

Development of Private-Public Participation in Iranian Water Resources to Boost the Tourism Industry

Développement de la participation privée-publique dans les ressources en eau iraniennes pour stimuler l'industrie du tourisme

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Abstract. Nowadays, tourism is one of the fastest growing industries in the world. It plays a prominent role in countries' economies since not only it directly contributes to the national income, but it also indirectly benefits adjacent industries through spillovers. Tourism has been the primary source of income for many emerging countries. Unfortunately, Iran has not been taking advantage of this industry since 1979 due to its reliance on revenues from the oil industry. However, due to rapidly declining oil revenues in the recent past, Iran's economic cycle has been interrupted, resulting in a recession. During a recession, a significant portion of the government's projected resources for keeping the country up and running will not be realized. In such situations, Public-Private Partnership (PPP) could boost the economy by expanding the adjacent businesses. In this paper, we demonstrate a PPP plan which leverages water resources and facilities to boost the tourism industry in Iran. In particular, we study in detail the partnership evolution in Iran, and propose appropriate PPP implementation mechanisms by defining autonomous projects. We show that our proposed approach could boost Iran's economy. As a byproduct, it could also enhance the outlook of Iran's tourism industry.

Résumé. De nos jours, le tourisme est l'une des industries à la croissance la plus rapide au monde. Il joue un rôle de premier plan dans l'économie des pays, car non seulement il contribue directement au revenu national, mais il profite aussi indirectement aux industries adjacentes par le biais des retombées économiques. Le tourisme a été la principale source de revenus

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de nombreux pays émergents. Malheureusement, l'Iran n'en a pas profité, car depuis 1979, il dépendait des revenus de l'industrie pétrolière. Les revenus issus de cette dernière ayant connu une chute rapide dans un passé récent, le cycle économique de l'Iran a été interrompu, ce qui a entraîné une récession. Durant une récession, une partie importante des ressources prévues par le gouvernement pour maintenir le pays en état de marche n'est pas réalisée. Dans de telles situations, le partenariat public-privé (PPP) pourrait relancer l'économie en développant les activités adjacentes. Dans cet article, nous présentons un plan de PPP qui exploite les ressources en eau et les installations pour stimuler l'industrie du tourisme en Iran. Nous étudions en détail l'évolution du partenariat en Iran, et proposons des mécanismes appropriés de mise en œuvre du PPP en définissant des projets autonomes. Nous montrons que l'approche que nous proposons pourrait stimuler l'économie iranienne. Comme sous-produit, elle pourrait également améliorer les perspectives de l'industrie du tourisme en Iran.

1 Introduction

Tourism generally provides benefits to a wide range of sectors for any economy. Tourism activities capture a considerably large percentage of Gross Domestic Product (GDP) for many countries. Investments in tourism not only include the construction of hotel and entertainment centers but they also cover transportation projects, such as improvement and modernization of airports, railroads, seaports, etc. However, it is not convenient to measure the efficiency of tourism investments since the underlying sole output is the customer satisfaction. In addition, budget constraints of governments and private entrepreneurs generally render large-scale tourism investments impossible to undertake. Therefore, new financial models based on the cooperation of governments and private companies are required to facilitate tourism investments [1].

Public-Private Partnerships (PPP) are arrangements between the government and private companies for the purpose of joint investment in projects such as construction or improvement of entertainment facilities, airports, seaports and railroads. Such partnerships are characterized by sharing investment amount, risk, responsibility and revenues between the partners. The reasons for establishing such partnerships generally involve financing, design, construction, operations and maintenance of tourism investments. The underlying rationale for establishing a partnership is that both the public and private sectors possess certain characteristics which would benefit services or project delivery. In other words, PPP models consolidate the strengths of government and private sector for providing more efficient services [1].

The tourism industry has a long history in the fields of antiquity, and natural, cultural and religious attractions in Iran. Taking advantage of the facilities created in the proximity of the lakes behind dams, which is generally a pleasant and scenic place, tourism development can be considered one of the most important economic justifications for dam construction projects.

The construction of tourist complexes in the proximity of dam lakes has a very limited history in Iran. Additionally, due to the recent economic crisis in Iran, financing for dam operation and maintenance projects has faced difficulties. In this article, we discuss how PPP could assist in providing credit and prosperity to tourism, help in the construction of new tourism complexes, and boost Iranian economy. In particular, we report measures taken to create tourism around water resources and facilities through PPP. We examine the current situation and provide examples of dam-related tourism projects in Iran and.

2 The definition of the project and its necessity

In 2014, according to the conditions and sensitivities in dams and water resources in Iran, our study group aimed to develop tourism around dams and raised the issue of double operation of dams. Due to the course of economic developments and attention to the water tourism industry, a suitable context was then created to define the issue of tourism around water resources and facilities. One of the most important issues in the field of tourism around dam reservoirs is its type of use, e.g. drinking, agriculture and industry.

Iran Water Resources Management Company (IWRM) in relation to the preparation of the water utilities has graded the degree of protection accordingly virtual tourism activities and initiatives aimed at preserving the quality of water resources and the environment for the study area is defined.

In Iran's economic development plan, the issue of PPP is one of the main programs on the government's agenda. Executive and successful history of PPP in Iran has already existed in various fields such as oil, dam construction, roads construction and in projects of public non-governmental organizations including municipalities as Buy-Back (BB), Build-Operate-Transfer (BOT) and Build-Own-Operate (BOO). Limited laws and publications have been developed. There are various types of PPP models that may be considered for tourism project financing.

Build-Lease-Transfer Model (BLT) is a form of PPP where the private sector finances, builds and operates a public service facility for a designated period of time. During the operating period, the contractor makes lease payments to the government. In other words, it becomes the private sector supporting services to society which should be provided by government. Under most common BLT, the private sector designs, builds finances and operates the facilities. However, each should base on the contract specifications decided by public sector. Under the BLT, the public sector does not own the asset (airport, seaport, railroad, hotel etc.) until the end of the contract period. Once the construction is completed and the facility is put in operation, the BLT contractor makes a stream of committed lease payments to the government. The contracting party under the BLT scheme is primarily awarded a space where the private contractor constructs a structure in conformity with the approved building plans and specifications at the company's expense. The contracting party is then given a 20-30-year contract at a very minimal lease rate. This allows the contracting party to recover the costs over construction which enables the private initiatives provide convenient margins for a profitable business [1].

Public investments in tourism area may be named as airports, seaports, railways, roads and highways, power plants, water and sewage systems. Private tourism investments may be listed as hotels, restaurants, shopping centers, entertainment centers, recreation facilities and parking facilities. It is viewed in the literature that transportation and energy investments have been mainly financed by employing either build-operate-transfer or build-operate. The construction is generally financed by the private partner while public partner provides land at no cost and some sort of privileges in operations. Private tourism investments may be financed in a similar way of public investments. Private investors may be reluctant to invest in new high-risk tourism areas or facing short of funding. At this stage, government may take the initial step and offer private sector plausible ways to make critical tourism investments happen. The government may provide land at no cost, postpone or forgive all income and other taxes, be a guarantor for bank loans to reduce financing costs or/and cover part of cost of the initial investment. In this context the private partner faces much lower investment risk and less initial cash outlay. After the construction phase, the facility is run by the private company. Private sector in this stage utilizes its advantages in flexibility and expertise in operations at a lower cost for a high service quality while facing much lower risk in return of initial investments. At year ends all operational costs plus a reasonable return for the private

partner are deducted from project revenues and the remaining amount is shared between partners at prorate [1].

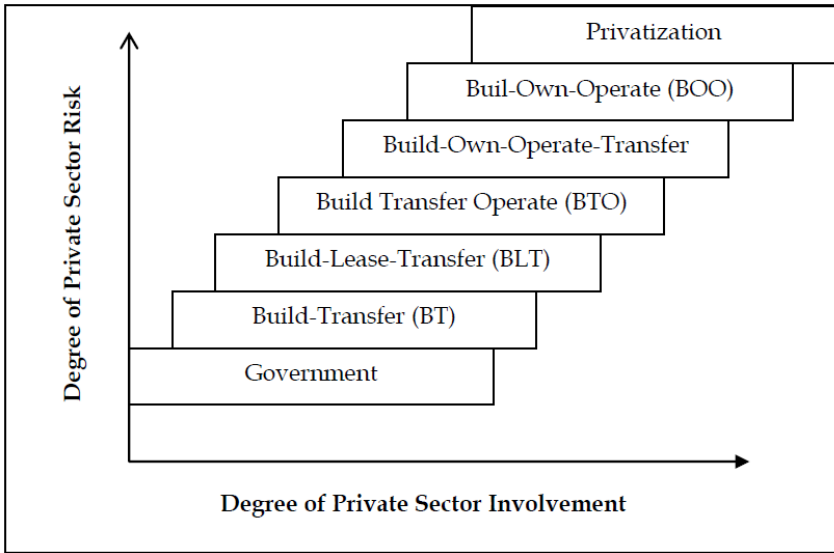


Fig. 1. Degree of private sector risk and private sector involvement.

2.1 Advantages of BLT method

The first advantage of this method is the conclusion of a contract with the private sector, during which the private company must finance the project. This process virtually eliminates the possibility of any public sector budget. On the other hand, the total risk of the project, including the financing risk and the risk during the operation of the overall project, will be borne by the private sector, although the risk taken by the investor will actually be borne by the public sector in accordance with the contract. This project is presented to the investor during the operation period and is paid to the public sector according to the lease contract (monthly or annual). At the end of the lease term, ownership and responsibility for the facility will be returned to the government employer [2].

Table 1. Comparison of Public-Private Partnership (PPP) methods.

Description	Public Sector Responsibility				Private sector responsibility			
	BOT	BOOT	BOO	BLOT	BOT	BOO	BOOT	BOLT
Operation and repairs				✓	✓	✓	✓	
Capital financing			✓		✓	✓	✓	✓
Capital financing					✓	✓	✓	✓
Asset ownership					✓	✓	✓	✓
Business risk			✓	✓	✓	✓	✓	✓

3 Methodology

Destinations define as the focus of facilities and services designed to meet the needs of the tourists. Most destinations comprise following components, which can be characterized as the 6A's framework as illustrated in the following:

- Attractions (natural, man-made, artificial, purpose built, heritage, special events).
- Accessibility (entire transportation system comprising of routes, terminals and vehicles).
- Amenities (accommodation and catering facilities, retailing, other tourist services).
- Available packages (pre-arranged packages by intermediaries and principals).
- Activities (all activities available at the destination and what consumers will do during their visit).
- Ancillary services (services used by tourists such as banks, telecommunications, post, newsagents, hospitals, etc.) (Source: Marketing the competitive destination of the future) [3].

The study group is to create tourism projects on water resources suggest the studies are as follows.

- Recognizing the potentials of tourism
- Feasibility study of tourism plan around water resources and water facilities,
- Preparation of financial and economic models
- Choosing a public-private partnership method
- Tender and selection of the investor
- Concluding a contract with the selected investor
- Starting the project by selective PPP

Accordingly, various projects have been studied by this research group and have reached the implementation stages. Among them, we can mention the projects of Alborz dam, Kaboudwal dam, historical complex of Abbas Abad dam in Behshahr, Chalous and Sardabroud Channel, Glabar dam in Zanjan, Qom Salt Lake, etc.

As a case study, Alborz dam and Abbas Abad dam in Behshahr are examined. Tourism studies of the dam have been carried out in the post-construction phase and in operation. Feasibility studies include: identification of water body and environment around the dam and review of basic studies - study of economic and social issues of the project area - potentials and limitations of the current situation - study of tourist attractions in the area - study of water resources and water facilities in the province and level of authorized tourism activities - review of restrictions and limitations - review of HSSE (Health, Safety, Security, Environment) considerations of the project - review of environmental monitoring and water quality protection requirements. Spatial planning and feasibility study of tourism activities.

Alborz dam (Pasha Kola, Savadkuh), which was built with the aim of supplying agricultural water and electricity generation, is currently proposed by BLT for investment in order to define the tourism plan around it. According to the feasibility studies and potentials of the region, in its tourism plan, the provision of tourism and sports services (special sports, water champions and camping sports) and healthy tourism (health and medicine) has been approved.

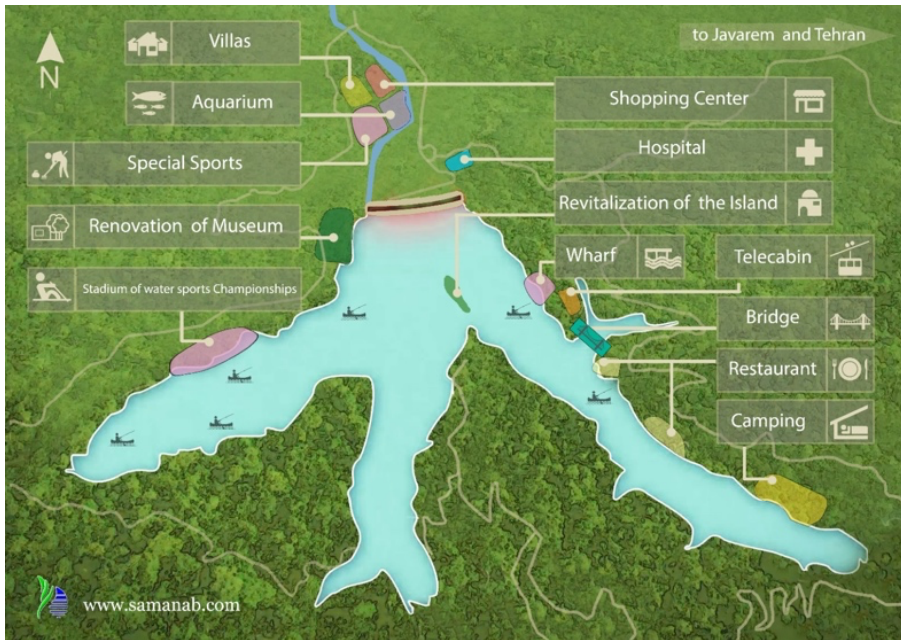


Fig. 2. Plan position of Alborz dam tourism.

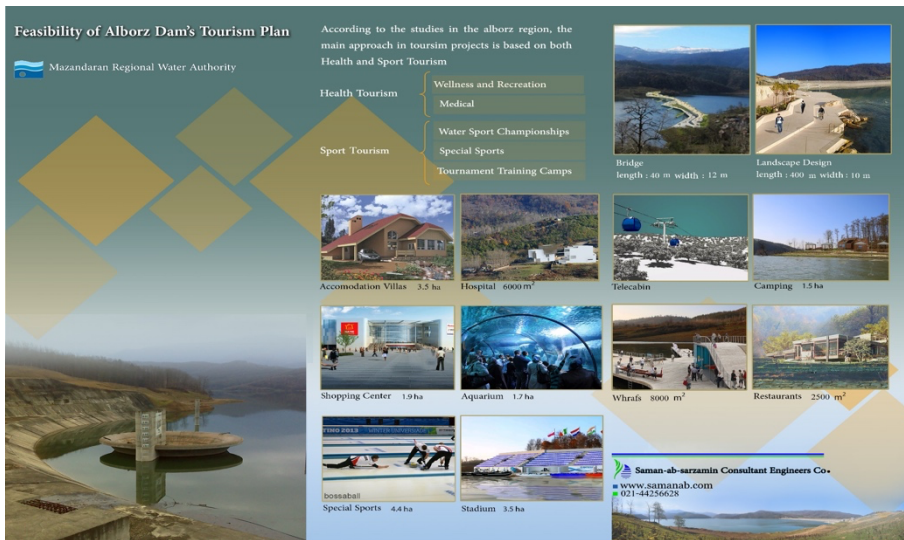


Fig. 3. Feasibility study of Alborz dam tourism plan.

Abbas-Abad historical site located in the north of Iran which is known as a historical and recreational complex. It was inherited from Safavid period (17th Century AD) and includes of dam, palace, pool, historical Iranian garden, water mill, water ways, brick towers, Chaharbagh enclosure and bathroom. It's a wonderful combination of natural landscapes and man-made structures which has been registered in the list of UNESCO World Heritage in 2011 due to the following capabilities: Wonderful Iranian gardens (no water restrictions), the uniqueness of the architecture and design of the garden (terraced) among natural gardens in the north of Iran, existence of specific water division systems.

Project outcome: Tourism development master plan of Abbas-Abad garden has proposed a number of projects for restoration of historical monuments, renovation of structures such as old wooden wharf or old wooden bridge, reconstruction of infrastructures and development of tourism and recreational facilities in this site and around lake of Abbas-Abad dam.



Fig. 4. View of Abbasabad dam lake.

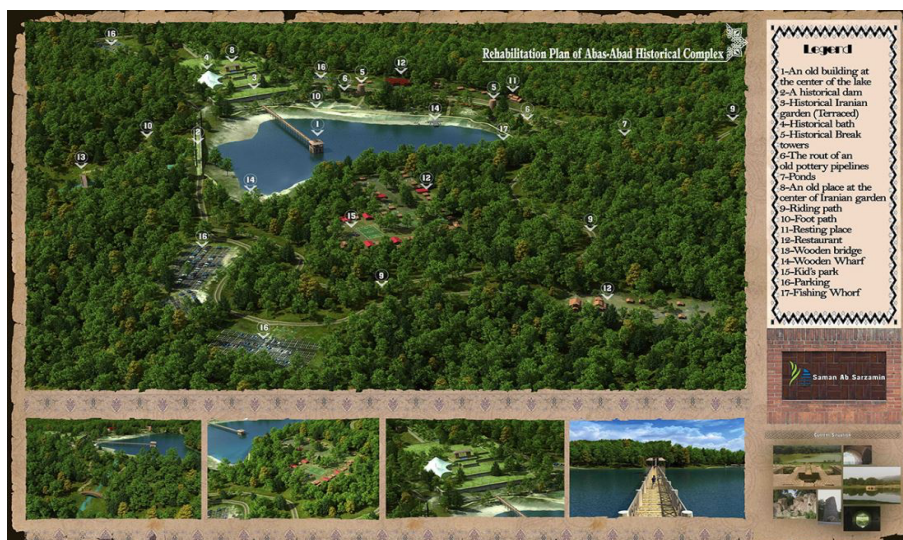


Fig. 5. Rehabilitation of Abbasabad Behshahr historical complex.

Both projects of Abbasabad Behshahr historical complex by Rehabilitation-Lease-Transfer (RLT) method and Alborz dam tourism have not been implemented yet. Unfortunately, most of the tourism projects around the dams have not been completed. We next describe viable reasons for failure in implementing these projects.

4 Conclusion & Result

The reason for the unsuccessful implementation of tourism projects around the dams can be considered the lack of proper executive structure and comprehensive laws related to the issue of PPP. Based on the experience we gained in tourism studies conducted around various dams, a list of major existing problems are as follows:

- Absence of a comprehensive law on the subject of PPP
- Lack of appropriate mechanism in selecting a project study consultant
- Lack of proper guidelines for selecting private investors
- Lack of knowledge of the state towards partnerships with the private sector
- Mistrust of investors to government
- Lack of financial incentives for potential investors
- Lack of government's confidence in the efficiency of BLT projects around dam reservoirs

In recent years, according to laws, publications and memoranda published by the government, it is predicted that the evolution of PPP in Iran is progressing [4]. By creating an appropriate structure and comprehensive rules and transparency, the PPP in tourism around dams will also be possible. To summarize the results of PPP approach to tourism around dams:

- Self-sufficiency of the country's economy and its development and independence from the oil economy
- Budgeting dam operation and maintenance projects, and creating self-governing projects through public and private partnerships
- Attract stray and partial capital, and fund small projects
- Attract more tourists locally and provincially, and promote culture, customs, handicrafts, and indigenous sports
- Youth employment and improving the business environment in the country

5 Suggestions

Based on the topics covered in this article, we suggest that the mutual participation should be followed by production rules and specific projects in PPP in the country and localization of international law will be most effective. Suitable conditions in the country can attract foreign investors and attract domestic and foreign tourists.

Regarding PPP with the tourism approach around dams, it seems that the definition of conducting feasibility studies for dam tourism in the pre-construction stage in the next stages will create suitable conditions, including creating conditions for obtaining financial incentives for tourism projects for dams built and in operation.

In Iran, there are no laws for public safety around dams and therefore it poses many dangers to tourists. We suggest the development of robust policies for public safety around water sources and facilities in accordance with international laws and standards.

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