



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 35, 2022

**A new decade
for social changes**

www.techniumscience.com

ISSN 2668-7798



9 772668 779000

The distribution of public equipments and its impact on the public service: case of the city of ammi Moussa, department of Relizane in Algeria

Hadji Abdelkader¹, Feloussia Lahcene²

Institute of Urban Techniques, University of M'Sila, Algeria

abdelkader.hadji@univ-msila.dz

Abstract. The city constitutes a center of human activity, and a base for a set of equipments and structures, which contribute in one way or another to the organization and creation of a population dynamic between it and surrounding centers and hence to the organization of the city itself. The needs and requirements of society vary from primary needs (education and health) to administrative, cultural and economic needs for an organized social life. Each category of needs is linked to social and economic norms, in particular the spatial characteristics, the scale of land consumption and the principles of sedentarization. This research aims to know the distribution of public equipments and its consistency with the demographic and urban growth of the city, and to show the quality of the public service of the facilities and its impact on the population, this is how the State strives to create equipment and distribute it in accordance with laws and decrees, including the theoretical equipment grid. The origin of the city of Ammi Moussa dates back to French colonialism, where it was founded as a prefecture in 1850, affiliated with the province of Oran, it is since 1984 that it has become the prefecture of the city by Relizane. The study included the different public facilities of the city, which were created and distributed under certain political, economic and social conditions, and in different periods. By comparing it with the theoretical standards of network equipment, it was found that they were incompatible, which led to an attack on the public service and the general organization of the city. , where it has experienced increasing population growth and difficulty in resisting the increasing pressure on the urban center, which contains most of the public amenities and facilities, which has caused a clear imbalance in its spatial organization. Therefore, the following question can be asked: how can the distribution of public facilities in the city play a role in the organization of its general urban space?

Keywords. public equipments, public service, theoretical grid of equipment, city of Ami Musa, organization of urban space

1. Introduction

Public equipments are fundamental elements in the history of our societies both on the plan: architectural and spatial because they symbolize the public policies of the moment in its various civic and social representations, references for the quality of services fundamentals that they have been able to render over time to populations (education, health, sport, justice, security, governance, etc.). As it is defined public equipment is a real estate work falling within the

normal competence of a community intended to meet a collective need of the public and “Their social and urban impact is significant in terms of dynamics and their taken into consideration should not escape the process of analysis, project and essential decision for the coherence of the actions on the city and the territory” [1].

According to the center for studies on networks, transport, urban planning and public constructions (Csntu - December 2003).

Algeria is one of the countries that witnessed diversity and development in equipment, and if we examine the spatial organization in it, we will find that during the colonial period it was subject to a policy directed at serving the colonizer, as the settlement of facilities and services in the northern regions of the country and sensitive areas, which led to the emergence of developed areas and Other marginalized areas, this is what helped the displacement of the population to these areas, especially after independence, which resulted in a large population and urban growth. This urban expansion that resulted in the displacement of the population raises the problem of equipment and the extent of the relationship between them, as one of the objectives of the spatial organization of the city is to achieve justice in the distribution and provision of life requirements by eliminating the differences resulting from the interaction of human and natural activities by providing all the necessary facilities to serve the population and To achieve this goal, we must build equipment, facilities and facilities in the vicinity of the residence, taking into consideration the spatial distribution of the population across the different parts of the city and equipments and its impact on the population.

2. Method of analysis: Due to the nature of our research and the goals that we seek to reach, it relied on the descriptive analytical approach, which aims to collect the data, facts and data necessary for this study and to describe and interpret them, then analyze them and come up with results as a last stage, for the possibility of an accurate description of the subject using data analysis and diagnosis The problem is more precisely by identifying how to distribute and locate the existing public equipment and know its impact on the public service and the population within the city of Ammi Moussa.

This approach is supported by observation: a direct technique for collecting data and information directly on the phenomenon that we want to study in order to learn more about the studied field.

The interview: It is a method that is in direct contact with the stakeholders (the heads of municipal councils, heads of sub-sections, technical departments, and offices with studies).

Questionnaire form: a means of collecting information about the phenomenon.

Photographs: to support and clarify information.

Documents: They are magazines, books and notes.

Charts, tables and technical courses: help in identifying and analyzing some of the data on the subject.

3. Literature Review

3-1. Historical overview

Public equipments are a historical heritage which constantly mentions that public facilities are fundamental elements in the history of our societies both on the plan: architectural and spatial because they symbolize the public policies of the moment in its various civic and social representations, they are also references for the quality of services fundamentals that they have been able to render over time to populations (education, health, sport, justice, security, governance, etc.).

In recent years, "sensitive neighborhoods" have emerged as a major theme in City Policy. A phenomenon that is difficult to define rigorously, the experts nevertheless seem to agree in recognizing the distance from public equipments as an explanatory factor for the social malaise in these territories. The need for a better spatial distribution of public facilities within urban agglomerations, and more particularly for an equitable location, comes up repeatedly in the debates.

from a historical point of view, if it is true that in the relatively recent past - the 1970s - economists did not hesitate to put public facilities at the center of the analysis of the urban crisis, they focused their research more on the monetary dimension than on the spatial dimension of equipment. Estimating the monetary cost of public facilities, generated by urban growth, was then the fundamental research objective. From a methodological point of view on the other hand, it must be recognized that economic theory has always had great difficulty in integrating the spatial dimension into the analysis (BLAUG, 1985; PONSARD, 1988; THISSE, WALLISER, 1998) [2]. The use of these instruments could therefore prove to be relevant in dealing with the problem linking the social malaise of sensitive neighborhoods and the location of public facilities. However, in terms of the history of the analysis, this results in a rather radical renewal of the reading of the urban crisis.

Through the work of F. de LA VERGNE (1979), he highlighted the strong growth of public facilities in France, over a period ranging from immediately after the war to the mid-1970s, it should also be added the unprecedented development of public facilities. Unfortunately, unlike urban development where it is possible to follow its evolution through the demographic criterion "urban population growth rate", that of the endowment of public facilities is more difficult to follow.

3-2. Definition of public equipment:

Set of facilities, networks, buildings that provide the resident population with the services it needs (schools, colleges, sports grounds). The notion of collective equipment takes into account public and private equipment providing a collective service. It is a facility directed to a group of people and it is an occupied or free space or a building in which a set of specific activities take place with a special organization and structure and a specific method of employment directed to serve everyone [3]. Public equipment responds to a primary objective of public service, as it responds to all citizens' needs free of charge and does not discriminate between members of society and does not aim to profit through the performance of this service. Public facilities are linked to public funds, and the process of realizing them is by the political and technical managers specialized in the field, and its social and urban impact has an important characteristic that meets the dynamic aspect. The decision must be taken in coordination between the various authorities in the city. The basis of movement in the city, as the latter does not have a dimension related to the neighborhood or the city. Today, many facilities have different functions that are intertwined and sometimes integrated.

3-3. Services

They are all services directed to the population within the urban area, in order to improve daily life, and give the field mobility and a civil character, and the provision of these services depends on a group of centers and equipment, which are of two types: public sector services and private sector services [4].

3-4. Factors affecting the distribution of equipment

3-4-1. Variation of population density between the neighborhoods of the assembly:

the importance of the equipment appears in its ability to meet the needs of the population with the least effort and cost, and this requires that the site of the processing be close to the centers of population gravity, and this is usually the center neighborhoods with a high population density, but the more about the center the less the density Population, as well as less spread of service sites.

3-4-2. Natural factors: The sites of public facilities are affected by many natural factors such as objective factors, which include the geographical deals of the area in terms of topography and the degree of slope, as well as the locational factors, including the relationship of the site to the surrounding area, for example, the presence of green spaces near schools and hospitals is desirable and It constitutes an element of attraction for the sites of this equipment[5].

3-4-3. The function of the population gathering: the larger the functions of the assembly and the larger the size of the required sector. The presence of a university in a particular community requires the presence of an appropriate number of sleeping places for students and the presence of an appropriate number of student services offices equivalent to the volume of demand for them [6].

3-4-4. Ease of access: The spatial importance of any service is measured by the length of time or the distance that the individual travels to reach that service, and of course, this is linked to the road network, and less time and cost

4. Actors and stakeholders involved in the implementation of public equipment:

The Directorate of Public Equipment: It establishes all the public equipment at the state level at the request of the various state bodies. It also monitors the implementation of this equipment and respects the deadlines according to the conditions book. It also selects the Office of Studies and Contracting through national and international tenders, where it is located on it is the responsibility of this administration to complete everything that is a public utility, whatever its nature [7].

5. Theoretical network standards for public equipment in Algeria.

Educational equipment according to education department:

5.1. Primary education [8]

The distance between the school and the child's home should not exceed 400 m. Primary institutions were divided into four categories: A, B, C, and D. These categories differ in terms of the number of departments, number of students, and real estate area, as shown in the table below:

Categories	Number of class room	Number of students in class room	built area m2	unbuilt surface m2	land area m2	absorption capacity
A	3	36	553	900	1453	108
B	6	36	1003	1500	2503	216
C	9	36	1474	1500	2974	324
D	12	36	1896	1500	3396	432

Table N° 01: Primary education institutions according to the theoretical network of equipment

Categories	Numberofstudents	built area m2	unbuilt surface m2	land area m2
Base03	324	1437	1532	2960
Base 04	432	1738	1142	2880
Base05	540	1965	1634	3600
Base06	648	2332	1988	4320
Base07	826	2687	2353	5040

Table N° 02: Intermediate education institutions according to the theoretical network of equipment

5.2. Secondary Education:

Two secondary schools: are completed for every 33,000 people, with a unit area of 44,000 m², and 0.66 m²/person.

Perfectly executed per 100,000 people with a unit area of 25000 m², and 0.25 m²/person.

5.3. Higher Education

The University: Universities are accomplished according to the university map, representing a ratio of 6.3 students per 100 residents, with an area of 50 m² for each student.

5.4. Sanitary equipment:

Hospital: They are of two types:

A hospital for 60,000 people with 120 beds.

A hospital for 100,000 people with 240 beds, with a unit area of 15,000 m² and 0.15 m²/person.

5.5. Administrative equipment[9]

The achievement of administrative institutions is not subject to specific theoretical criteria.

Municipality: The area of a single municipality shall not be less than 2,600 m².

Postal Center: A postal center is established for every 5,000 to 100,000 inhabitants, with an area of 1200 m².

Court: It is completed for every 100,000 people, with an area of 2500 m².

6. Discussion

6.1. City location

The location is the basis of the city's concentration, the primitive nucleus of the built space and its relationship to the local topography, and it is considered one of the basic elements in imprinting the city's image and urban memory for it[10].

It is an Algerian town. Located 71 km from the capital of the wilaya of Relizane, it covers 173.55 km² and had 11,258 inhabitants in 1987 and 28,962 inhabitants in 2000. It has been the capital of a daïra since 1987, which includes the municipalities of El Oueldja, OuledAiche and El Hassi. A fairly large local market has been held every Thursdays since 1880.



Figure 1: Location of the Municipality of Ammi moussa
Source: the municipality service of Ammi Moussa.2022.

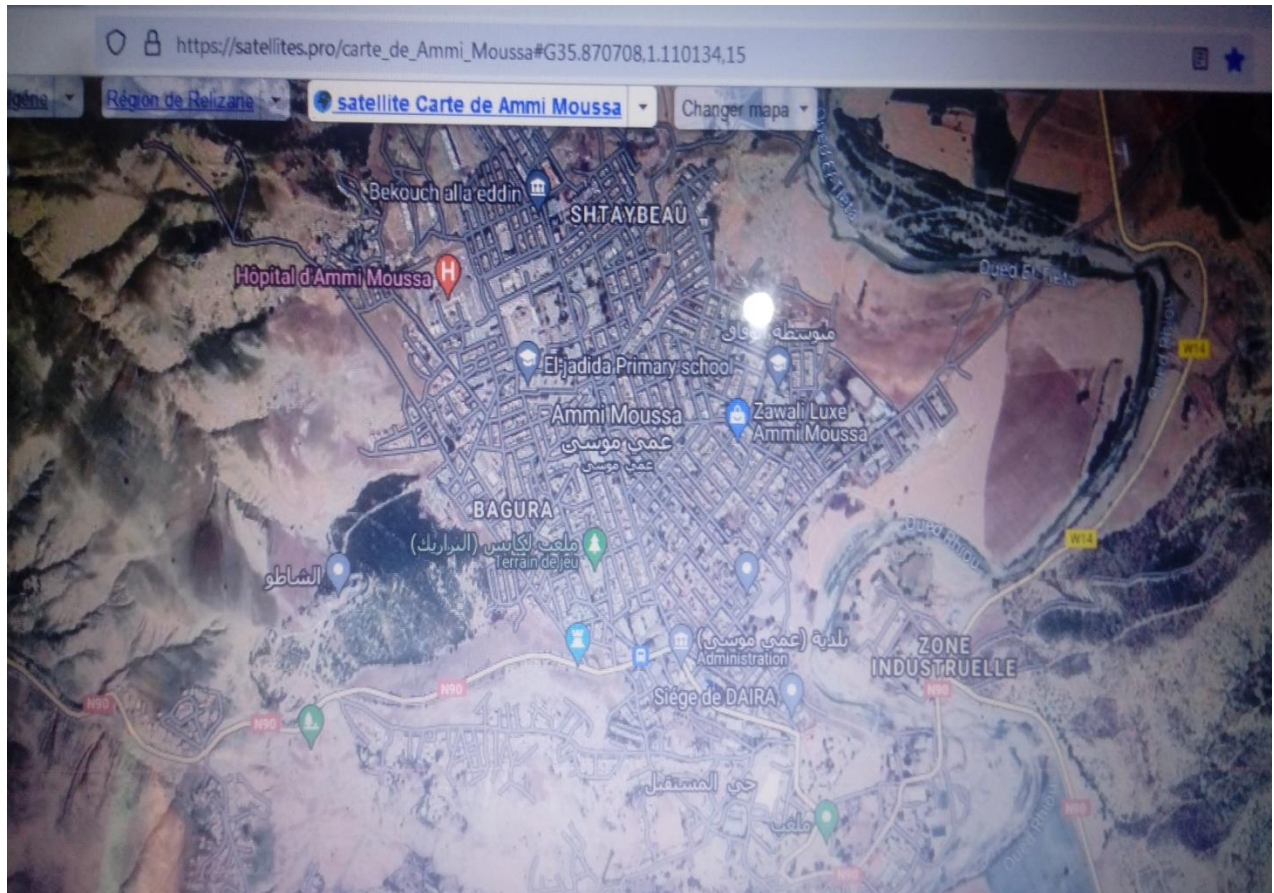


Figure 2:the city of Ammi Moussa

Source: city of Ammi Moussa through satellite Google map 2022.

6.2.A Historical overview of the city of Ammi Moussa

In the year 1974, the municipality of Ammi Moussa was attached to the “Wadi Arhiu” district until 1984, where the district of Ammi Moussa emerged and at that time it included 08 municipalities (Ami Musa, Al Walaja, Al Hassi, Awlad Yaish, Souk Al Hadd, Had Al Shakalah, Ain Tariq, Al Ramkeh). However, the new administrative division of 1991 made it at the head of four municipalities (Ammi Moussa, Al Walaja, Awlad Yaish, and Al Hassi) administratively subordinate to the department of Relizane.

7. Results

To show the quality of the public service for equipment and facilities and its impact on the population, we made a questionnaire lists for public equipment in the city of Ami Musa and distributed them to a group of different samples, headed by the head of the department and municipality, heads of sub-sections of various facilities, directors of educational and health institutions, imams, heads Various departments and some city residents.

Results of questionnaire summarily questions about the distribution of public equipments in the city of Ammi Moussa (sample of a100 person)and we have chosen five representative From a set of questions of our questionnaire aims to answer the research problem.

1-Are the educational equipments close to the homes of most students?

- 2-Are there any obstacles to accessing the administrative equipments?
 3-Are the neighborhood clinics evenly distributed to the city's residents?
 4-Are institutions departments close to each other?
 5-Have the stadiums been completed according to national standards?

Question No. 01	Yes	No	Total
the number	10	90	100
The ratio	10%	90%	100%

Table N°03 Educational equipments.

Question No. 02	Not exist	Exist	Total
the number	30	70	100
The ratio	40%	60%	100%

Table N°04: administrative equipments.

Question No. 03	Yes	No	Total
the number	90	10	100
The ratio	10%	90%	100%

Table N°05: neighborhood clinics.

Question No. 04	Yes	No	Total
the number	45	55	100
The ratio	45%	55%	100%

Table N°06: institution departments.

Question No. 05	Yes	No	Total
the number	07	93	100
The ratio	07%	93%	100

Table N°07: The stadium.

The place of public equipment plays an important role in providing service and luxury and bringing it closer to the inhabitant Public utilities from the population increase the benefit and the further away the benefit decreases, which has an impact on the neighborhood in which the equipment is located the public equipments in particular and the complete organization of the city in general, and the public equipment increased and grew in a way imposed by it urgent needs, an inevitable result, unequally and justly between different neighborhoods, and without prior planning that defines precisely the location, size and type of equipment.

Through our study of the reality of the distribution of public equipment in the city of Ammi Moussa of all kinds, it became clear to us the important role played by these equipment from the social, educational, service and commercial aspect in the general organization of the city, with imbalances in the distribution of public services and utilities imposed by the scientific organization of public equipments and Through meetings with local officials, we observed that The pace of completion of residential neighborhoods is moving at a very fast pace without public facilities and equipment, due to the urgent need for housing, which leads to a mismatch between population growth and their needs for facilities and equipment. Planning and completion of projects takes into account the variables of population growth and demographic growth, but The lack of supplies and the lack of real estate prevents this from applying and respecting the planning standards, on the one hand, and on the other hand, the registration or establishment of a public facility remains subject to a political trend, and in most cases it is a hasty decision that does not take into account the planning standards in the same project, or the place of its implementation or its purpose.

8. Conclusion

with the diversity of their services (educational, health, administrative...etc) and their sphere of influence (neighborhood, local, regional...etc), is considered one of the most important factors affecting the urban field, and it is not limited to the neighborhood in which it is located, but goes beyond that. To the general organization of the city, and its construction with standards that do not match the standards of the theoretical network of processing and its random distribution or filling of voids, resulting in imbalances that affect the profitability of the public service provided by the equipment, the neighborhood in which it is located, and the general organization of the city.

After addressing the reality of the public facilities in the city of Ami Musa, through field investigation, we noticed the presence of many of these facilities of various types and their role and the effective impact they play in its general organization, but their distribution was not in an equal manner among the neighborhoods of the city, there are well-equipped magnets, as opposed to others. poorly equipped, for reasons including: he lack of respect for standards and plans, the lack of supplies and the problem of real estate, and that development is generally subject to political trends. We also noticed the differences between public equipment and the theoretical network standards for equipment, which showed several points, including: recording a deficit in some equipment, recording a lack of space Some equipment, despite its availability, records an excess of space with overcrowding, and this is explained by two things: (- poor programming and planning – the sphere of influence of the equipment reaches the sectoral level), For that, it is necessary to program, construct and distribute public equipment with a prior study, taking into account the quality of service and the sphere of influence, while respecting the construction plans and applying the theoretical network standards for equipment,

to reach urban homogeneity and spatial organization, which positively affects the quality of service and General organization of the city.

References

- [1] Centre d'études sur les réseaux, les transports, l'urbanisme, HAL Id: hal-02150556 (CERTU),p.17.
- [2] Jean-François, *Journal of Regional&Urban Economy*,2004, pages 195 à 221.
- [3] Alberto Zuccheli. *Introduction to operational town planning and urban composition* 1984, volume 2.pages 147.
- [4] Ben azzouz Aicha, *Public equipment, Memorandum of a state engineer at the University of Constantine* 2012.
- [5] Hadroug Adel, *the impact of the location of equipment on the urban transport network, a study of the city of Djelfa, a supplementary note to obtaining an academic master's degree, University of M'sila*.2016.
- [6] Faouzia Rawabhia, *The Role of Public equipments in the City's Organizing A Case Study of the City of Sharia, Memorandum for Obtaining a Master's Degree, Oum El Bouaghi University*, 2018.
- [7] Algerian Law 05/242 of February 27, 2005.
- [8] Algeria. Ministerial Decree N°. 33/2021.
- [9] Normative grid of equipment in algeria 1995
- [10] J. Bastier – B Dezelt (1981) "urbanspace" Edition Mason, p14.