



MEDITERRANEAN COMMISSION ON SUSTAINABLE DEVELOPMENT

## Urbanisation and town management in the Mediterranean countries

Assessment and perspectives for  
sustainable urban development

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### **Avertissement**

Ce rapport a été établi par Claude CHALINE (Professeur émérite à l'Université de Paris XII) pour le Plan Bleu et la Commission Méditerranéenne du Développement Durable, dans le cadre d'une action soutenue par la Commission européenne.

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## **Table of contents**

<b>INTRODUCTION TO THE ISSUES AND CONCERNS OF THIS REPORT .....</b>	<b>1</b>
<b>1. DIFFICULTIES AND SHORTCOMINGS IN MEDITERRANEAN CITIES. GENERAL ASSESMENT AND REGIONAL CONTRASTS .....</b>	<b>3</b>
1.1. Intense and unequally appeased urban dynamics .....	4
1.2. Urban sprawl, an evil or a need .....	7
1.3. Vulnerability and deterioration of the urban living environment .....	11
1.4. The difficult utilization of all the human resources .....	13
1.5. Limits of urban policies and planning tools .....	15
1.6. Reconsideration of the institutions and methods for managing cities .....	16
<b>2. THE INTERFACES BETWEEN DEVELOPMENT, REFURBISHING AND MANAGEMENT OF MEDITERRANEAN CITIES, AND SUSTAINABILITY .....</b>	<b>17</b>
2.1. Frame of actions in cities.....	17
2.2. Singularity of Sustainable Development for Mediterranean cities.....	18
2.3. Urban environment and Sustainable Development .....	20
2.4. Urban Morphology and Sustainable Development.....	22
2.5. Social Equity, Urban Renewal and Sustainable Development .....	24
2.6. Economic Integration and Sustainable Development.....	27
2.7. Sustainable urban management players.....	29
2.8. The necessary training and information on sustainable urban development .....	32
<b>3. TOWARD PROPOSALS TO MEDITERRANEAN LOCAL COMMUNITIES FOR GREATER SUSTAINABILITY .....</b>	<b>34</b>
<b>BIBLIOGRAPHIC REFERENCES .....</b>	<b>39</b>
Subregional and national reports on urbanisation and town management .....	39
Books, articles, studies, research work.....	39



## **Introduction to the issues and concerns of this report**

In most cities across the world, social demands are more differentiated, more intense and involve different points of view, regarding the situations of the inhabitants, strengthened by formal reports by the miscellaneous institutions and organisms. The cities in the Mediterranean rim countries share these situations, although they never reach the level of intensity observed in other cultural areas. In this Mediterranean area where the first totally organized human homes developed and became widespread in a sustainable manner, more than anywhere else, we should avoid using excessively catastrophic or demeaning approach. I think it is reasonable to keep to a more relative standpoint regarding the urban "living difficulty" which does indeed exist, and to which the urban policies over the last decades have offered the right answers in very unequal proportions. Does Sustainable Development, a "heart-felt supplement", offer any real change regarding the purposes and methods of urban development and management in the light of these critical situations, indicative of a more or less intense crisis?

These are the recurrent questions facing us, the response to a report whose priority goal is to open up the way to reflection and debate which will eventually lead to a number of guidelines and proposals intended for the people who, through their power, skill or influence, are endeavoring to achieve better urban living conditions, conforming to the recommendations of international institutions, but with constant attention on the specific aspect of the Mediterranean area.

The pre-operational practical goal of this report led to the commissioning of its organization. The First Part, without becoming excessively academic and descriptive, has to describe the difficulties facing the contemporary Mediterranean city and go on to cover national or sub-regional characteristics. This synthesis work drew extensively on the works performed and published by the European Commission, the Plan Bleu and the Priority Actions Program (cf. Bibliography). Similarly, it integrated abundant amounts of data, observations and suggestions contained in each of the five reports devoted to the sub-regional groups of the Mediterranean rim (cf. Bibliography).

We also thought it worth extending this body of documents, somewhat official, with input drawn from the very extensive production of the various human, economic and judicial sciences, devoted in full or in part to the Mediterranean area, and of which the more significant and recent publications appear in the bibliography. The wealth of this scientific literature, indicative of the constantly deeper knowledge of the complexity of the urban situation and the relation between society developments and technological progress, also meant making choices, whether conceptual or practical, in the establishing of this report.

The principles of an analytical framework, combined with themes of reference to urban problems are the subject of working notes and documents in the Plan Bleu and in the Priority Actions Program for the Sustainable Development Mediterranean Commission (CMDD). This necessarily selective outline was confirmed in particular in the accomplishments of the working group for the management of cities and Sustainable

Development between 1999 and 2000, but also in the questionnaires that the Priority Action Program (PAP) regional activities center sent out to the national and urban authorities of the Mediterranean countries, and whose statistical processing of the responses was presented in 2001.

The abstract of these urban diagnoses was summarily associated with a number of causes and effects, more or less determining, underlying the fabric of Part Two.

In Part Two, in the most open manner possible, we have attempted to analyze the interfaces between normal urban development and Sustainable Development. Ordinary development refers to development according to doses that vary between countries, between private initiative and public decisions. Sustainable Development could be considered as a set of approaches and proposals intended not only to remedy the observed urban ailments, but also to develop new perspectives with the appropriate facilities for all those concerned in different ways with the future of our societies that are now essentially urban. We also need to avoid falling into the trap of "clearing the table". If, as F. Ascher points out in his publication *Métapolis*, a second urban revolution is underway, based on new communications technologies, the future of our cities, in particular those of the Mediterranean, cannot negate the solid backbone of know-how they possess, and which may need to be reactivated, or any regulatory sedimentation which it is probably important to improve in terms of application and implementation.

Therefore, in Part Two, emphasis is placed on solutions that can be applied to urban issues starting from a Sustainable Development approach. More particularly, attention is drawn to the level of innovation, to the cost/profit evaluations that may ensue, and their implications in the field of the exogenous and endogenous forces that urban dynamic trends may impose.

In Part Three, we have drawn up the most exhaustive list possible of the goals, areas and means of implementing urban Sustainable Development, applicable to highly differentiated conditions and situations of the Mediterranean rim cities. This is simply a working hypothesis, but the bases of which appear repeatedly, explicitly or implicitly, in all the works and documents that have been used as input to this report. It will naturally be up to the participants of the 2001 Regional Workshop to establish their pertinence and, above all, to move on from simple questions to real propositions.

## **1. Difficulties and shortcomings in Mediterranean cities. General assesment and regional contrasts**

The situations encountered in Mediterranean cities rarely reach the thresholds of seriousness observed, for instance, in inter-tropical Africa. However, the fast rates of growth of these cities through the second half of the Twentieth Century often failed to generate the necessary accompaniment in terms of economic development, service and amenity supplies that city populations expect of contemporary modernity.

However, it seems that the **malfunctions and failures of the urban fabric are felt, interpreted and hierarchized differently**. Often, emphasis by managers is placed on the environmental conditions of urban life, nuisances, even more pollution and the feared sanitary spin-offs of pollution. The social demand, from the inhabitants, tends to focus on the insufficiencies of the residential inventory accessible to populations with limited income.

Further, although for most Mediterranean cities the same list of needs and problems can be established, their importance and order of priority vary considerably between the Northern cities and the Southern and Eastern ones. These contemporary contrasts represent the accumulated products of historical heritages that are particularly dense and within which, many times, the economic and cultural centers of gravity have moved between cities that have been both sources of outward influence and central focus: Athens, Rome, Damascus, Cordoba, Palermo, Cairo, Constantinople, Fez and many more.

With the Nineteenth Century and the Industrial Age, only the outer fringes of the economic effervescence in the main Northwestern European centers influenced the Mediterranean rim. However, in the context of the decisions reached by several influencing empires: Ottoman, British, French, Austrian-Hungarian and Italian, the strategic, economic, political and fundamental choices will have a lasting effect on the future of the Mediterranean urban system and its geographical balance. The main beneficiaries will be some of the larger ports, and their power of attractiveness will reach its peak throughout the second half of the Twentieth Century, the age of national independence for some States, of integration into European prosperity for others, and of negotiation toward globalization for all of them.

Therefore, it is impossible to understand local and regional urban contrasts without also understanding the significance of the acquired or inherited impetus. But even more so, it probably depends on more recent determining factors placed well upstream of city management and development mechanisms. These are, especially, national economic performances overall territorial development policies and also, some caprices or excesses of natural forces that have a definite aggravating influence on the constraints imposed by geographical conditions on Mediterranean cities: hills and valleys and boxed-in sections, irregular and random rainfall are typical of them. The Mediterranean is also the subject of islands which more than ever appear to depend on exogenous currents, dominated by tourism.

To fully evaluate the situations of each city, we have to consider the availability of pertinent and comparable indicators. This is not all that easy, as soon as we move away from demographic data. An additional complication comes from the diversity of the administrative definitions of the urban fabric of different countries, and that of the effective entities: built-up areas, metropolitan areas or regions.

In the light of the above observations, the available information and the areas of reflection on which attention was focused during earlier meetings, and without any attempt at hierarchical classification, we will discuss the main problems and failures specific to the Mediterranean urban issue. But beyond the general contrasts between North and South, in every region we also have to remember, implicitly, that some of the cities are stagnating while others are constantly developing in terms of dynamism, enabling us to put into the right proportion the conclusions established from over-hasty reading of statistical data.

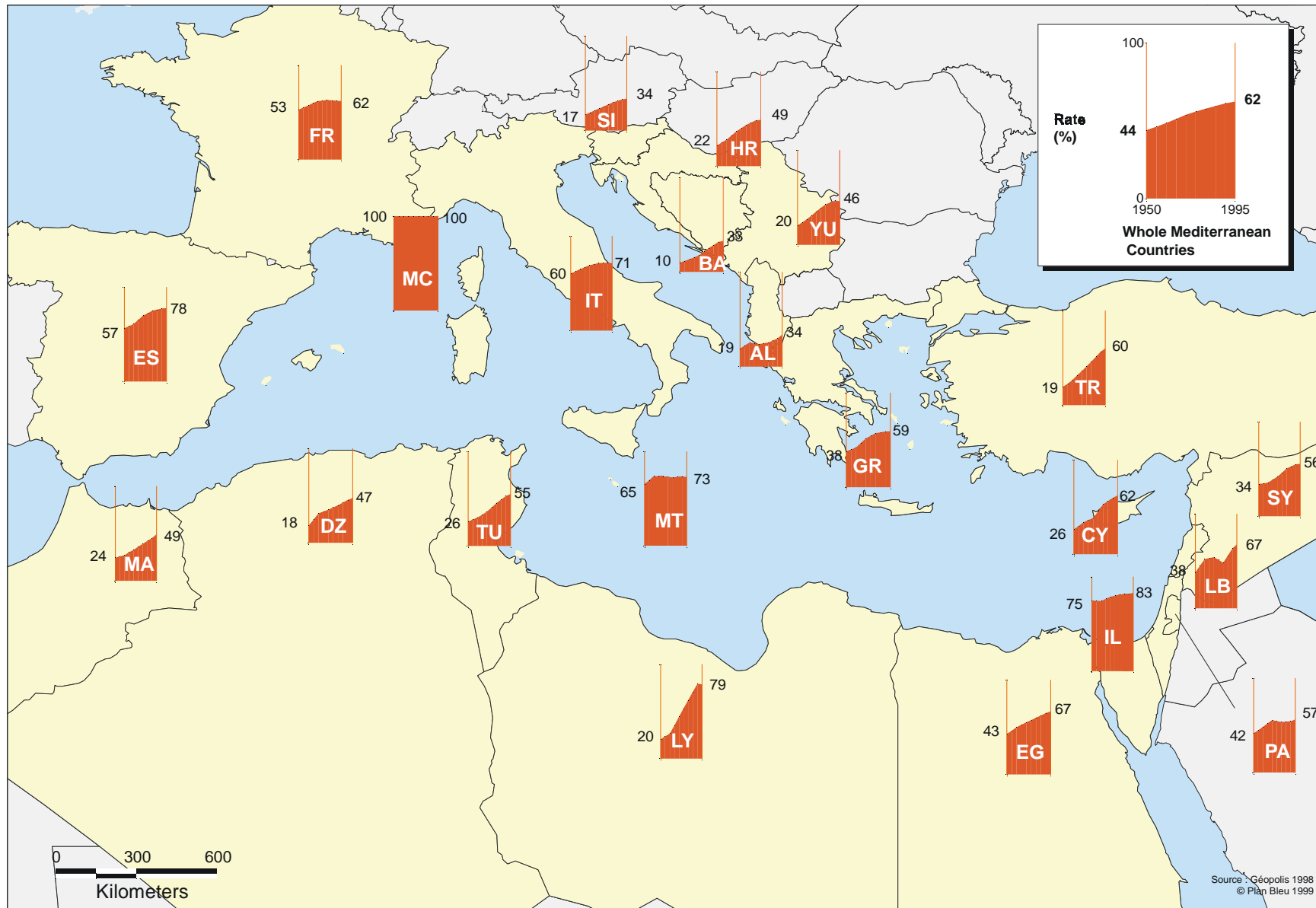
### **1.1. Intense and unequally appeased urban dynamics**

Little by little, we will have to set aside the foregone conclusions of "urban explosion", the domination of a "primate city", etc. The deceleration, accompanying the change of a country to the "demographic transition" stage is now over in the Northern cities. The movement is progressing or is foreseeable in most of the Southern cities, between now and 2025, except for particular situations of rural poverty (Libya) or political instability (Bosnia). Accordingly, the main driving force of these urban demographics is endogenous. It is more a natural balance than a rural exodus whose flows are drying up, as in the evident case of Egypt or Tunisia, less so in Turkey and Morocco. However, all the Mediterranean cities have not yet totally absorbed the shock resulting from a recent period of exceptional growth.

#### **A half century of intense urbanization**

We should bear in mind that, starting in 1940-50, all the cities placed within a large ring around the Mediterranean sustained unprecedented rates of growth under the effect of natural gain and migratory gain. These rates of growth overtook the national rates and, in each country, led to rapid urban growth, almost always to the advantage of the national metropolis. One of the initial results was the forming around the Mediterranean of a circle of urban concentrations, among the largest in the world, because it totals approximately 26 cities with at least one million inhabitants. Their gradual coalescence prompted the geographer J. Gottmann to see in them the premises of a future megalopolis.

Urban rate growth in Mediterranean countries or territories between 1950-1995



## Demographic changes in the Mediterranean States and cities

Pays	Total population (1000 inh)			Urbanisation rate (%)		Urban population growth rate (%)	
	1970	2000	2025	2000	2025	1970-1990	1990-1995
Spain	34 027	39 815	40 769	80,0	80,8	1,2	0,4
France	50 569	59 412	64 177	62,2	62,0	0,6	0,4
Monaco	24	34	41	100,0	100,0	1,2	1,1
Italy	53 758	57 456	53 925	71,6	72,5	0,5	-0,2
Malta	319	389	430	75,1	77,4	0,6	0,6
Slovenia	1 670	1 965	2 029	35,9	43,7	2,0	0,8
Croatia	4 406	4 473	4 193	53,0	63,4	1,8	0,6
Bosnia-Herzegovina	3 564	3 972	4 324	47,3	62,5	3,9	-0,4
Yugoslavia	8 691	10 856	12 217	53,6	64,2	2,2	0,5
Albania	2 184	3 114	3 820	35,7	49,1	3,2	3,5
Greece	8 716	10 558	10 393	59,6	64,6	1,5	0,2
<b>North shore</b>	<b>167 928</b>	<b>192 044</b>	<b>196 318</b>	<b>66,9</b>	<b>68,7</b>		
Turkey	35 666	65 627	87 303	66,3	76,1	4,6	3,0
Syria	6 277	15 936	24 003	58,6	72,0	4,8	3,6
Lebanon	2 177	3 206	4 147	76,8	80,1	2,6	2,6
Israel	2 935	5 851	7 861	85,2	87,3	2,4	4,8
Palestinian Authority	1 134	3 150	6 072	53,4	58,8	1,9	9,1
Cyprus	615	785	900	63,8	77,7	2,8	1,8
Egypt	32 364	66 007	94 895	64,4	83,0	3,2	2,6
Libya	1 986	6 038	8 832	73,7	77,0	6,7	4,3
Tunisia	5 127	9 615	12 892	58,3	68,5	4,3	3,2
Algeria	13 623	30 332	42 329	50,5	61,1	4,4	3,3
Morocco	15 081	28 505	38 174	52,8	65,6	4,0	3,9
<b>South shore</b>	<b>116 985</b>	<b>235 052</b>	<b>327 408</b>	<b>61,9</b>	<b>74,4</b>		
<b>WHOLE</b>	<b>284 913</b>	<b>427 096</b>	<b>523 726</b>	<b>64,1</b>	<b>72,2</b>	<b>2,1</b>	<b>1,7</b>

Sources: United Nations (*World Population Prospects. The 1998 Revision*), I. Attané & Y. Courbage (*Demographic projections of the Mediterranean countries*, 2000), *Géopolis* 1998, Plan Bleu (2001).

### The demographic weight of coasts

A closer approach to the Mediterranean urban situation has led to establishing distinctions between the Mediterranean rim countries as a whole, the administrative rim regions and the coastline. The Plan Bleu and *Géopolis* reference bases establish the orders of magnitude. In 1995, the 22 Mediterranean countries totaled 405 million inhabitants, with an average urbanization factor of 62%. The frontager administrative areas alone total 140 million inhabitants, with average densities of 96 inh/km<sup>2</sup>, whereas the overall Mediterranean density is 47 inh/km<sup>2</sup>. As far as the coastline is concerned, there are 93 million inhabitants there, of which 64% are urban, i.e. 60 million. However, there is no general tendency toward coastalization. Indeed, coastal cities are growing faster than interior cities in contexts where national growth is low, in Spain, Croatia and in contexts of high demographic dynamism in Syria, Morocco, and Turkey. But coastal cities are not growing as fast as the interior cities in Algeria, Tunisia and Egypt. Furthermore, many wide coastal belts are almost empty, as in the case of Algeria and Libya, or are the subject of pseudo-urbanization with a tourist goal, as in Egypt, between Alexandria and the Libyan border, or in many coastal sections of Southern Europe.

## **The current and foreseeable accentuation of regional contrasts**

Although there has been an intense quantitative dynamic movement in the Mediterranean urban system over the last half-century, from one country to another, it has always been affected by different time frames, resulting above all from economic changes, differences in levels of development and thinking evolution. At present, the result is high contrasts between the characteristics and tendencies of the "Northern" cities and those of the South.

- The Southern cities have a high medium-term growth potential in spite of an almost general slow-down in their demographic dynamism, except for Libya and the Palestinian territories. The urban population fertility rates dropped starting from 1965 in Tunisia, 1970 in Morocco and 1975 in Algeria. However, the demographic structures suggest that between 2000 and 2005, the urban development rates will be in excess of 2% per annum, representing an overall and additional input of more than 100 million inhabitants or 2.5 million new city dwellers each year, of which a major share will concern the Egyptian, Turkish, Algerian and Moroccan cities. In parallel, the Southern urbanization rates could increase from 62% in 2000 to 74% in 2025. A definite polarization toward several large cities will continue, through the acquired impetus whereby in Egypt, in 1996, Alexandria, Cairo and Giza totaled 41.5% of the national urban population. But the latest surveys in several countries indicate that, apart from Turkey, there is a settling in metropolitan dynamism to the benefit of medium-size or small cities.
- For the greater part, the Northern cities have now achieved very moderate rates of growth of less than 1% per annum. Their low natural excess is based on stabilized national demographic figures (Slovenia, Croatia, Spain) that are even running below part as in Italy. France has more sustained perspectives for growth. In all, the in the North, the urbanization factors, already around 70%, will only progress marginally, and it is estimated that urban populations between 2000 and 2025 will only grow overall by 7 million, i.e. slightly less than 250,000 inhabitants per annum. But in all cases, the barely foreseeable development of migration flows could modify these trends.

In all the Mediterranean cities, the life expectancy perspectives are tending to flatten out in the medium term, but the differential of the fertility factors is confronted by two existential problems in the cities of the North and South. In the South, it involves the number of young members of the population who have to be trained and integrated into active life. In the North, in parallel to aging, there is a trend toward new social demands, the smaller number of active people and the challenges of new inter-generation relations.

### **1.2. Urban sprawl, an evil or a need**

In the entire Mediterranean urban system, the built-up surface areas are growing much faster than is the number of inhabitants. There have been many cases of illicit forms of outspread, in the North and in the South. But since recently, the people in charge of development, especially in the North, are also worried about the negative spin-offs that the intense regular peri-urbanization movement is causing. This means that it will be

necessary to attempt to evaluate the various costs and advantages of a **phenomenon, which, beyond distinct mechanisms, will concern North and South alike.**

#### **Scale and growth of non-regulated habitat**

It is probable that the signs of what is to be considered as urban disorder have to be restored to the specific context of almost all Mediterranean built-up areas, differentiating them from Northern Europe where urban planning is much more tightly controlled.

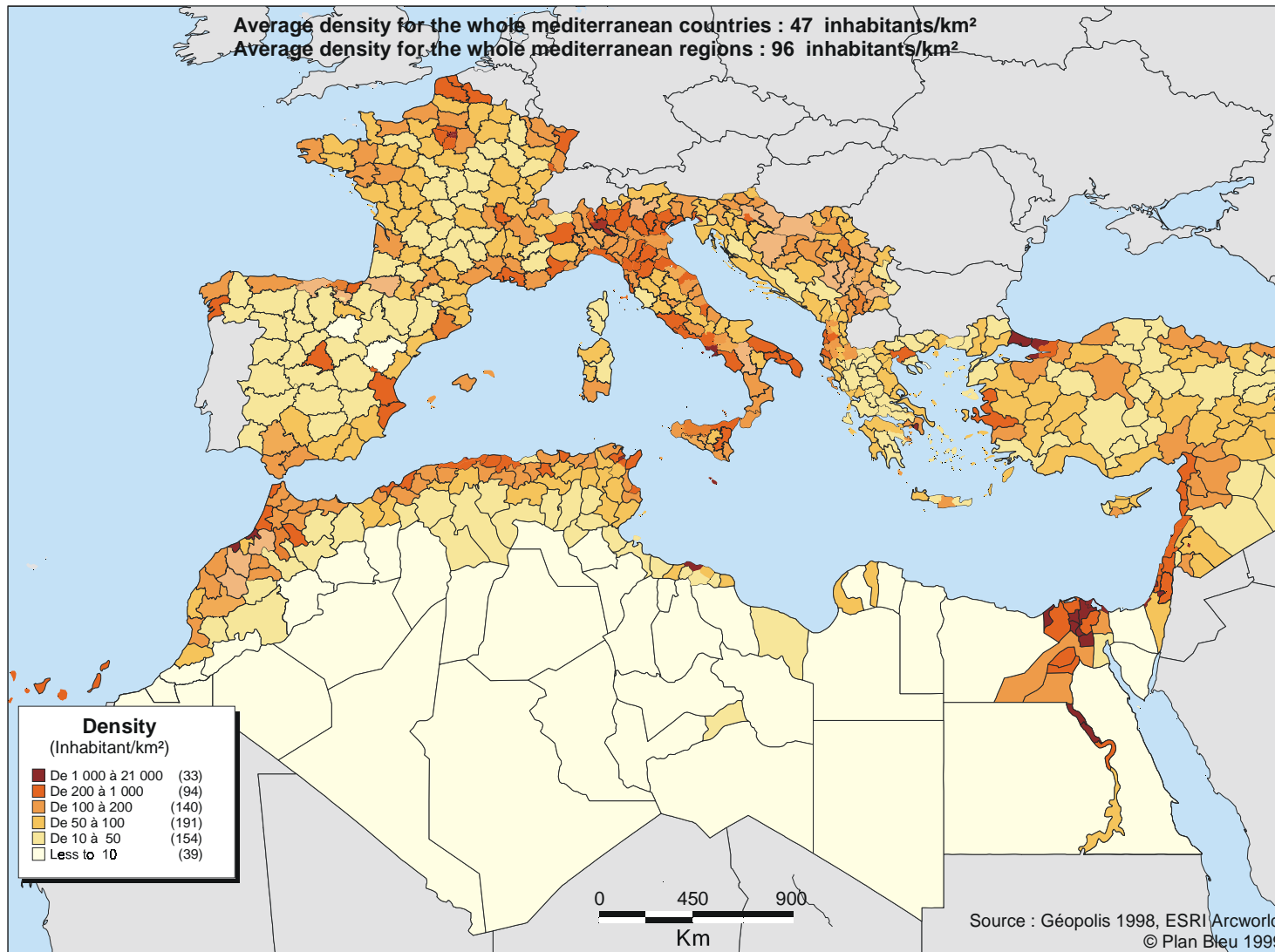
However, the statistical data available are approximate to establish any comparison of a phenomenon that often breaks away from regular forms of peripheral extensions and which, in reality, has resulted in the advent of a particular technology, filling out the vernacular tongues. Illegal deregulated construction is spectacular in the big cities. It can be expressed as a percentage of the total urban population: it is 70% in Albania, almost as high in Greece, explaining why 75% of the inhabitants are owners, between 50 and 70% for the inhabitants of the major Turkish cities and the "gecekonu". It is 40% at Aleppo, 34% in the Egyptian cities, but reaches 58% in Greater Cairo, where these spontaneous districts cover 50% of the urban area. The percentage is estimated at 30% in the cities of Morocco and Algeria, and it is suggested that the total clandestine inventory comes to approximately 400,000 homes.

The share of deregulated constructions is even greater compared to the annual production of new housing: 60 to 80% in Damascus, Cairo and elsewhere in Egypt, 40 to 50% in Morocco and Tunisia. The Northern cities are also bound up in the phenomenon, in particular Athens, but also Rome, where it is estimated that approximately 300,000 people illicitly moved into Agro-Romano, in "borgate" which juxtapose "casette" (individual houses) and "palazzi" (collective buildings).

Today, we are confronted by evolutionary "hard built" constructions, sometimes with several levels that aggravate the risks and that are produced by various channels resulting from individual initiative. Although construction is illegal, the acquisition of property often results from a negotiated transaction.

For the greater part, the inhabitants of these districts come from central districts as part of a spontaneous ex-urbanization process, and come from the socially diversified categories that are contributing to establishing a real property sub-market. The major concern everywhere is the State's failure to produce a significant inventory of social housing. To this is added the incapability of the public authorities to control land usage and, often, the implicit tendency of the government, which, for budget requirements, tends to let things go and mobilizes popular savings to erect a building, which will be regulated and equipped at a later stage.

### Population density in the regions of the Mediterranean countries in 1995



### **Vigorous legal peri-urbanization**

Urban outspread is progressing legally in the Southern cities, with, for instance, many ZHUNs (New Urban Dwelling Zones) built by the Government in Algeria, tourist complexes in Tunisia and Turkey, etc. This outspread is even more evident in the Northern cities where, for the last several decades, the rising standard of living is encouraging aspirations for individual housing. In France, between 1990 and 2000, the population of the peri-urban areas increased from 17% to 21% of the total inhabitants of the major cities, with the development of metropolization processes as in the case of Grasse, Cannes, Nice and Antibes. The urbanization and artificialization of coastal strips is becoming commonplace, as between Marbella and Malaga, Cannes and Menton, and around the Iskenderun bay (Turkey). However, this urban sprawl also involves the Balkan countries, since their change to more liberal politics, with intensified one-family constructions, authorized or not, also resulting in coastal sprawl.

### **Balance of urban sprawl effects**

The most positive spin-off of this urban population redistribution is definitely that of attenuating the levels of over-densification of central districts, although densities are still high at around 200 inhabitants/ha in built-up areas like Cairo, Casablanca and even Beirut, but are aligned on more moderate Mediterranean averages, between 50 and 80 inhabitants/ha in Istanbul, Marseilles, Naples, Athens and Barcelona. For the balance, the effects are generally considered to be negative. Spontaneous peripheral districts are becoming densified and are verticalized; they are deficient in terms of public services, water supply and drainage networks. More generally, peripheral sprawl is suspected of leading to the devitalizing of city centers, with the segregation of urban areas. However, the most often quoted accusation is that of wasted space, landscape deterioration and, more specifically, the irreversible loss of farmland, the result of which is to make the countries more dependent on external supplies.

### **Reduced agricultural space**

The disappearance of natural or farmland concerns the entire Mediterranean area. It is particularly worrying in that the partitioned relief makes it difficult to find any alternative solution for urban growth. In France, the loss of farmland is estimated at 50,000 ha/year, but in the Mediterranean regions, the losses are particularly significant with the extension of urban sprawl toward the hinterland. The loss of arable land each year for the last three decades is estimated at: 2,700 ha in Slovenia, 4,000 ha in Croatia, 1,000 ha in Bosnia. In Cyprus, because of the urbanization factor of 3,200 ha around Nicosia, since 1985, the loss of agricultural production can be estimated at more than 8 million dollars.

Even more dramatic is the irreversible consumption of good agricultural land of around 150,000 ha in Turkey, between 1978 and 1998; in Egypt, especially around Cairo, they concern 25,000 ha each year since 1952, reducing the ratio of farmland per capita from 0.3 to 0.14 feddans. In Lebanon, uncontrolled urban sprawl over the last twenty years has led to the disappearance of 7% of the cultivated land and 15% of irrigated land. In Tunisia, the growth of Sfax since 1992 has absorbed 9,000 ha of agricultural gardens; as far as the badly controlled sprawl of Greater Algiers is concerned, it has used up 1,400 km<sup>2</sup> of fertile land, especially in the Mitidja plain.

However, we should compare in each case, the agricultural production losses with the gains in productivity linked with the improvement of new land, as in the case of Egypt or in the more frequent case, with the value-added factor generated by new activities. But we also need to take into consideration the unwanted effects of simply splitting up areas previously devoted to farming.

### **Urban sprawl and mobility**

The extension of built-up areas is having a mechanical effect of increasing mobility flows and increasing the distances covered. This leads us to another environmental concern, because this new mobility is essentially by private cars, which, in spite of the progress accomplished by manufacturers, are considerably, contributing to the pollution of the air and the atmosphere. Among the other negative consequences of urban sprawl, in addition to the loss of activity in city centers, emphasis should be placed on the time budgets of peri-urban dwellers, and even more so, on the share of their income devoted to traveling which, depending on the social category, and according to estimations in France, can amount to between 10 and 30%.

### **1.3. Vulnerability and deterioration of the urban living environment**

Obviously, Mediterranean cities are experiencing most of the malfunctions endemic to urban areas all over the world, but they are different in terms of quantities and qualities. Further, according to the surveys, it is noteworthy that the top ranking dissatisfactions concern the cost of property in the city center and the insufficiency of social housing supplies.

1. The incapability of urban technical services to keep up with urban rates of growth. This is particularly the case in Southern towns, where situations are critical in precarious or deregulated residential areas. Although electric service is generalized, often by amiable connections between residents, there is some question regarding the low mobilization of solar or wind-powered energies. However, the priority problems are water and waste.

- **water** is an unequally renewable resource, considering the more or less arid surroundings. At present, national organizations in charge of water, despite cuts as in Damascus or Algiers, are managing to cover the essential urban requirements with, as in the example of Cairo, the availability of 289 liters/day/inh. But the specter of hydric stress is looming up for the horizon of 2025, when consumption will have increased by 40%, and in many regions, when urban consumption, combined with that of farming, will outrun the national capacities of local resource renewal. Combined with this risk of shortage and the problem of the present day in many cities, there is the problem of sewage water treatment in that the water is dumped into the sea or to topographical low points, due to a shortage of equipment.
- The volume of domestic, hospital or industrial **waste**, is in line with urban growth. It is estimated at 3 million tons per annum in Cairo, 1 million in Alexandria and in the northern cities, was production of around 350 kilos for inhabitant and per year have become commonplace. The methods of collection and storage in the dumps, and street cleaning, are the most common failings, but also those most often criticized by the public.

The various public amenities (schools, sanitary and administrative issues) appear to be reasonably distributed and accessible in the cities of the North and in the South, with the particular exception in the latter of the spontaneous districts in which needs should be covered by the public authorities, with variable lead times.

2. The congestion of traffic networks, with long waiting queues and economic losses estimated at up to 5% of the GNP in the OECD countries is continuing to increase in step with the increase of vehicle owners and the standardized use of private vehicles. This situation appears to be critical in all of the major eastern cities like Istanbul or Athens, where a shortage of high performance community transport services means that most traveling takes place in private cars or collective taxis. However, this situation is often encountered in the Northern peri-urban territories.

3. The deterioration of the environment takes on many different forms. It can result, like the failures of the public policies, from the negligence of the people all from badly managed economic development. Depending on the cities, the effects may concern the landscapes and the urban composition, of the natural spaces, the architectural and historical heritage, archaeological testimony, with, as a spin-off, their used as a tourist attraction. But the priority points requiring attention are the rising pollution levels of the water, the soil and above all the city air and on this point, automobile traffic is considered everywhere as being the primary wrong-doer while Athens is considered the classroom case. The city represents half the national automobile inventory and air pollution is becoming a recurrent problem with the "nephos" or photochemical smog, encouraged by weather conditions with temperature inversion. For a volume of pollutants estimated at 500 000 t/year (SO<sub>2</sub>, NO<sub>2</sub>, CO, fine particles) the share generated by transport comes to 75%. But the share produced by pollution-generating industries, or even technological risks, may be far more worrying on a local scale, for instance, near l'Etang de Berre in France, near Sfax and Gabès in Tunisia, Homs in Syria, and we should not lose sight of the accident at Seveso, that occurred in 1976 in Italy, due to the release of a cloud of dioxin.

4. The sanitary risks resulting from the different changes to urban ecosystems, in the North and the South, are the primary causes according to the public services. In the southern cities, the latent epidemiological situations are essentially related to the impoverished state of the habitat, to faults or to the absence of drinking water and drainage networks, but also to social practices sometimes well beyond the bounds of the more basic precautions in terms of hygiene. In the northern cities, attention was recently focused, as in France, on the risks of saturnism, related to lead in old housing but there are greater concerns, those of the risks caused by asbestos, widely used in construction over the last few decades. On one hand, we also wonder about the pathogenic effects of electromagnetic fields that are invading the urban environment and on the other, of the stress the results from the "hectic life of the large cities" (research center for the study and observation of living conditions).

5. In that the same way as all over the world, natural risks, when transported into the urban environment, are multiplied by the negligence of various builders and the consequences are particularly tangible in the spontaneous district. To natural major risks concern more particularly the cities in the Mediterranean: flooding due to violent rainfall, as was the case in Nîmes in 1988, and even worse, earthquake. Plaque tectonic

data suggest that almost all the Mediterranean cities are vulnerable to this devastating and potentially lethal scourge, as was the case in the last two decades at Messina, El Asnam, Naples, Cairo, Kalamata and more recently Izmit near Istanbul.

The political instability that reigned or continued in large areas of the Mediterranean has also caused considerable destruction and disorder in the urban fabric, and we might well wonder about its interference, in aggravating the reported situations and difficulties.

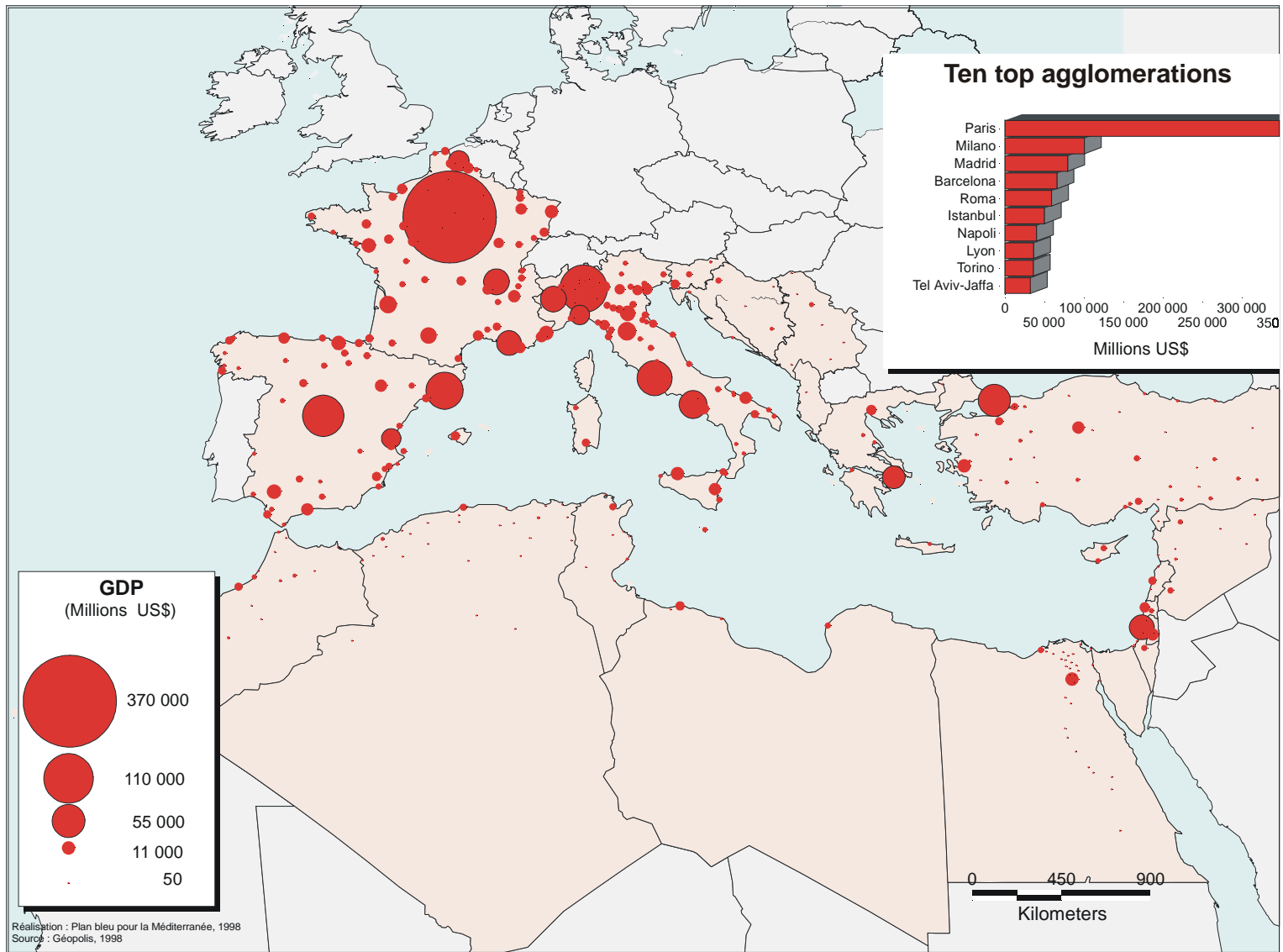
#### **1.4. The difficult utilization of all the human resources**

The stages and levels of development, expressed as natural GNP, – whenever the data relative to the GUP (Gross Urban Product) are unreliable – differ enormously in the Mediterranean cities. A coarse distinction can be made between those that cannot absorb quantitatively in the South, in their working market, a very large proportion of job seekers and those who, in the north, are confronted to some extent by the unsuitability of the supply and demand and offer various forms of temporary assistance for the unemployed. Beyond these different contexts, all the Mediterranean cities are confronted by the challenges of the globalization of exchanges, the de-localizing of their companies, the relative shrinkage of productive centers compared to the increasingly dominant significance of services and, as a spin-off, urban tourism.

To cope with these situations and their constraints, in all the Mediterranean rim countries, a large share of the workforce has turned toward a new range of jobs, none of which are legally recognized. The « De-structured » or informal sector often covers the shortcomings of the government, or works around the regulations that are considered to be too unwieldy.

The evaluation of the economic scale of this sector has to be approximate, although significant, because of the active urban population in Tunisia and Egypt is estimated at 45%, at approximately 40% in Algeria and Morocco, approximately 30% in Turkey. This area, referred to in local publications as a "gray economy" appears to be equally important in the Balkan regions but also plays a considerable part in the North. The underground economy is evaluated at approximately 25% of the national GNP in Spain, Italy and Greece, around 20% in France. Officially ignored all condemned for a long time, this sector is worth a great deal of thought concerning its advantages and drawbacks.

### GDP of the Mediterranean conurbations in 1995



## **1.5. Limits of urban policies and planning tools**

In most of the Mediterranean countries, the governments are clear about their concern to establish balanced development of their territories and the national urban systems.

These political desires come up against both the strategic choices of decision makers, concerned about optimum investment profitability and on the given the idea that productivity is optimum in large urban concentrations. This should lead on to serious balance studies incorporating environmental and social costs. However, mainly government planning strategies, fashionable in the 1960s and 1970s failed to generate the effects hoped for:

- This was the case of heavy industries that it was expected would be « industrializing », used in the 1960s-and 70s around the Mediterranean and which, here and there, are now resulting in enormous industrial and urban areas of wasteland.
- Even more so it was the case of the master plans brought to bear on the major built-up areas. In almost every country, the same faults were made:
  - Of the plans were soon found to be out of phase with respect to changing society, because they were more often than not based on the unreliable data and on random and perfectionist prospectives, failing completely until the 1980s, to take into consideration of the long-regulated districts and informal employment;
  - Their implementation ran aground, due to the insufficient public financing needed and in many cases, they lack of public control of real estate resources, open to speculation and which, often in the unstable countries, represented a real refuge value;
  - These planning documents were produced in a highly centralized manner and in terms of their application, came up against the inertia and reticence of the local authorities, gradually as the latter began to benefit from the spin-offs of greater decentralization and liberalization.;
  - Excessive attention paid to the future of the urban macro form and its extension, effectively resulted in undertakings involving extensive amenities and voluntary new urban planning schemes.

However, simultaneously, these documents failed to take into consideration the subsequent process of degradation in areas that were already urbanized, especially in the port cities. Accordingly, they were particularly unsuitable for new requirements, turned toward the renewal and regeneration of the existing urban fabric and which, all the more so, went hand-in-hand with new demands by the public, to participate in the decision-making process.

## **1.6. Reconsideration of the institutions and methods for managing cities**

In both the Northern countries, where there have been municipal organizations for a long time, as in Italy, and in the Eastern and Southern countries which, for several decades only have been committed to deep-reaching institutional transformations, all these cities are now confronted by the needs to address the same challenges such as:

- the implementation of negotiated and pragmatic urban planning involving a broad panel of players, including people from civil society;
- responses to demands by increasingly segmented urban societies;
- the harmonization of public urban policies, still very often sectorized and the overall and consistent acknowledgment of the various component sectors of the urban fabric, whether economic, social, environmental or cultural, from the decision-making level through to management;
- accordingly, the withdrawal of the Government and the move toward public/private partnership systems, more particularly in the fields of urban services like community transport, drinking water distribution, drainage.

For one or two decades, all these challenges have been the subject of public or internal debate, depending on the dominant national ideology, but also because of data specific to each local or national culture. Accordingly, **there may be, around the Mediterranean, more than one pattern that responds to the very real difficulties of managing urban organisms.**

However, in all the Mediterranean cities, major criticism and lines of reflection are organized according to several common themes such as:

- redefining the control of the Government of local communities and the perspectives of change from de-concentration, often effective or underway, by Government services, toward greater municipal self-sufficiency;
- the insufficiency of the financial resources and facilities of the local communities that depend practically and generally on Government assistance, either directly or by contractual methods;
- the establishing of administrative territories which correspond as closely as possible to the effective and real territories, like the job basins, life basins around the cities. The case most open to debate concerns the large national cities, for instance Barcelona, Marseilles, Algiers, Tunis, with successive approaches that highlight the different challenges. In all these cases there is now a need to adopt explicit subsidiarity and, from now on, to take into consideration the existence of forms of local self-organization;
- there is a shortage, especially in the emerging countries, of elected representatives and municipal administrative personnel with sufficient training or awareness regarding the new data concerning a more complex urban fabric, changing faster and often unpredictably, which requires a response through transversal actions which must combine economic development, social fairness and Sustainable Development.

## **2. The interfaces between development, refurbishing and management of Mediterranean cities, and sustainability**

### **2.1. Frame of actions in cities**

1. The reported difficulties and malfunctions, to various levels of intensity or seriousness, between Mediterranean cities, are often simply the negative external manifestations of processes of growth, technological change or gradual transformation, for which the cities are simple recipients, restricted spaces in which most of the problems of society are concentrated, the foremost of which are different forms of exclusion. Although the more critical situations are to be found in the very large cities, nobody today would want to recommend "closed city" formulas which, as proved by experience, have proved to be relatively inefficient and which, in any case, would now be confronted by principles of free circulation. On the other hand, in each country, it is essential to test, then apply territorial development policies and policies of balance between cities of different sizes by bringing in restrictive arrangements and attractive measures. This observation leads on to pointing out and underscoring that the city never generates on its own all the problems it experiences and that upstream, there are many determining influences that may, at the best, only be regulated by national redistribution policies. de redistribution.

2. Any action on the city is therefore exposed to the interference of agents and endogenous and exogenous forces, limiting the local margins of maneuver, and even the capacities for autonomy. Accordingly, many actions have to take place between at least two different scales. This brings us to the possibly exaggerated recurrent problem of pertinent territories required for action on the urban fabric, which may extend from the city block to the district or even the urban area. In taking these various scales into consideration, we also have to associate the specific nature of each of the city's territories: center, peri-central districts, suburbs, peri-suburbs.

3. There are two specific aspects to the Mediterranean urban system. On the one hand, there is the gestation of the urban fact, thousands of years old which, combined with natural conditions, has generated a common pattern of life styles, use of space, know-how, construction knowledge. But on the other side, different development stages modify the concerns involved, hierarchizing differently the orders of priority to act on the city. In one case employment and housing may prevail while on the other, priority will be motorization and its toxic effects.

4. Social-economic or geographical contrasts between Mediterranean urban subsystems lead to situations that are sometimes competitive, involving the delocalization of activities, and sometimes complementary, in the forms of migration, work or leisure flows.

5. Small and medium-size towns, numerous and increasingly dynamic, in all the Mediterranean countries, should be better taken into consideration. But there are few studies that identify the existence of quantitative thresholds from which disorders and failures of the urban system become evident.

## **2.2. Singularity of Sustainable Development for Mediterranean cities**

Sustainable Development can be understood in many ways. To some, it is a notion, a constructed concept, sometimes an attitude, an approach; its fields of interest and intervention extended enormously during the years 1970-90. Global ecological, environmental and ecosystemic concerns gave way in 1992, with the Rio Summit and its extension at Curitiba to more specifically urban approaches filled out more particularly during the Aalborg Conference in 1994 and the adoption of the European cities Chart for sustainability.

1. From the general point of view, urban Sustainable Development fits in with a sort of virtuous triangle, the apexes of which are:

- a social environment ensuring fairness, cohesion, equal access to services and fair distribution of costs and profits;
- a monitored economic environment governing economic, though-out and efficient development;
- a natural and urban physical environment whose qualities must be preserved, managing carefully the resources and potential.

In more concrete terms, Sustainable Development is both corrective and preventive, quantitative and qualitative. But the debate is still open between those who want it to be of a normative nature and scope, even regulatory, and those for whom it is essentially an approach, an attitude that is wide open and has to be adapted to each specific situation, with reference, above all, to pragmatic and flexible tools like charts, the 21 agendas and the good conduct codes.

2. When applied to Mediterranean cities, the Sustainable Development concept should be realigned. Well thought out choices are essential in the vast catalogue of objectives and actions available to us. Arbitrations were necessary so that these choices could concern, insofar as possible, all the cities of North and South. The works produced for the Mediterranean Sustainable Development Commission, by Le Plan Bleu and the Priority Actions Program, essentially guided these choices and priorities. They have taken into consideration the results of surveys among Governments and cities. They have been filled out by the content of sub-regional Reports and their case studies, often in great detail.

3. A method of promoting Mediterranean urban Sustainable Development. Probably more than in other cultural areas, any innovative action affecting urban issues around the Mediterranean will need to associate with and think up synergies between two methods, resulting from two complementary approaches:

- the normative approach, based on a complete regulatory and sectorised base, whether it exists or is in the process of production, like the provisions that apply to air, water, soil, etc. This codification is already well established in the North and also exists in the South, but its application is confronted by numerous constraints or sources of resistance. It would be a good idea to research, from what thresholds of disorders methods and means of self-regulation should be set up instead of regulatory intervention.

- the more global and unwritten approach, which can benefit enormously from the reactivation of traditional knowledge, tailored to special and natural conditions as is possible for the recovery of rainwater or the ventilation of premises. It can also consist of responses adapted to local uses, for instance the minibus or the community taxi, replacing public transport systems. In these areas, it is important to keep a level head and to evaluate the social and environmental advantages and costs of each method, which may result in original patterns for Sustainable Development, applicable to each individual city.

But, whatever the circumstance, it is important to know, for each Government, the forms and degrees of its commitment with respect to Sustainable Development, which may range from indifference to repetitive incantation, from exemplarity to proselytism.

In this context, a mixture of utopia, good will, political concerns, urban projects, it appears well worth emphasizing a series of achievements and experiments that, on full scale, confirm the advent of Sustainable Development in urban policies and strategies. It is from such examples that exchange, comparison and feasibility can set the pace and be distributed, with the assistance of organizations like Cités Unies or MedCités.

4. Culture, the fourth cornerstone of Mediterranean Sustainable Development. In addition to economic, social and environmental considerations, culture appears to be an essential dimension for the objectives of sustainability that necessarily associate tangible and intangible parameters, and even more so in an area where successive phases of urban development have accumulated over the millennia.

The integration of cultural aspects into the conceptions of Sustainable Development is easy to justify in terms of mobility, urban tourism, university, intellectual and artistic exchanges. It has its mediatized events, its high points, its temples and its head priests, but also lives essentially from the implication of associated fabrics and help to establish or renew urban identities. The vigilance regarding a sustainability concern is, however, necessary to establish the limits within forms or flows of frequentation having more negative than positive spin-offs, in an overall goal of sustainability, as is the case, for instance, in some of the historical centers. Similarly, the carefully thought-out integration of cultural aspects enters into symbiosis with several of the components and objectives of Sustainable Development:

- creation of jobs, although they may often be low qualified;
- resources for local budgets.

It helps stimulate local urban strategies, to enrich urban projects at the local level, as through quality and the supply of public spaces, urban services and amenities. Even more, it offers a real goal for reconstruction operations following periods of water (e.g. Yugoslavia, Lebanon) or major voluntary operations to regenerate old centers, or to win over waterfronts as is the case in most of the port cities, especially Algiers, Barcelona, Genoa, Koper, Marseilles, Valletta, and many others to.

### **2.3. Urban environment and Sustainable Development**

The interface between sustainability and the city environment, the setting within which the inhabitants live, has been and may still be greatly improved by setting up standards that meet precise objectives in the field of hygiene. In Northern countries and Southern countries, at the end of the Twentieth Century, legislative arrangements such as the "Clean Air Act" came into being, designed to fight the pollution of the air, in particular by industry. But in each approach toward Sustainable Development, it becomes necessary to insert such regulations into a broader vision, associating policies of rehabilitation, requalification of urban aspects and the fight against every type of degradation of the ecosystems and the pathological and social effects that ensue.

1. An integrated approach to the urban environment refers to a set of conditions and choices:
  - the areas concerned extend from various productive activities to mobility, to technological applications and through to population behavior patterns;
  - the intervention areas depend generally on the community administrative limits or limits assigned to the operator of a network, as in the case of water supply or services, like refuse collection. Experience shows that a good standard of living and city cleanliness may have the effect of polluting the surroundings into which the refuse is delocalized. This gives rise to the classical problem of coincidence between administrative territories and territories where a public or private operator is carrying out his activity.
  - the choice of management methods of the main public services, liable to generate nuisances, but also of ensuring optimum satisfaction of users are either direct management, control, concession or delegated management. French experience tends to favor the latter choice because it is a way of sustainably sharing financial risks between private operators and local communities while allowing some flexibility of adaptation to changing local situations (Cl. Martinand, 1995). Furthermore, other solutions are possible, depending on local structures and existing installations. In addition, if technological responses are capable of dealing with almost all nuisances and pollution sources, it is better not to count on over-equipment, for instance in terms of waste treatment plants, because of the decreasing law of efficiency which may render perfectionist policies too costly for local budgets (J.C. Lévy).
  - integrated acknowledgment of environmental data is the subject of recent architecture or urban planning operations. The idea is to come into conformity with the requirements needed by the ISO 14001 label, already coveted by some industrial production units. The possibilities of generalized application in the Mediterranean area would be well worth investigating. A more modest approach in France concerns the integration of environmental objectives (energy and water consumption) upstream of architectural programs with HQE (standing for Environmental High Quality) programs, designed aid, which must nevertheless be the subject of costed evaluations.

## 2. The sustainable development of water resources

In the Mediterranean area, water is as much a biological necessity as a symbolic value, and access to water for everybody is, theoretically, a recognized principle throughout the zone. In fact, things are very different in the large cities of the South, and a great deal of literature has been devoted to seeking the answers. We will consider a few perspectives that are valid in the North and the South, except for the cities where there are abundant local resources:

- is it necessary to accompany urban development by an increasing availability which, in some cases, amounts to 500 l/day/inh?
- in addition to reducing waste, network losses, do we not also need to invoice to users the real cost price of water? On this point, CMDD in 1997 recommended setting up gradual pricing systems depending on the volumes consumed, which presupposes the installation of meters;
- for the purpose of solidarity, should the price of water be based on the resources of the inhabitants, as is suggested by the Water Academy in France?
- in many cases, natural local water resources near a large city do not renew themselves at the rate the water is drawn off. Can we continue with the method that consists in inter-regional water transfer or, otherwise, how can we arbitrate between various sector requirements (habitat, tourism, agriculture)? It appears well worth pointing out that in 1997, CMDD and the Mediterranean countries set water demand regulation as a priority political objective for Sustainable Development in the Mediterranean.

## 3. The badly resolved problem of urban waste

Cities generate increasing volumes of wastes of three types: sewage water, household and industrial refuse, site refuse. Each type requires responses that are technically established but very inaccurately applied. In the North, European aid and directives are dealing with the problem, as in Athens. In the South, a great deal of waste water is dumped untreated into the sea, in particular; in the East, dumps in the peri-urban environment are contributing to the pollution of rivers and soils and adding their dangers to those of minefields, the vestiges of recent armed conflicts.

Almost everywhere, it is essential to process, recycle and improve waste, and the exchange of experience and technical assistance appears to be indispensable.

## 4. Highly neglected prevention regarding natural risks

In addition to the two major natural risks of the Mediterranean area, flooding due to heavy rainfall and earthquakes, the responses inspired by a policy of prevention or precaution, and accordingly of Sustainable Development, are almost totally left out of account. In many States like Turkey and Egypt, there is almost no paraseismic codification for buildings. In Greece, emphasis is placed more on warning the population when it is considered that an earthquake is probable, based on the results of the VAN method. In Italy and France, paraseismic regulations and techniques are applied as in the local urban plan for Nice, where information transfers may take place.

## **5. Progress to be continued regarding industrial risk prevention**

Possible or confirmed risks that the large industrial complexes represent, in particular when they are on the Mediterranean coast, are underestimated in many places, and are not the subject of protection measures that are now essential, considering the alarming sanitary data confronting us, as in the case of Homs (Syria). In the North, the European directives, in particular the Seveso II Directive, efficiently impose severe constraints upon the most hazardous facilities. In the South, as in Tunisia, public authorities share the same concerns. Since 1988, the National Environment Protection Agency has been in operation and can submit any project to an environmental impact evaluation (EIE) as a prior step to the granting of any administrative authorization (Abdelkafi). In Turkey, the municipalities are competent in establishing health protection belts to limit urban development around high risk facilities (Keles). In Egypt, the theme of the environment only appeared in legislative considerations in the beginning of the 1980s, and ministries operate above all in the field of health and hygiene. Initiatives are tending to generalize the method of the "green swap" negotiated between multinational firms and environmental protection organizations (El Kadi). The task to continue is therefore one of associating legitimate economic growth strategies with environmental obligations taken either upstream of the projects, or otherwise downstream, by application of the polluter pays principle.

### **2.4. Urban Morphology and Sustainable Development**

Depending on various conditions and time frames, every Mediterranean city is quantified by the two-fold problem of urban sprawl at the expense of rural space and the deterioration or devitalization of part of the fabric already urbanized. For decision-makers, the challenge is to find formulas accepted by the greatest number as a tradeoff between the costs and attractions of the outspread city and that of the compact city.

- 1.** Control of urban spread can be achieved effectively by creating a green belt, which is supposed to be protected from construction.

The idea was never really embodied in any Master Plan for the South, and even less so put into application. At the very most, in the South as in the North, through their own urban planning documents, communities are attempting to preserve natural spaces by zoning. But it is obvious that wherever land is a refuge value, and where, to various degrees, speculation into real estate is tacitly recognized and even escapes any taxing, as in Lebanon, any planning instruments will be totally inoperative.

Egypt alone has undertaken gigantic projects in new urban planning over the last three decades, to absorb the overflow from Cairo and Alexandria. Six new cities are currently being built around Greater Cairo, on desert land, but production is slow and objectives have been restricted. Only two appear to be promising, May Fifteen and Ramadan Ten, with approximately 50,000 inhabitants each, small numbers compared to the demographic growth of Greater Cairo and the ensuing informal urbanization. The other Government attempt is the new settlements, designed to protect agricultural land by offering viable plots of land in the arid surroundings of Cairo and which, so far, has not lived up to expectations.

In France, the legislator, bringing in the SRU (Urban solidarity and renewal) Law of December 2000, wants to equip local communities with a planning tool that will enable them to take a stand against excessive urban sprawl. The territorial coherence plan (SCT) governs the opening up of new zones to urbanization, to the creation of public transport services and, above all, to the prior use of land available in urban zones. However, the application of the plan will depend on the general opinion of the various players involved, and a certain consensus favorable to the return toward a denser city.

2. The option in favor of the dense or compact city has recently entered into the perspectives of urban Sustainable Development.

But because there are no real applications today, except possibly for the very special case of Beirut, the matter is above all one of reflection, extensively discussed in the Northern city, but which will soon extend to those of the South. The compact city option is opening the debate for at least two main subjects:

- establishing the optimum density, evaluated at between 125 and 250 inhabitable rooms per hectare; it has to be associated with good access and central-focus operation. Generally, agreement is reached for small community buildings and rules out high rise buildings. Beirut is the exception to the rule where, since 1971, regulations limiting building heights to 26 m have been eradicated;
- the social advantages of the compact city outweigh its drawbacks. It is considered that this option is beneficial to social mixing, reducing home/work traveling time, favoring the use of community transport and, in all, equalizing chances in a dynamic movement that offers greater social equity. However, everybody agrees that the open spaces will be limited and the size of the accommodation will be smaller, while nuisances, noise and pollution may increase.

A realistic evaluation of the compact city option would mean using indicators, particularly in terms of social equity (E. Burton, *Urban Studies*, 27 [II], 2000). It is also evident that vacant urban land liable to be densified is nevertheless more expensive than in the peri-urban zone. Accordingly, social financiers, like the HLM organizations in France, hesitate to acquire them. In response to this difficulty, the French Government, subsequent to the enacting of the SRU law, is encouraging social developers to construct buildings that are partly rental and partly intended for sale to occupant-owners of the middle classes.

### 3. Compensation for the loss of urbanized agricultural land

In most countries, the using up of natural spaces or farmland by urbanization does not appear to be a priority consideration, and the issue becomes one of increased yield in other places, with the well-known drawbacks of excessively intense farming. Things are quite different in countries facing aridity, like Libya, Syria and Egypt, where the urbanization of productive land means depending on the import of agricultural products. To cover this type of situation in the medium and long term, for the forthcoming decades, Egypt has made a commitment to the establishing of two giant projects to improve land that has been desertic so far. The Tochki project consists in converting part of the Nasser Lake water toward a natural depression where the Kharga Farafra oases are located. The Charq Al Ouweinat project follows up a major discovery of

aquifers near Aswan. In both cases, projects concern irrigated farmland, urbanization and new activities. Some major decisions are still necessary and will depend on difficult expertise and prospective work. The Aswan aquifer is part of the same structure that feeds the Libyan aquifer, already used extensively, and there are questions about the natural renewal capacity of these aquageological resources. As far as the Charq Al Ouweinat project is concerned, it is based on a known but not unlimited resource, the Nile, and is criticized by those who would like to use the available volumes, not only for Greater Cairo but also to improve the Sinäi. There is no doubt that this approach involves Sustainable Development for future generations, but who, from the very design stage, will have to draw on impact studies, successive evaluations and probably, also, on similar foreign improvement experiments.

## **2.5. Social Equity, Urban Renewal and Sustainable Development**

The various situations of territorial disinheritance and social-economic exclusion, outside the city or within its districts, may find answers in the converging objectives and urban policies that combine solidarity and improvement for men and places. Two types of territories are especially worthy of attention in the Mediterranean area: the non-regulated districts and the intra-urban spaces that are in the process of being left aside. To this we must add the social collective living complexes, built on public funds but which are currently suffering from degradation, as is the case around Cairo or in the North of Marseilles. Each of these situations elicits appropriate answers which will be evoked briefly on the basis of several case studies.

### **Restructuring spontaneous districts, generally on the periphery**

#### **The case of Elyssar (Beirut)**

This is an area in the Southwest suburbs of Beirut representing 560 ha, of which 330 ha were constructed in total illegality and need to be redeveloped because of the mediocre living conditions, the shortage of amenities and the ecological degradation (Huybrechts). Redevelopment will be part of a 1995 government decree for the creation of a public establishment responsible for the operation. Its action has been organized as follows:

- population census and social-economic survey concerning approximately 80,000 people,
- establishing of a master plan and detailed plans,
- establishing of new infrastructures,
- regulation of the property problem,
- reorganization of the user of space, implying the delocalizing of homes and activities to within the operation perimeter,
- construction of new housing.

In all, the Lebanese Government is assigning one home to each family, but the recipients of new or refurbished constructions must buy them to become their owners. The amounts requested allow for the value of the abandoned illegal property and the

value of the new constructions. Systems of loans for up to twenty years are provided for and can be applied to other operations in Lebanon (Huybrechts).

#### **The case of the Manchéyet Nasser quarter (Cairo)**

This is a small precarious residential quarter where there were approximately 5,900 inhabitants in 1981, known as the zabalins, involved approximately in the rag trade, collecting and recycling urban waste in high risk sanitary conditions. The combined action of several public and charity organizations, in the 1990s, led to the following improvements:

- construction of two schools, two professional training centers, shops, care centers, a post office and a police station as well as service by public transport facilities;
- the reduction of pollutant emissions by the installation of waste incineration furnaces;
- the refurbishing of the habitat;
- the regulation of the property situation with payment of a contribution to the Government;
- the construction of a fertilizer plant.

The current balance shows that living conditions are better, with more inhabitants. However, there are serious problems of drifting in terms of environment management, amenity maintenance, the follow-up of vocational training, all due to some extent to the difficult application of participation to the inhabitants and to the conditions of interaction between the various operation players (El Kadi).

#### **Refurbishing of old central or peri-central quarters**

The degradation and devitalization of this type of district is evident throughout the Mediterranean cities, with the concentration of low revenue populations. The problems of refurbishing become more complicated when part of the constructed inventory is also part of the historical and architectural inheritance.

#### **The case of Balat and Fener districts of Istanbul**

The purpose of the project for these two districts near the Golden Horn was to render a particularly degraded urban fabric habitable and decent for a population that is often poor and that it is desirable to maintain in place. The initial difficulty was that the Turkish Government had no intervention procedures applying to the improvement of the habitat with respect to private property, except for buildings listed for their patrimonial value. The refurbishing project aims to revitalize these districts and combines the Government and the European Union in its action. Emphasis is placed on the improvement of housing (bringing to standards, connection to natural gas, insulation). The main advantage of the project is its conditions of financing. The system provided for presupposes the following, falling upon owner-occupants and renting owners:

- prior savings,
- refurbishing credit from the Government,

- European Union subsidy.

The operation is programmed for 4 years and concerns 900 buildings. It will be completed by some collective amenities. It is considered to be a pilot experiment for the future social housing policy, which could apply to other ancient districts of Turkey on the basis of public/private partnership (Huybrechts).

Exchanges of methods and procedures may be useful, in particular with Spain (the refurbishing of the old city of Barcelona or the Barcelonetta district) and with France (Euromediterranean operation in Marseilles).

### **Operations on large social habitat complexes**

In some of the Northern countries (France and Spain) and in the South (Algeria, Egypt), the social habitat inventory constructed between 1960-80, consisting of tower buildings or complexes, has become difficult to manage in social terms and costly to maintain.

In Egypt, there have been many spontaneous adaptations at the initiative of the occupants. In Algeria, there are few public responses to gradual degradation, exploitation in Algiers. In France, as part of the "city" policy, at the initiative of local communities, things have gone so far as to involve the destruction of some buildings, but very often, the response involves requalification operations on public financing, particularly as part of the GPVs (Major City Projects).

### **Conservation and reuse of patrimonial quality quarters**

Awareness is now general concerning the interest of preserving inheritance in the form of old buildings, but with very different motivations depending on the cities, and therefore unequal effects in terms of social fairness. A distinction must be made between projects with a tourist or culture dominant, concerning essentially listed buildings and more global actions to revitalize an entire old city, as in the case of Alep, with German cooperation covering the economic development and social promotion (Huybrechts). Each case is well worth analysis regarding the terms of financing which may come from patrons (Cairo) or from public and international sources. The shortage of financing may accordingly slow down projects which are otherwise very well set up, as is the case of the old city of Nicosia (Constantinides). In all cases, it is necessary to proceed with evaluations in terms of functional and social combination. A specific problem concerns cities where there has been a colonial period, as in Algiers, Oran, Rabat, Tunis and Cairo. The future of districts built to the European model is uncertain there and should be the subject of short-term choices insofar as the age of the buildings requires extensive refurbishing works.

In the North, local communities operating as Government partners, have generally considered the patrimony to be a major economic resource to revitalize urban centers and capture the flow of urban tourists.

## **The opportunity of large wasteland in harbours**

In most Mediterranean cities, technological changes, economic corporate strategies and even the reorganization of the armed forces are making large stretches of urban territory available for new assignments. Because of the scale of the network of port cities around the Mediterranean, the land vacated by maritime and industrial activities represents an enormous opportunity for urban renewal strategies, more compact cities, combined with new economic bases based on exchanges, transaction and attendance. The operations for the conversion of this type of industrial-port wasteland have already been accomplished in Barcelona, Alicante, Naples, Genoa, and are in progress in Marseilles, Koper, and Thessalonica, and planned in Algiers, Tunis and Tangier... It is considered desirable to stimulate contacts and the exchange of expertise by evaluations carried out in the more advanced cities in these areas, in particular Barcelona. Can the recovery of deserted urban wasteland be aligned spontaneously with the Sustainable Development objectives? With which ones? Will the benefits go to the inhabitants or to the visitors? What are the cause and effect chains induced by these operations that are going to become generalized? These questions apply more particularly to Malta with the Vallette Grand Harbor Area project, a plot of land totaling 728 ha that will be losing its activities and its population. An economic and social revitalization plan is aimed at integrating the conservation of patrimonial heritage, tourism and business activities (Constantinides).

## **2.6. Economic Integration and Sustainable Development**

In every society, including Mediterranean societies, having a job is both a condition for integration into urban life and a means of social-professional promotion; employment is considered like a "social elevator". But from one Mediterranean country to another, these mechanisms come up against many constraints. The range of responses made is difficult to conciliate with the objectives concerning sustainability, whether present or in the longer term.

The conciliation becomes more complicated in that we are confronted by political situations, economic regimes that are particularly diverse and often in the course of transition. This is the case of the Eastern cities which have moved from highly centralized State systems toward liberal forms, although badly managed as yet. In the South, the major problem as everybody knows is the considerable excess of job demands with regard to what the official and legal openings have to offer. In the North, the shortage in some professional areas goes hand in hand with persistent high structural unemployment handled by providential Government organs. Therefore, we can only roughly outline the answers appropriate to the various regional situations and suggest how they may be extended, shaped or reoriented, by putting them into realistic sustainability perspectives:

- In the emerging countries, informal sectors are tending to become temporarily sustainable (Huybrechts, Keles). They fit in with the formal activities of the regular districts. The two sectors are exposed to subtle forms of space and social-cultural integration. More emphatically, locally, the informal sector can cover the shortcomings of the public services in various fields such as transport or refuse

collection. The task consists not in eliminating this informal sector but injecting into it the basic sanitary and environmental concerns.

- In the Eastern countries, the major problems look very much like the result of badly controlled evolution toward liberalism and privatization. The high unemployment figures are grounds for privileging foreign investment, with little concern for the environment, and allowing local activities to develop with insufficient care about applying regulations. Better utilization of the "social capital" specific to these countries is suggested as the best way toward Sustainable Development (Maroevic).
- In the Northern countries, various types of responses apply. In France, the recommended approach is "supported economic" by enterprises. In districts where there are high unemployment factors, some success has been obtained with some success, with responses such as "controlled services", creating jobs in order to supply the inhabitants or "company nurseries". The most efficient are public assistance with the creation of firms in these districts, as part of the "city policy", and in particular with the creation of "free zones" as in Marseille-Nord.

Italy proposes other types of responses which are worth considering for all the other Mediterranean States. Massive public assistance to the benefit of industrialization in the South during the years 1960-70 only had limited effects and did not induce the expected development spirals. Conversely, observers underscored the dynamism of the "industrial districts" of the "third Italy" (Tuscany, Emilia, Venetia) where purely private initiatives without government assistance, since the 1980s, resulted in the establishing of dynamic economic centers based on small and medium size firms and industries, highly integrated and specialized flexibly in productive sectors ranging from precision mechanics and medical equipment to garment manufacturing and furniture-making.

Probably, it is within this potential area of small productive or service companies that all the Mediterranean cities should endeavor to push forward, drawing on artisan and traditional methods, combined with the necessary dose of invention. European aid is turning toward formulas like this, in particular through the loans of the European Investment Bank (EIB), which is highly active in Italy. Similar methods could be adopted by the financial organizations of the Arab world. However, it is important to find written or unwritten, explicit or implicit, encouraging or restrictive formulas that are flexible enough to combine the strategies of these small companies in the form of networks, with the final goal of sustainability. However, in all, it would seem that one of the major objectives for urban Sustainable Development should be the stimulation of the spirit of initiative and creativity. This brings up the question of the probable implications of the new technology on urban life and on the approach to sustainability. How can we conciliate "cyberville" with Sustainable Development? What about the British approach of "foresight" designed to evaluate the social impact of the new technologies within a Sustainable Development perspective (R. Barré, *Futuribles*, Jan. 2000) ?

## **2.7. Sustainable urban management players<sup>1</sup>**

How do we handle the move toward urban management and planning, incorporating in its objectives and methods Sustainable Development in all its accepted forms? This is a recurrent question concerning all the data and themes that we have just analyzed or simply outlined. Evidently, any general approach can only be singularized and adapted to the social-economic conditions, to the political regimes and to the national or even local geographical situations.

Many avenues lead to greater urban sustainability; they may be discrete or simply and publicly affirmed. Nevertheless, all of them involve a channel or an essential filter of national administrative contexts, the hierarchization of powers and skills between central and local levels. They also involve traditions or possibilities of local democracy, or even the participation of the inhabitants with new relations between private players and public players, set off by municipal availabilities in terms of construction or servicing and maintenance.

### **Unequal and diversified acknowledgment of Sustainable Development in the countries**

There is no exhaustive inventory that allows the measurement of urban commitments in terms of sustainability, and the criteria for evaluating this implication, even roughly, vary according to the countries. These criteria can range from the announcement of an Action 21, whose effects will have to be evaluated, through to discrete and gradual developments of local behavior, both among administrations and inhabitants.

As far as local Agendas 21 are concerned, Turkey has thirty of them, including Antalya, Bursa, Izmir (Huybrechts). In Croatia, very few municipalities have as yet answered government incitation to prepare Agenda 21 offerings. Such documents are provided for at larger scales, but "are often very extensive documents burdened with detailed analysis and lacking specific policies" (Maroevic). However, we note the exception of the Split built-up area, where actions are undertaken with international aid for water procurement and waste water treatment. In Egypt, it is only since the 1990s that environmental affairs, in their entirety, are the subject of legislative provisions, but remain on a second order among the population because of the concerns relative to job and housing shortages (El Kadi). During the same decade, 1990, in Tunisia, with an obligation to submit every agricultural, industrial and commercial project to an impact study, we move away from an appearance-enhancing vision to a concern for the fight against the degradation of the living framework and of sanitary conditions (Abdelkafi).

The Northern countries (Spain, France, Italy) have been indicated as being the "bad students" in Europe for local Agendas 21. Indeed, in each of these countries, for two decades, various programs have been aiming toward Sustainable Development objectives. This is the case of the Barcelona Diputacio, a regional administration

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<sup>1</sup> This paragraph has been organized more particularly according to the data contained in the various sub-regional reports.

committed to "an audit program with a hundred or so communities to set up Agendas 21 and establish a network of sustainable towns" (Diagonal, Oct. 2000). In Italy, after the failure of the National Sustainable Development plan in 1993, to implement Actions 21, there was a burgeoning of municipal initiatives because in 1999, a network of 150 sustainable towns was set up at the initiative of Ferrare and Modena, while Bologna was committed to a metropolitan Sustainable Development plan.

In France, local steps taken towards sustainability took place as of 1984, with the Urban Ecology Charts. There are forty or so of them which, although having no legal impact, make it possible to progress toward integrated actions. A similar approach has taken place among a hundred or so municipal and environmental plans with ministerial aid. During the 1990s, the Ministry of the Environment added an additional device, the Environment Chart, with 46 charts signed since 1992, recommending an overall approach to environmental themes by combining them with a built-up area project. The French study is designed to be progressive, before engaging local Agendas 21, and in particular, seeks to incorporate various sustainability objectives in the planning documents, as stipulated in the recent SRU law. Furthermore, the Government is ensuring that the Sustainable Development is integrated into the Plan Contracts it negotiates with each region. It is also interesting to see the commitment of the main French public firms toward Sustainable Development, as in the case of SNCF, EDF, Paris Airport, etc. as part of Actions 21.

### **Powers and territories for Sustainable urban Development**

Although Sustainable Development is very much an attitude, a behavior, it can only be effective, in terms of many of its themes and concerns, from standards and regulations involving a vast environmental right. But who is the regulating body? What are the application means? Which territories are most appropriate for these rules and their implementation, and which have the necessary flexibility? Is the urban scale always the most pertinent, and how do we handle a sub-regional or regional scale which is often preferred by supra-national organizations?

**State management** –central or provincial– is practically inevitable and imposed on all the municipalities, even when decentralization policies are effective. Accordingly, in France, the prevention of national, industrial and housing risks are Governmental prerogatives. In every country, the State deliberates, regulates and encourages in terms of Sustainable Development. For instance, in Tunisia, a Territorial and Urban Planning Development Code, published in 1994, aims at harmonizing the economic, social and environmental development to guarantee Sustainable Development. A very similar legislation took place in Egypt at the same time. Obviously, the practical scope of these texts still has to be evaluated by local case studies. The awareness of the legislator regarding Sustainable Development appears to be less obvious in other countries like Turkey, where the Constitution, while confirming the right of property, leaves little space to maneuver for general interest objectives and sustainability. In addition, the tolerated real estate speculation will not apply the efficient application of legislative texts designed to protect natural resources (Keles).

**Limited room for maneuver for local communities.** Traditions and experience of community autonomy vary considerably between North and South and depending on whether responsible people are appointed, elected and are or are not submitted to hierarchical control. Very rarely is there local management autonomy, and in almost all the countries, the municipalities depend financially on central Government. This dependence can be up to 80% of local budgets. Accordingly, even when there is a decentralization policy, the municipalities are essentially required to:

- on the one hand, apply national legislation,
- on the other hand, manage by sector, conventional domains like transport, safety, water supplies, drainage, security, waste and therefore many sources of pollution and intervention regarding the environment.

It is also obvious that the margins for maneuver will differ enormously depending on whether the city is large or small, or whether the metropolitan area has many million inhabitants and whenever the central government, whatever the country, wants to maintain tight control of things.

A change toward a Sustainable Development attitude therefore depends on mutual observation and negotiations between initiatives, manager concerns, local authorities and assignments that the central authority assigns to the walis, governors, prefects.

Through the concept of governing, there is a need to associate with urban management, the living forces of the economic world, the private sector, through partnership formulas. Only case studies will make it possible to evaluate effects in terms of Sustainable Development, to get to know better the stages of negotiations, orchestrations, prior to decisions deemed to be acceptable in terms of sustainability.

In all cases, Sustainable Development municipal strategies will lead to transversal inter-sector actions and therefore to reorganizing eventual municipal organization charts. But reorganization of this type presupposes greater availability in terms of trained and skill procedure (cf. below), as well as relays or encouragements from civil society or from non-government organizations.

### **The rising players of civil society**

More Sustainable Development as part of urban development can result from the informed will of the "prince" or the effective implication of all or part of the users and inhabitants. In the Twenty-first Century, the first formula no longer appears to be appropriate, and we are even thinking about the possibility of changing, in the Maghreb, from a relatively inefficient planning dirigisme toward "participative planning" which would establish consensus by drawing on opinions and points of view of all the players concerned (Abdelkafi). As far as the second formula is concerned, its amalgamation with greater democratization in decision-making would, in theory, benefit from large-scale approval, beyond the often sketchy aspects that are insufficiently experimented, of the good will involved.

Depending on cultural traditions and current regimes, the involvements of the inhabitants complies with the three following main types:

- the participation of inhabitants upstream or downstream of decisions concerning urban matters is relatively well established in the North, in particular with public survey procedures and their gradual improvement. Participation also finds its openings through the method of claims and the action of judges, leading to abundant prior case law. In the East, it would appear that, despite a legal obligation, participation in particular for development plans is confronted by many difficulties, in particular the excessively technical nature of the documents submitted to the inhabitants. "Public hearings usually attract only direct land owners. In order to secure effective participation, procedures have to be changed. The form of plan proposal is generally graphic and triumphalistic. In transition countries a transparent form of decision-making and consensus building are necessary" (Maroevic). In the South, the budding concern for national construction, after independence, probably extensively masked the emerging local consensus, taking into consideration the diversity of the inhabitants. The current withdrawal of the Government is leading an open action field for associative life, of which several examples are evident in Egypt (El Kadi). More often than not, this concerns the spontaneous action of district associations that can open up real dialogue and partnership with public services in areas that concern more particularly the local lifestyle. The more conclusive experiments are those of the well-off districts of Cairo, like Zamaleq.

In Algeria, "participative planning" methods are underway, also be rehabilitation operations. A typical example is the case of the "grand ensemble", a community residential building at Summam, East of Algiers, inhabited by different social categories and partly by co-owners. The project involves Government services, national enterprises, the Bab Ezzwar local community and a German cooperation. In the initial phase, the inhabitants are the subject of information and inquiries and participate in the production of the restructuring plans. The step toward production is nevertheless a subject of difficulties involved in the financial setup, which has to incorporate a contribution from co-owners amounting to approximately 28%.

- "advocacy planning". In spontaneous districts or in the rural world, experiments in the USA enter into the "advocacy planning" formulas based on the role of experts who assist the populations in precarious conditions, and who alone are incapable of negotiating with the administrations.
- participative action of the NGOs. These actions above all are aimed at improving the living and environmental conditions. They appear to be present throughout the East and South. However, regional relationships do not allow any quantitative or qualitative evaluation to be made and are more often than not limited to a brief allusion. Egypt is the exception, with, for instance, NGO Life, supported by PNUD, and NGO operating on the Heliopolis Gardens operation, and in Turkey, where NGOs may possibly initiate legal claims against official projects considered as damaging to the environment (Huybrechts).

## **2.8. The necessary training and information on sustainable urban development**

Regional surveys and reports invoke the shortage of competent and qualified personnel as the difficulties involved in improving urban management, the lifestyle and the upgrading of development methods or the application of regulations.

The answers to these problems could be established according to the following scheme:

- Urban aspects and developments toward greater sustainability become social subjects, and all training addresses public entities and categories that are increasingly diversified:
  - leaders and managers of local communities, elected council members or appointed parties;
  - political personnel;
  - union executives;
  - personnel from certain professional categories (health, engineering, law, etc.);
  - local and provincial administration personnel, directly or indirectly involved in urban aspects;
  - civil companies, associations;
  - the general public.

This type of training must be adapted to each different category:

- initial training during the 2nd or 3rd university cycle, for future Government service personnel, those of local communities, Chambers of Commerce, some large organizations and public or private operators, construction and urban engineering contractors.

This training, spread out over more than a year, can be offered either by specialized institutions such as the Urbanism and Development Institute, or by the Architecture School, following the architecture's diploma, or in engineering schools.

The goal is to go beyond approaches and training by sector and open up the way toward multidisciplinary approaches, filling out the necessary initial training.

- vocational training (selected weeks, evening classes) for personnel who are already operational, but who want to update their knowledge or prepare the same diplomas as during initial training;
- sessions of variable durations, working days, seminars, conferences for various publics.

Training in urban areas is fundamentally linked with research, technological development follow-up and, in each country, presupposes the articulation of teaching organizations and centers that are more particularly devoted to research, with the necessary interaction of personnel. The French experience of "Maisons de la Ville", created in several university cities (such as Grenoble and Tours) may be well worth observing.

Training organizations and national research poles have to enter into international networks like AESOP (Association of European Schools of Planning) to regularly confront national experiment, lines of research and approaches that can lead to harmonized policies and practices while allowing for local identities. Often, the field is open to Mediterranean perspectives like this.

### 3. Toward proposals to Mediterranean local communities for greater sustainability<sup>2</sup>

This last part is deliberately brief; it simply indicates the avenues of thinking and intensification relative to the objectives and methods of integrating the concept of **sustainability**. We have endeavored to take into consideration the complexity of managing and developing urban matters throughout the countries, each of which is specific, and therefore each of which has different sensibilities:

- in their forms of social-economic development;
- in the regimes governing them;
- in the setting up of central and local powers;
- within the margin of maneuver of local communities;
- within the capability of the inhabitants and civil society to become partners of the decision and management of the city.

We have grouped together areas that can be the subject of proposals without any hierarchization because, as a fundamental hypothesis, Sustainable urban Development implies transversal actions and a constant need for development and empirical adaptation to uncertain circumstances and to prospective projections. But as implied in the first two parts of this document, for any Sustainable Development action or policy, quantifiable standard elements and more qualitative documents, even more subjective elements, are inseparably bound together.

#### *1. Defining effective capacities and margins of maneuver available to the urban authorities to be able to work in terms of Sustainable Development, leading up to:*

- in each case, knowledge of the role of the Government, upstream of local urban policies and of its essential regulating role. All the Mediterranean countries will have to establish their territorial development strategies, first to slow down the excessive growth of megalopolis cities and also to permit the development of networks of small and medium size towns;
- in establishing urban actions compatible with local budget resources, with outside financial aid or with the possibilities of loans and the necessary conditions of guarantee. This will lead on to possibilities of programming, staggered in the more or less long term. It may well be worth evaluating the practical scope of the European LIFE-Environment tool designed to support innovative actions, local communities in terms of water, waste, pollution, protection of natural spaces, etc.;
- in choosing and defining territorial scales that are most appropriate to intervene or to manage. This will often prompt the urban authority to negotiate with the higher echelons (Government, regions) or with other neighboring territorial communities. It is essential not to transfer environmental costs outside of the municipal parameter;
- in reorganizing the organization chart of municipal services to favor multi-sector and transversal approaches.

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<sup>2</sup> A number of the proposals given are the result of in-depth discussions with Serge Antoine.

## **2. Founding or accompanying the logics of intervention among urban authorities, for Sustainable Development concerning:**

- the establishing of accounting and cost/ profit evaluation systems for the situations as observed, and the proposed or effective improvements in terms of sustainability, applied to the urban form, to the environment, to human resources and to the requests of the inhabitants;
- the creation of local "organization charts" with the use of audits on the basis of specific urban management indicators, those of lifestyle quality and the acknowledgment of the main Sustainable Development objectives (recycling, social equity, joint economic). The choice and pertinence of these indicators will govern their values as the "controlling tools" of the local policy for Sustainable Development;
- the generalized use of geographical information systems (GIS) to feed and update local data banks and materialize and confirm information for the public and guide decision-makers and managers.

## **3. Choosing between sustainability "low" or "high" options**

The former puts its trust in technological resources and innovations to compensate for effects on the environment and focuses on continuing qualitatively managed economic development. The second option puts priority on the conservation of all the present resources and limits responses of "technology remedies", meaning a break away from the accustomed habits of the "continuous growth mentality", or even that of waste.

Considering its advantages and constraints, each Mediterranean city will have to choose a middle path between these two options and hierarchize the fields in the priority areas.

- It would seem that for all the cities, there is a consensus of opinions in achieving standards recognized by international authorities concerning areas such as public health, power, water supplies, waste, and more generally the various sources of nuisance and pollution. Resource to regulations is necessary, but application is nevertheless dependent on the available financial and technological means;
- the control of the urban form, the possible evolution toward the compact city or greater multi-centrality, the preservation of farmland or natural spaces will reinvigorate physical planning through Master Plans. However, even updated, this type of document will only be useful if combined with legislative arrangements that are effectively put into application, in particular for the control of real estate and the forms of assistance, management and self-construction of housing;
- the objectives concerning social equity, employment and living conditions, on the other hand, depend less on development documents as such than on strategic development approaches to built-up areas or projects drawn up for the city. However, responses between cities in the South, East and North will depend on fundamental pressures and trends that are imposed on any Sustainable Development perspective. In the North, the trend is for the reconsideration of urban sprawl, to the benefit of urban regeneration and renewal formulae. In the East and South, for some decades more, it will be more a question of better managing gradual deceleration of urban growth.

**4. Must the methods for the practical application of urban Sustainable Development be harmonized in all the cities, on the pattern of Agenda 21?**

This agenda is defined as a voluntary way for a community to work on a long-term inter-generational perspective in an endeavor to accomplish, with civil society "systemic work in which territories, economy and ecology are associated". But eight years after the Rio Conference, less than fifty or so Mediterranean cities have undertaken this type of task in a complete and innovative manner.

Other openings are worth considering, for more modest and more specific objectives like:

- environment charts,
- simple good conduct codes such as those providing for a limit on the negative effects of construction sites (nuisance, noise, waste),
- the application of generalized impact studies prior to all urban planning operations.

**5. The development of specific policies and actions in areas like:**

- alternate energies; on this point, attention can be focused on forms of partnership between North and South enterprises, as is the case for joint ventures for drainage, launched by SANOFI in Morocco and Tunisia, or by Giordano Industrie for solar heating equipment in Tunisia,
- the development of public transport, drawing on efficient local initiatives in the South and East, such as private minibuses,
- the improvement of district listed as being of historical interest, while maintaining inhabitants and services, but leaving it up to each urban authority to define its conception of the patrimony,
- winning over urban wasteland and reallocation, recycling of waterfronts in coastal cities with the subsequent extensions for urban tourism and transformation of the economic base of the city,
- the development of tramp steamer operations for inter-city connections by sea could be an alternative to the construction of costly road infrastructures in terms of investments and the environment,
- the setting up of devices to forestall the effects of technological risks or natural risks (earthquake, flooding), but also the means and organisms assigned to manage crisis situations. In all cases, the cities have to draw on the return on experience, on the basis of catastrophic events.

**6. Two objectives forming part of a widened concept of Sustainable Development call for the thought and imagination of urban managers. These are:**

- the full use of human resources which are very unequally drawn upon. Responses can include such concepts as the creation of free zones, community banks, assistance in creating small companies and are yet to be evaluated. They could extend to the restarting of artisan activities, the creation of service activities turned toward the environment and even innovation in the vast field of the new economic and communication technologies. But we already know

about the computer brain drain from South to North, particularly evident in a country like Morocco. What actions can urban authorities use to hold onto their highly qualified personnel, and whose direct and induced activities would contribute to standardizing the economic basis of the city?

- social equity, which can extend from equal chances for the young to better differentiated services in the districts, through to the political choice of functional and social combinations. We still need to evaluate the bearing of such sociological options which may be confronted by spontaneous trends of movements toward community grouping forms.

In all cases, the most difficult task, as soon as the approach is no longer strictly ecological, is to find the means of conciliating and managing inevitable economic growth with schedules that cover the full range of social economic and environmental construction to which Sustainable Development corresponds.

#### ***7. Creating a general network of information, exchange and training between Mediterranean cities already committed to Sustainable Development approaches.***

This network would be voluntary, and in particular permit:

- the gathering and distribution of information,
- the exchange of experience and good practice,
- a means of accommodating young trainees coming from different Mediterranean countries,
- creating systems of solidarity between Mediterranean cities, for instance, to predict or to act in the event of catastrophic events (earthquakes, drought).

Networks could be established in more specialized areas like:

- in the sanitary field, in conjunction with the international networks of the WHO,
- in the field of urban development, in conjunction with an organization like AESOP (Association of European Schools of Planning).

#### ***8. Transformation or reinforcement in institutional and human capacities for city management.***

In the Mediterranean cities, the general trend is toward a multitude of urban management players. It is up to each city to organize its form of "governing" and to break it down into various scales: from built-up area to district. The diversity of the contexts, national or regional, leaves no room in the middle term other than for the advent or the establishing of highly specific organizations that cannot be generalized. Depending on the case, this will involve:

- developing actions by public/private partnership with, in particular, the role of Chambers of Commerce and various consular bodies aware of Sustainable Development;
- increasing the participation of the inhabitants and their associations, either by direct and targeted initiatives, or through various procedures provided for in the texts, in the same way as for public surveys;

- assisting the inhabitants who are not necessarily aware of the means that could improve their living conditions, with formulas of the "advocacy planning" type.

In the two latter situations, the role of the NGOs is particularly essential.

Therefore, we think that it will be necessary to carry out evaluations on the basis of concrete cases regarding the effects of such and such a form of urban governing within the vast field covered by Sustainable Development in order to draw information from it, that might even be transferable.

#### ***9. Associating and interconnecting the various levels of education with Sustainable Development.***

- at primary and secondary levels, extending civil training toward the fields of Sustainable Development and creating areas to encourage familiarization with energy savings, economic management of natural resources, etc.
- in higher education, providing for initial or vocational training turns towards Sustainable Development in the fields of urban development and management. This means addressing a recurrent observation in terms of the number of regional studies concerning the shortage of high-level managers and developers and qualified analysts on urban politics. The emphasis concerning these demands would be placed more particularly on multidisciplinary training incorporating urban politics, management tools, environment, public participation and techniques for resolving conflicts by negotiation;
- the possible creation, at the level of the Mediterranean space, of a summer university, as a forum for debate and the exchange of ideas and experience in terms of Sustainable Development between elected parties, associations, and personnel from existing university centers;
- the creation of Mediterranean academy to encourage research, publication, theses and the dissemination of knowledge by various communication facilities (Internet, television, radio) patterned, for instance, on the British Open University. An organization like this could form a backbone for the existing research centers in specific areas such as health, as well as port cities such as the Centro Internazionale Città d'Aqua, in Venice.

#### Closing remark:

According to the European Community Eurobarometer, 85% of Europeans consider themselves as attached to their city as they are to their country.

## Bibliographic References

### Subregional and national reports on urbanisation and town management

Egypte, par Galila El Kadi, 2001, 54 p.

- Synthèse sur l'urbanisation en Egypte et Libye, par Galila El Kadi, 2001, 4 p.
- Libya, by Ahmed A. Mahmud, 2001, 21 p.

Liban, Syrie, Turquie, par Eric Huybrechts, 2001, 75 p.

- Turkey, par Rusen Keles, 1999, 25 p.

Malta and Cyprus, by Glafkos Constantinides, 2001, 55 p.

Maghreb, par Jellal Abdelkafi, 2001, 81 p.

Slovenia, Croatia, Bosnia and Herzegovina, Albania, by Maja Maroevic, 2001, 37 p.

- Albania, by Alma Bako, 2001, 40 p.
- Bosnia and Herzegovina, by Mehmed Bublin, 2001, 35 p.
- Slovenia, by Alma Zavodnik, 2001, 19 p.

### Books, articles, studies, research work

Abdelkafi J. *La médina de Tunis*, Paris, CNRS, 1989.

Antoine S. "Les leçons de l'expérience historique" in *Environnement et Aménagement du Territoire*, DATAR et Documentation française, 1996.

Archibugi F., *Essays in the urban planning requirement for the sustainable development*, Roma, Planning Studies Centre, 1998.

Banister D. (ed.) *Environment, land use and urban policy*, Cheltenham, E. Elgar Publishing, 1999.

Borja J., Castells M., "Plans stratégiques et projets métropolitains", in *Le développement urbain dans la Méditerranée*, Commission européenne, DG XVI, 1998.

Brandon P.S. (ed.), *Evaluation of the built environment for sustainability*, Univ. of Salford, 1997.

Breheny M. (ed.), *Sustainable development and urban form*, London, Pion, 1992.

Bromley D.W., *Environmental resources in developing countries*, Univ. of Wisconsin, 1999.

Burton E. *The compact city* (Urban Studies, 37 (II), 2000).

Camagni R., Gibelli M.C. (ed.) *Développement urbain durable*. DATAR, Ed. de l'Aube, 1997.

Chaline C., *Les villes du monde arabe*, Paris, A.Colin, 1996.

Chaline C., *Urbanisme et développement. Evaluation des schémas directeurs d'Ankara, du Caire, de Rabat*, de Tunis, Paris, SEDES, 1989.

Coccosis H. Sustainable development of the cities in the Mediterranean, Paper prepared for the meeting of the MCSD Working group on Urban management. Split, April 26-27, 1999

Coccosis H. *Urban development and sustainable management for the Mediterranean towns (Greece)*. Paper prepared for the meeting of the MCSD Working group on Urban management. Split, April 26-27, 1999

Commission européenne, DG XI-Environnement. Groupe d'experts sur l'environnement urbain. *Villes durables européennes*, 1996.

Commission européenne, DG XI- Environnement. *Green paper on the urban environment*, 1990

Commission européenne, DG XI. *Charter of European cities and towns, towards sustainability*, 1994.

Commission européenne, DG XVI- Politique régionale et cohésion. *Development prospects of the Central Mediterranean regions. Mezzogiorno-Greece*, 1996.

Commission européenne, DG XVI- Politique régionale et cohésion. *Evolution prospective des régions de la Méditerranée-Ouest*, 1996.

Courbage Y. et Attané, *Projections démographiques des pays méditerranéens et de leurs zones côtières*, Plan Bleu, 2000.

Falque M., Massenet M. (dir.) *Droits de propriété, économie et environnement*, Paris, Dalloz, 2000.

Faucheux S., O'Connor M., *Technosphère vs écosphère* (Futuribles, n-251, mars 2000).

Habitat, *An urbanizing world, global report*, Oxford Un. Press, 1996.

Houghton G et Hunter C., *Sustainable cities*, London, Regional studies association, 1994.

Huybrechts E., *Densités beyrouthines* (Observatoire de recherches sur Beyrouth, n-12)

Huybrechts E., *La mise en oeuvre du plan de transport de la région métropolitaine de Beyrouth* (Observatoire de recherches sur Beyrouth, n-12).

Kerdoun A. *Environnement et développement, enjeux et défis*, Paris, PubliSud, 2000.

Layard A. and others, *Planning for a sustainable future*, London, Spon 2001

Leitmann J., *Sustaining cities*, New York, McGraw Hill, 1999.

Margat J., *L'eau dans le bassin méditerranéen*, fasc. 6, Plan Bleu, Paris, Economica, 1992.

Marshall R. *Waterfront in post industrial cities*, London, Spon, 2001.

MEDCITES. *Ten MEDCITIES towns' environment audits and strategies*, Paper presented at the meeting of the MCSD Working group on Urban management. Split, April 26-27, 1999.

MEDCITES / METAP, *Recouvrement des coûts, partenariat public-privé, financement des actions municipales*, Paper presented at the meeting of the MCSD Working group on Urban management. Split, April 26-27, 1999.

Moriconi Ebrard F., *L'urbanisation en Méditerranée de 1950 à 1995*. Plan Bleu, 2000.

Pérouse J.F., "Istanbul grande inconnue et métropole malgré elle", in *Petites et grandes villes d'Europe et du Bassin méditerranéen*, C.Vallat ed. Ecole française de Rome, 1998.

Plan Bleu. *Villes et développement durable. Des éléments pour un constat*. Note pour la Première réunion du Comité d'orientation du Groupe de travail de la CMDD sur la gestion des villes et le développement durable. Paris, 10-11 avril 2000

Plan Bleu. *Cities and sustainable development in the Mediterranean. Working paper* prepared for the MCSD. July 2000

Plan Bleu. *L'étalement urbain en Méditerranée*, mars 2001.

Plan Bleu. *Lebanon. Environment and sustainable development issues and policies*, 1999. (Mediterranean Country Profiles)

Priority Actions Programme (PAP). *Report on the questionnaire for city authorities*. Paper presented at the Second Meeting of the MCSD Working group on Urban management and sustainable development. Sophia-Antipolis, 24 January 2001

Priority Actions Programme (PAP). *Sustainable Urban Development in Mediterranean. Towards Regional Action Programme*. Paper presented at the Second Meeting of the MCSD Working group on Urban management and sustainable development. Sophia-Antipolis, 24 January 2001

Robertson J., *The new economics of sustainable development*, London, Kogan Page, 1999.

Sanguin A.L. (dir.) *Mare nostrum, dynamique et mutations géopolitiques de la Méditerranée*, Paris, L'Harmattan, 2000.

Sanlaville P., *Le Moyen Orient arabe*, Paris, A.Colin, 2000.

Satterthwaite D. and others, *Special issue Habitat II*, (Urban Studies, 34 (10) Oct. 1999.

Schoon N. *The chosen city*, London, Spon, 2001.

Signoles P. et El Kadi G. (dir.). *L'urbain dans le monde arabe, politique, instruments, acteurs*, Paris, CNRS, 1999.

Theys J. (dir.). *Développement durable, villes et territoires*, janvier 2000 (Notes du Centre de Prospective et de Veille scientifique, n° 13).

Tsoulouvi L. "Urban planning, social policy, new forms of urban inequality" in *Greek cities* (Int. J. Urban Reg. Researches, 20 (4), 1996).

Vallat C., "L'urbanisation illégale dans les grandes villes méditerranéennes" in *Les très grandes villes du monde*, sous la dir. d'E. Dorier-Apprill, Paris, ed. du Temps, 2000.

Wiel M., *La transition urbaine ou le passage de la ville pédestre à la ville motorisée*, Sprimont, Mardaga, 1999.

