

The Lebanese Road Network and Urban Governance: A Case Study of the Pan-Arab Highway

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Abstract — *given the current high rate of urbanization in a post-conflict reconstruction context, the Lebanese government requested from the C.D.R. (Council for Development and Reconstruction) to make the necessary planning of urban highways to meet an increasing vehicle need. Built mostly by superimposition on existing urban spaces, these roads seem to cause more segmentation to the territory. Thus, the questions of these infrastructures' integration in the urban fabric and the urban policies that are neglecting population's social, environmental and landscape concerns are once more raised. Retracing the evolution of the Pan-Arab Highway that connects the capital to the Beqaa Valley and all the way to the Syrian border, we will identify in this article the various actors in the project and shed light upon a mostly nonexistent citizen participation in urban regulations. This analysis will then be followed by a public opinion survey (2016-2017) conducted among the affected population (100 respondents), emphasizing aspects "forgotten" by elected representatives, such as citizen participation, an essential (but barely implemented) tool for urban policies.*

Keyword — *Lebanon; highway; densification; urban governance; citizen participation*

1. INTRODUCTION

The debate concerning the location of highways in the territory is not new; this subject is often controversial in public opinion [1]-[2]. An unavoidable stake in the definition of any urban and metropolitan project, these "hierarchical and structured" infrastructures are generally used to remodel the city according to reconstruction plans that aim at providing "from the center to the distant peripheries an area coverage of the territory" [3]. In a Lebanese context of political instability and high social pressure, these reconstruction projects have been revealed to be, to quote Verdeil, "moments of experimentation and implementation of urban techniques on a broad scale" [4]. However, these plans, these "action plans" [3], have undeniably a significant hold on the physical territory: road infrastructures exert a structural role in the urban space [5] and often encourage a linear development of the fabric. It is, in fact, "striking to point out the extreme expansion of Lebanon's urbanization, through its extension along road axes" [6]. However, it is worth mentioning that unlike "traditional" urban roadways (a network around which the city expands gradually), the

most recent highways were built by superimposition on already existing urban spaces. By promoting road capacity in this manner at the expense of cities/villages, this monofunctional logic on roadways hardly ever makes room for people's social, environmental and landscape concerns. Planning schemes, which seem to increasingly cause interruptions and divide the urban territory, restart therefore the debate on technical infrastructures' integration and the orientation of urban policies. It is in this context that this article studies the case of the Pan-Arab Highway that connects the capital to the Beqaa Valley and all the way to the Syrian border. Planning this physical infrastructure emerged in the 1970s and has been subject to criticism and oppositions ever since. Schemes were thus adapted accordingly, and chief project officers have been making adjustments up until today. In light of the Pan-Arab Highway analysis, we suggest to contextualize the project, by bringing out the different actors in order to understand their way of functioning "as individuals as well as collectives" [7]. This analysis will be followed by a public opinion survey conducted among the affected population. It should be noted that the question raised revolves primarily around infrastructure management and planning, while focusing on aspects "forgotten" by elected representatives, such as citizen participation.

2. PROBLEM IDENTIFICATION

2.1 Current Situation: An Ongoing High Demand on Automobiles

Lebanon presents an extremely high urbanization rate [8]: if in 2010, "80, 4% of the Lebanese population, estimated at 4, 2 million residents, was urban" [9], in 2017, this rate reached 88%. Faced with this land pressure and high demand on automobiles – and the lack of public transportation, cars remain the first means of transportation used by the Lebanese people. Highway networks are built with the only goal being to absorb ever-increasing traffic congestion. This high demographic expansion combined with people's increasing mobility requires, according to the C.D.R. (Council for Development and Reconstruction), new urban roads. Thinking it would be able to spread the flow and decrease congestion problems, the state embarked on the journey of heavy infrastructure planning (some of which were carried out, while others are being currently executed. However, a host of them

is still in the study phase); going through the enlargement of existing roads and the construction of new highways that connect the city to peripheral spaces. The interrelations between highways and territories are defined as follows: as demographic growth increases, people's mobility intensifies and the state launches projects for road networks extension (which lead to pollution and noise pollution); creating by thus a vicious cycle that is impossible to break. Pollutions, unchecked urbanization, congestion, infrastructures only dedicated to automobile circulation do not seem to satisfy the required objectives. That is an assertion supported by Paul Lecroart who explains that "increasing road capacity only aggravates the congestion problem" [10].

A direct consequence to urban extension and densification is the Pan-Arab Highway, which allows the process of rethinking the link between the city and the highway. Through the project analysis, we attempt to pinpoint the state's "way of proceeding" during a highway planning.

2.2 Case Study

The Pan-Arab Highway question has been mobilizing actors for urban planning since the late 1960s (1967-1968). Suggested by the late Cheikh Maurice Al-Gemayl, the project's objective consisted of laying out a main road that instills crucial economic dynamism to the Middle East, i.e., the creation of a brand new highway that connects Port of Beirut to the Beqaa Valley through Hammana. Due to lack of funding, this route would be replaced in 1974 by another proposition. Similarly, the new route would start from Port of Beirut, bypass the airport, and cut across cities of Hadath, Betchay, Haret al Set, Jamhour, Kahalé, Aley, and reach Masnaa located at the Syrian border. Known as the Pan-Arab Highway, this project would also be subject to decree No. 9169. However, the eruption of civil war would soon interrupt its implementation. This project is divided into multiple sections, one of which is our case study that is still underway and conducted from Jamhour to Baalchmay. It should be noted that this section underwent various changes in 1993, 2005 and lastly in 2012, and has yet to be defined once and for all.

3. METHODS OF STUDY

In order to point out the different actors in this highway planning and how they work, and having already defined our study site, we have conducted several interviews with different officials in this sector of transportation in Lebanon and with relevant collectives. Furthermore, to better target the public opinion and consider the concerns of residents living near the highway and passengers, we have conducted a social survey (February-March 2017) in which 100 interviewees have participated by replying to a questionnaire. They were split into nine local collectivities, as defined in our studied section that covers cities from Jamhour to Baalchmay, passing through Hart el Set, Araya, Kahalé, Bsous, Aley, Chouit,

Aabadyeh, Ain Jdide and Baalchmay. The goal is to take into consideration citizens' arguments, giving them the chance to express their concerns related to the subject. It should be noted that the interviewed citizens (who are natives of the affected villages) are from different age groups (both young and old people). As a matter of fact, this problem affects all the residents, since a highway project of such a scale might pose a threat to the quality of life of residents living nearby, and it would risk harming the environment.

4. RESULTS AND ANALYSIS

4.1 Identifying Stakeholders and the Functioning of the Planning Project

By definition, a project like that of the Pan-Arab Highway involves a great number of actors: elected representatives, funders, experts in layouts and transportation, infrastructure managers, local collectivities, residents living nearby or users. Theoretically, affected community locals represent primary stakeholders. As per secondary stakeholders, they count: 1) municipalities (the closest local governance to the people) whose role consists of mediating between citizens and the chief project officer, facilitating by thus the consultation process. 2) N.G.O. (Non-Governmental Organizations), which represent civil society and have been significantly developing these past few years in Lebanon. 3) Ministry of Environment, a principal actor that constitutes the public authority responsible for the observance of laws and regulations related to the environment in Lebanon. 4) C.D.R., a governmental organism that deals with all questions related to planning and implementing developmental projects in Lebanon. 5) Central Administration of Statistics, a public administration within the presidency of the Council of Ministers whose mission is to collect, process, generate and publish social and economic statistics at a national level and to provide users with all required information. 6) In cases where sites of high archaeological potentials were eventually affected by the project, consulting the Directorate General of Antiquities (a technical unit affiliated to the Ministry of Culture) is mandatory. Following an interview, the chief officer in charge of road projects at the C.D.R. explains briefly the procedure and the role of each actor. The project is set in motion upon the request of the minister of Public Works and Transport at the Council of Ministers to confide the highway project to the C.D.R. (to the delegated chief project officer). The latter is hence assigned to a mission (by the Council of the Ministers) of studying and implementing the project, due to lack of experts at the ministries. The C.D.R. (via a private company) conducts a preliminary project study and sends it in a later phase to the general directorate of urbanism and to the municipalities concerned with the ongoing planning, for the purpose of refinement (in case of adjustments). Then, the C.D.R. sends the decree on planning to the Council of Ministers in charge of ratifying it and providing the C.D.R. with the necessary funding

through the public treasury or foreign donations (such as the World Bank, a founder of the road section Jamhour-Baalchmay of the Pan-Arab Highway) to start expropriations. In parallel, the C.D.R., through the company in charge of the project study, undertakes a detailed study, particularly an evaluation of the environmental impact and economic feasibility to ensure the project's validity. Consequently, an offer call is launched to assign the task of implementation and supervision of the project to a company of experts (such as Khatib & Alami's firm that was selected for the road section Jamhour-Baalchmay and was bound by contract to the C.D.R.). Thus, the C.D.R., instructed by the state to implement the works, manages and controls the proper workflow of the project. Once completed, the project is presented to the ministry that is responsible for its maintenance and management. Yet, this project, which undeniably brings about a radical transformation to the space, faces today the opposition of the citizens residing in the affected cities/villages.

4.2 Regulatory Public Consultation

The purpose of any public consultation is to inform the actors and people concerned with the project's nature and its direct or indirect effects, giving them by thus the possibility to participate actively by expressing their viewpoints and concerns. Lebanon, a cosigner of the Rio Declaration, has incorporated the public consultation principle into the Act n° 444 of July 29, 2002 (that deals with matters of the environment). In fact, article 18 focuses on the necessity to include citizens and non-governmental organizations affected by the issues related to the protection of the environment. However, despite this framework law, the principle of participating is not mentioned in the code of urbanism enacted by the legislative decree 69/1983 [11]. This incomplete legal situation revives then the question on the application of public consultation within urban policies. It is to be noted that within a sustainable development logic, urbanism, which undoubtedly exposes the environment (be it urban and/or human) to incidents, should include mechanisms that foster regulatory participation. According to international regulations on projects funded by the World Bank (as in the case of the road section Jamhour - Baalchmay of the Pan-Arab Highway), the operational policy 4.01 insists on the importance to diffuse the information and preliminary public debates required during the social and environmental impact evaluation [12]. Admittedly, public participation is seldom applied in reality in Lebanon during the implementation of large-scale urban projects due to lack of application mechanisms. However, concerning the Pan-Arab Highway, Khatib & Alami's firm (consulting company) confirms that it has presented the project to the main stakeholders. According to the firm, the project's anticipated objectives and action plans have been discussed and clarified through official letters, meetings and phone calls. In this context, we believe it is crucial to address

citizen participation, by exploiting the concerned population's opinion.

4.3 Survey: On Citizen Participation in Urban Projects

Today, citizen participation is associated with notions encompassing "the transparency of administrative action", "information circulation" and notably "respecting users' rights" [13]. However, in Lebanon, urban governance always operates by adopting a "top-down" approach. In order to understand the current situation, we have interviewed around a hundred people on the Pan-Arab Highway: 87% of the interviewees have succeeded in defining this highway as being a road axis that links Beirut to the Syrian periphery, but information in this field remains scarce and essentially limited to its definition. In fact, the data collected from our survey generate some alarming results: 80% of the residents admitted the fact that they were uninformed of all the modifying steps and alternatives related to the Pan-Arab Highway project (Fig. 1). Although they had the right to access to this kind of information, they confirmed that they were not informed of the project's evolution.

Have you been informed of all the modifying steps related to the Pan-Arab Highway project?

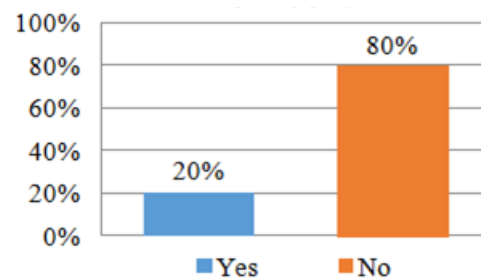


Fig. 1. The degree of information residents have about the evolution of the Pan-Arab Highway project.

Moreover, people who knew about the project confessed that the information had spread by word of mouth through close people or companions (with a percentage of 62%) or through the news and local newspapers (19%). Only 8% of interviewees confirmed that they were informed of the project through municipalities (Fig. 2); this percentage is understandable since the relationship between the administrative body and citizens is not that strong. The loss of trust in all forms of authority is reflected in the interviewees' discourse. Refusing state decisions is largely due to the fact that this mode of urban governance, according to residents, undeniably lacks transparency. It is worth mentioning though that interviewees have expressed their desire to be involved in the decisions made concerning every project that was prone to change their city. We find it essential then to establish a constructive dialogue between project representatives and citizens. After all, urban projects, the likes of the Pan-Arab Highway, have often an impact where they are built and should,

therefore, fulfill the environment's aspirations. Another disquieting observation: 97% of interviewees confirmed that they were not consulted on or informed of the project's evolution, asserting that concentration was not proposed to citizens. Moreover, in 2012, and in response to the World Bank's requirements, Khatib & Alami's firm confirmed having visited the villages and organized, in coordination with the municipalities, presentations on the Pan-Arab Highway, which were followed by a public concentration, in order to raise awareness among residents of the project's merits.

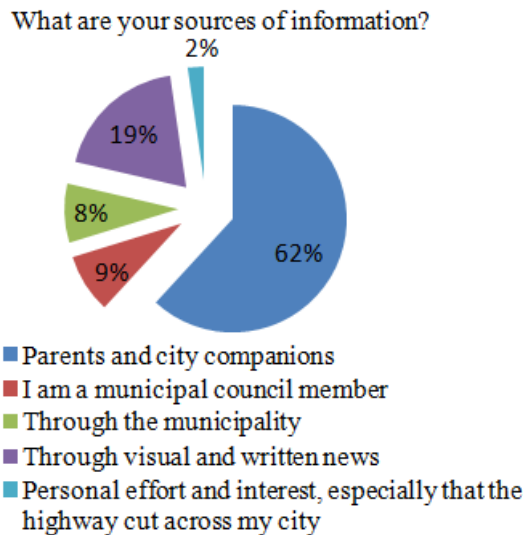


Fig. 2. Interviewees' different sources of information pertaining to the Pan-Arab Highway

Have project officials collected your standpoints or suggestions through opinion polls and /or conference related to the project?

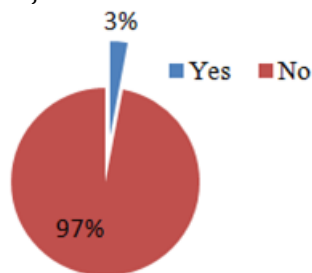


Fig. 3. Percentage of people who confirmed the conduct of an opinion poll or a conference by project officials.

However, despite the procedures undertaken by Khatib & Alami's firm, participation remained limited and only engaged in certain villages municipal council members. This explains the fact that only 3% of interviewees admitted the conduct of an opinion poll or a conference by project officials (Fig. 3). The lack of coordination between project decision-makers and municipalities, combined to the lack of communication between municipalities and citizens, reinforces the relatively limited character of concentration. Popular disputes revolve mainly around highways' urban and landscape impacts (interruptions within the urban space, noise

pollutions ...); fears that cannot be quieted due to lack of communication between citizens and project representatives. Ultimately, this urban highway was not very welcomed by users and the population, which generated large public debates. Nonetheless, residents, future residents living near the Pan-Arab Highway, constitute primary actors in this kind of territorial layout projects. It seems evident that actors should establish a relationship of trust based on communication and transparency in project management. A public concentration announced the right way could be a means to engage the population in a public decision-making and bring all different actors closely together, minimizing by thus impacts and failures.

5. Discussion

In summary, it seems essential to initiate at the earliest stage possible, during the planning phase, but also throughout the implementation, necessary mechanisms that ensure ownership of projects. This situation requires collaboration among the different actors, including primary stakeholders: the people of the affected communities. However, in the context of urban planning, regulations failing to mention the principle of participation leave little room for a dialogue between citizens and project officials. It seems that only through imposition of this principle by the law or the regulation, will citizens be engaged to make decisions related to their cities/villages. In fact, as aforementioned, participation practices emerged during the development of the Pan-Arab Highway project. It is indisputable that officials sought to establish contact with local authorities and citizens by organizing presentations and public debates held in a legal context, according to Act 444/2002 pertaining to the protection of the environment. The results of these interventions remain however insufficient. In the majority of cases, only local elected representatives (members of the affected municipal councils) were brought to participate in these meetings and were therefore associated with the decision-making process. The most part of the population was not consulted in any way, even if applying concentration at the level of municipalities concerned with the project could be considered in itself a participatory process. Nevertheless, lack of communication between local elected representatives and citizens restricts access to information of residents living near the Highway. Finally, it is worth pointing out that the near absence of citizen participation in urban governance could induce side effects, such as the rejection of elaborated plans by residents living nearby. This non-consultation with the affected populations gradually pushed residents to lose trust in state decisions; a situation that is reflected by the fact that the population itself is opposing to the project. This is manifested through the interviewees' skeptical attitude, noting that no environmental impact assessment has been conducted, or through their total lack of interest in the project.

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