizations may design, finance, build, and operate large-scale infrastructure projects in terms of certain contracts (Doua, Zeroual, Khariss, & Aasri, 2025). In this regard, Egypt developed its framework of partnerships through passing of Law No. 67 of 2010 and

setting up a mechanism through which the partnership policies are planned and implemented. The mechanism comprises of the Supreme Committee for Partnership Affairs chaired by the Prime Minister, and the Central Unit for Partnership with the Private Sector.

Queen Alia International Airport has been among the most successful examples of a public-private partnership initiative in the airport industry not only in Jordan but also in the wider Middle Eastern region, being the biggest private investment in Jordan. In the period from 2007 to 2019, the government earned \$1.2 billion in concession revenues and \$820 million in special ticket levies. There has been an increase in the number of employees by 40 percent due to the change in management and further training. (Clegg, Ke, Devkar, Mangioni, & Sankaran, 2024)

Table 05: Private Infrastructure Commitments and Projects – MENA by Country (2024)

Country	PPI investments in 2024 (\$, millions)	Number of Projects
Morocco	188	1
Egypt, Arab Rep	177	3
Tunisia	104	3
Jordan	22	1
Total	491	8

Source : (world bank , 2024)

There is a relatively small set of PPP projects within the MENA region. This limitation is due to the fact that the conditions for doing business in many developing countries are not favorable; there are high levels of risks which discourage investors. Moreover, there is political and security instability, which makes the situation even worse, along with a lack of technical skills necessary for implementing complex PPP agreements (Noumba Um, Straub, & Vellutini, 2009) . There are various challenges associated with systemic governance, and lack of transparency may contribute not only to corruption but also to significant inefficiencies. In case the private sector considers the system to be not transparent and fair enough, its involvement in infrastructure initiatives will decrease. (Arezki & Belhaj, 2019)

Despite being the region with the fewest number of PPPs, MENA was found to have the largest percentage of projects with decentralized finance institutions backing them, as these institutions provided support to seven of the eight projects. (world bank , 2024)

4. Conditions for the Development of Public Private Partnerships Program

There is no doubt that public private partnerships, however diverse they may be, require sophisticated legal and financial structures that incur high costs. In addition, there is a number of problems involved in implementing PPP initiatives. (Mustafa A. , 2016)According to Gupta & Sharma (2024), macroeconomic stability, regulatory quality, and governance form critical and significant determinants in infrastructure partnership arrangements, with the investment environment having a very significant positive impact on the development of Public Private Partnerships (PPPs) (Gupta & Sharma, 2024). Furthermore, both the government and its collaborators need to improve the cost–benefit analysis of PPP projects. In developing nations, the cost of PPPs has often been higher than anticipated, while the benefits have been lower, hence the limited use of PPPs in such settings. (Leigland, 2018)

In order for partnership programs to succeed, there are two different sets of conditions that must be met. The first set of conditions pertains to the institutional dimension and involves the stability of the

country, the quality of its institutions, rule of law, and success of the partnership process. The second set of conditions involves the design and implementation of the public-private partnership programs and the establishment of a sound framework for such programs. The main issue facing the implementation of infrastructure projects under PPP agreements is related to regulatory and legal considerations. (Khairy, Raouf, & Ezeldin, 2026)

Corrigan et al. (2005) identify ten critical principles on which the success of public-private partnership projects is based. These principles include: proper prior preparation for the partnership project; a shared vision of both partners; an adequate understanding of the partners and the key players in the project; a clear understanding and equal division of risks and benefits for both parties; a rational decision-making process; making sure that everyone fulfills his/her responsibilities; good coordination of actions; prompt and efficient communication; fair negotiation for both partners; and building trust. (Minsoo, Xuehui, Villaruel, & Lin, 2018)

Conclusion

The MENA region represents a significant market for infrastructure development. Investments in infrastructure form one of the main drivers for economic growth and development. In the past ten years, there has been an increasing trend in the use of the public-private partnership (PPP) approach in all its various types, as indicated by 257 completed projects and total investments amounting to US\$72.641 billion. The PPP model remains very important for infrastructure development through service improvements.

The success of public-private partnerships in the Middle East and North Africa region is dependent on the existence of an enabling environment. Such an environment is composed of a number of key ingredients, which include economic and political stability, sound policies and regulations, strong commitment from the government, well-developed capital markets, institutional capacity, risk sharing, stakeholder involvement, performance monitoring, process transparency, and strategic orientation.

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