

Urban Spreading out in Algeria and its Consequences on the Environment

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Abstract: Town planning in general and urban spreading out in particular are identified by all the researchers like an anthropic action, which produces harmful effects to the environment, because it appears by the increase in cities. The majority of the cities that currently count Algeria literally exploded since the Seventies, without any respect of agricultural spaces and the natural environment their respective sites: Algiers, which did not occupy more than 7.500 ha in 1970, has almost triplet its surface since, by consuming 17.000 ha. Tlemcen passed from 535 ha in 1965 to 2.200 ha currently. An occupation of unsuitable spaces has the urbanization; Arable land losses and proliferation of lost spaces; Problems of pollution and transport as town planners, which solutions can we give to solve this problem?

Key words: Urban spreading out, environment, consequences, town planning, harmful effects

INTRODUCTION

Urban spreading out appears when the Occupation Change Rate of the ground, exceeds the growth rate of the population or in another manner the urban density which is expressed by resident/ha, is low compared to the occupied surface of the ground, or a very low occupied coefficient on a ground, which increases the request for vital space and requires an increase in the provisioning of energy and inevitably matches infrastructure development, mainly of transport and the use of more important surfaces, these evolutions harm the natural environment and increase the gas emissions for purpose (effet de serre). This which favors the climatic change and in addition, involves air pollutions and increased sound. Consequently urban spreading out has a direct impact on the quality of life of the people living within and near the urban zones.

The objectives of the study are:

- To present solutions to limit the wasting of the ground and the urban spreading out which is not any more one located phenomenon, but practically relates to all the Algerian cities.
- To elaborate some new approaches concerning the urban studies to give a dimension more appropriated to this phénomène and to grant him the interest and the necessary importance.
- To propose some solutions to limit the waste of soil and the urban spreading that are not anymore a localized phénomène, but concerns All Algerian cities practically.

Problems: The practice of the town-planning in Algeria causes major concern considering the state degradation of the urban landscapes, the parks, the spontaneous habitat and the anarchistic bursting of the cities and urban spreading out.

- The dynamics of spontaneous urbanization indeed distorts all the objectives and the assumptions of the studies and thus put in difficulty the town-planning.
- One of the major effects on space, it is the propagation of the individual habitat by the policy of the allotment and the detour (diversion=deviation) of the arable lands of their vocation.
- The overpopulation of the districts, especially on the large cities has caused frontages disordered, thus degradation of the esthetics urban landscape
- Degradation of natural spaces, for lack of maintains or the space is almost neglected in the management proposals and town planning.

A new urban project was established since 1991, which is summarized by the master plan of installation and of town planning and the occupation plan of the grounds PDAU/POS but actually its application remains always a failure on the ground.

Recommended solutions: Urban spreading out is accompanied by a spreading out of surface which contributes to trap heat (CO₂ and other gas) (EAE, 2007) without counting the acceleration of the water cycle and the increased use of the vehicle often essential in habitat

“disperses” It is necessary to adopt a new urbanization which allows conceiving and carrying out urban projects of logic conformity with the economic development. In the current state of things, emergency solutions are in need to ensure a durable development.

The strategic orientations are the control of land, struggle against the wasting of the ground and Need for saving the territory for ecological, social and economic reasons by choosing.

To the scale of the PDAU:

- For the compact city, this avoids transformation of the peripheral lands arable to lands predicted to be built, which also allows persevering the parks, ecosystems and natural landscape (Muller, 2001) the compact city (Master plan of installation and of town planning) (Alberto, 1983).

The urbanism volontariste and radical of years 60 and 70 recommended the extension of the city thanks to the transformation of the agricultural earths peripheral in building estates. The new cities and the districts that came then at a rhythm out of earth accelerated satisfied the needs to short time without the possible consequences on the men and the nature have been taken in consideration.

A lasting planning of the territoire refuses the expansion of the urban zones and extol the reconquête of an identity dune culture through the enhancement of the heritage: Renovation of the quarter elders and restructuring of the fallow lands undustrials, miliaries and harbor. To give up an individual house in the middle of a big parcel in urban periphery is a first step toward the lasting development.

In a compact city the proximity of the habitat, the jobs, the services and the facilities encourage an optimal use of the space, an use saving of the natural zones and an organization efficient of the public transportation.

Limiting the consumption of space: An indicator to be retained is CES (occupied coefficient on the ground = relationship between the surface occupied by constructions and the surface of the piece). This coefficient indicates the consumption of space better than the COS (occupied coefficient of the grounds = relationship between the total surface of floors on the piece surface). Contrary, the COS expresses better the built density and the occupation degree. This latter can be evaluated by ratio of human density which is evaluated by deferring the number of residents and uses of the zone arranged to its surface (Outrequin and Valdieu, 2007):

- Preserving fertile agricultural zones: The cities are often creating around the most fertile grounds which tend to disappear with the urban development that means to take well into account the patrimonial value of these grounds.
- Optimizing management and occupation public equipment: How to use the equipment as well as possible, or to favorite the multi use which is also a reduction form of the space consumption.
- Optimizing the localization of the project of installation in sight of the city: Does the project worsen (aggravate) a spreading out of the city by creating arbitrary cuts and an extension of the urban zone? Does the project favorite the zones in connection with the remainder of the city?
- To improve quality of the grounds: In other words to completely take into account the pollution of the grounds and possibility of the reversible choices in the use of the grounds.
- To preserve the biodiversity (fauna and flora): What implies a very fine analysis of the ecosystems involved then the search for a protection of these ecosystems by avoiding cuts. Ecological or corridors continuity is particularly important and can constitute structuring elements of a project.
- To reinforce the environmental quality of the buildings by improving quality of the construction in general and residences in particular.
- To preserve or improve the landscape and visual quality: Parks, disliked surfaces, protection of fauna and the flora and development of the biodiversity are Unavoidable (Inevitable) elements of the district projects or durable installation.

To the scale of the P.O.S: Points to be treated in a project of installation are (The occupation plan of the grounds) (Bosviel, 1987):

- Exposing the diagnostic.
- Analyzing the initial state of the environment.
- Explaining selected choices to restore the project of installation, durable development and the delimitation of zones taking into consideration fundamental objective of the law and norms.
- Exposing reasons for the administrative limitations to the use of the land carried by the law and justifying the institution of the sectors of the urban zones.
- Evaluating incidences of the plan orientations on the environment and exposing the way in which it takes into account the preoccupation of its safeguarding and a its development.

- Defining the respect of the objectives and guiding principle of the law, the orientations maintained by the commune in sight to support the urban renewal and to preserve quality architectural and the environment. Within this framework it can specify.
- Measurements, to preserve the downtown and districts centers, to develop or create them again.
- Actions and operations of restoration or rehabilitation of small central islands of district or sectors, interventions intended to struggle against insalubrities and has to restructure, to restore or rehabilitate the small central islands or buildings (Bonacorsi, 1987).
- Characteristics and treatment of streets, boulevard, spaces and public works, which, to preserve, to modify or to create (Pierre, 1990).
- Actions and operations of natural installation to ensure the protection of diversity commercial of the districts.
- Conditions of installation of the cities entries (Degorianoff, 1988).
- Measurements to ensure the protection of the landscapes and to maintain the parks.
- Management of drinking water.
- Improvement of the cleansing system.

Design of comfortable external spaces with a bioclimatic approach (Nikolo Poulou, 2001). In this context the vegetation can affect the microclimate in many ways by reducing the temperature of the air compared to nonvegetable surfaces, by getting the shade and improving protection with the wind.

CONCLUSION

This gait has been led in the intention to light some problems relatives:

- To the urban spreading and its impacts on the city and the environment.
- To the unsteady between the urban growth and the demographic growth my work concerned a practice of the cities planning in Algérie and what it generated like negatives effects, on the space and the urban landscape, we tried to demonstrate that the phenomenon is binding to the urbanization methods that marked the city.

To remedy it my work so is a gait of project in the context of the urban renewal that remains to build, by:

- The mastery of the urban spreading.
- The consideration of the different orientations, instructions and solution recommended previous, that the technicians and specialists will have to translate on the site (to take them like references) if surely, we want a serious reflection and intervention about the city in Algeria.

For this, it remains to value the shapes of the urban space management, the interventions levels of the urban institutions, the role that will be acting by the public sector of production building and the meaning of space in the society practices of full mutation.

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