

No Plan? ... Money Rules!

Lebanon's Construction Boom and the Challenges to Urban and Environmental Planning Von Waltraud Frommherz-Hassib

While a number of countries slid into recession during the year 2008, Lebanon witnessed spectacular economic growth. Most of the growth is, however, due to the recent boom in the construction sector. Over the last few years, not only trendy downtown Beirut but other parts of the country, too, have seen a major boom in construction. Real estate development is in overdrive and there is hardly any planning, hardly any communal or federal oversight.

The consequences for Lebanon's natural resources, infrastructure and life quality are severe. The author analyses the construction industry in Lebanon, traces the efforts of civil society actors, and shows, which factors are crucial in order to promote an ecologically and socially sound development in the future.



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While, in 2008, many countries went into recession the Lebanese economy grew at a spectacular rate of 8.5% - the highest in 15 years – and by 8.7% in 2009. It looks as if this will continue in 2010.1

This growth is mainly due to the building industry. Over the last few years, not only Beirut's trendy Central District but other parts of the country, too, have seen a major boom in construction. In 2008, the number of building permits rose by an incredible 79% - compared to 4.1% in the two previous years. This has probably been stimulated by the Doha agreement struck between government and opposition that ended a month-long political crisis. And the boom is continuing. Compared to 2009, in the first four months of 2010 construction rose again by 56.5%.² In 2009, tourism, too, broke all records. For the first time since the outbreak of the civil war, there were over two million visitors.

Development is occurring at such a rapid pace that there is hardly any planning, hardly any communal or federal oversight. The consequences for natural resources, infrastructure, and the quality of life are dire.

In the real estate business annual growth rates of over 30%³ are increasingly attracting capital from the Gulf states and from wealthy Lebanese expatriates. Such investors, who also make for the majority of visitors to Lebanon, like to invest in high-end real estate, which has led to an increasing demand especially in Beirut's Central District.

The run on luxury real estate has reached such levels that building plots are becoming hard to get by. This has fuelled fantasies of building an offshore island paradise for wealthy expatriates and Gulf state citizens. Following the example of Dubai, the plan is for an artificial island, 3.3 km2 in size, off the coast of Lebanon, an exclave complete with luxury homes, condominiums, shops, parks, and beaches. Yet, in the meantime, it has transpired that Dubai's similar project has not only garnered much attention but also left the Emirate with a sizable debt problem. A group of professors from Beirut's American University has called the project an "environmental and urban disaster."

The on-going construction that aims to repair the massive damages caused by the 2006 war between Israel and Hezbollah is a further factor fuelling Lebanon's building boom.⁵



Beirut City Center, Photo: W. Frommherz-Hassib

Developments in the Greater Beirut District

Beirut and its suburbs are threatened by untrammelled growth. Although there is a zoning plan for Greater Beirut District, many residents are worried sick by the numerous construction sites. Beirut's zoning plan⁶, drafted in the spirit of the 1950s, does not provide criteria for a liveable environment, nor for non-motorised traffic, i.e. pedestrians and cyclists, and there are no standards for public space, air quality, or noise control. Buildings go up as each contractor sees fit. The only limitations are regarding height and site density - and even there numerous exceptions are being granted. What is left, is a city not only scarred by war, but also by unchecked speculation - a city that is rapidly loosing its last havens of tranquillity and the everyday life of whose inhabitants is marked by traffic congestions, smog, noise, and the struggle to get access to even elementary services such as water and electricity.

Since the 1990s, Beirut's posh downtown Central District, an area of 1.8 km2 heavily damaged during the civil war, has been redeveloped as a "Hong Kong on the Mediterranean" by Solidère, a construction company controlled by the prime minister. The quarter has been almost completely reconstructed, yet what was once a vibrant city centre is today a heavily guarded gated community housing high-end stores, restaurants, and public spaces open only to a sufficiently solvent clientele. Only a stone's throw away are neighbourhoods where the former line of demarcation and the scars left by the civil war are still only too visible.



Beirut's New Waterfront, Photo: W. Frommherz-Hassib

A lack of plan?

Every landowner in Lebanon, no matter, where their property is located, may legally build houses of up to four storeys on 10% to 20% of his or her parcel of land. The only exceptions are nature preserves and plots on the Mediterranean coast. No binding site plan, no public hearing is necessary in order to be granted a building permit. Nor is it necessary to prove that there is a working sewer system of adequate size or that there is an access road in place.

Only about 10% of all Lebanon does have a legally binding local master plan⁷ that supplants national law by specific building regulations – and about a fifth of them are not legally binding. Moreover, although there are local zoning plans for main settlement areas – the one for Beirut is from the 1950s – such plans exist only for about 40% of current areas of urbanisation.⁸ Negotiations between planning authorities, ministries, and local authorities do usually take very long. As zoning involves a lot of money, landowners put pressure on local authorities so that they can make more profit.

According to the central planning authority (Direction Generale d'Urbanisme, DGU), during the last two years only two new master plans have been submitted for review. After more than ten years, half of the plans are still work in progress. As there has been a freeze on recruitment for ministries and authorities since 1995, it is very unlikely that, in the short term, much will change about Lebanon's "lack of plan."

Lack of basic data

During the civil war years, almost all system of data gathering collapsed. Up to the present day, Lebanon's

statistics agency (founded in 1998) is fighting an uphill struggle to create a reliable collection of data for the country.9 As the last census took place in 1932, the statistics agency can only publish population estimates based on registered buildings and the number of households. 10 Frequently, voter registers are used that list everybody registered at a certain place. Yet, these do not reflect actual population figures as people who have moved and even people living abroad are still being listed. With a population of 4.1 million¹¹ and an estimated diaspora of anywhere between five and 14 million, voter registers will only provide a greatly distorted image of Lebanon's actual population distribution. A new census is nowhere in sight, as it could threaten Lebanon's political status quo which is based on the size of the different religious groups.

Up until today, about a third of Lebanon does not have a land register. Only Beirut, the coastal area, the agricultural areas in the Bekaa Valley, and a narrow strip along the road to Damascus are on a land register. Many areas affected by the current boom in construction such as Mount Lebanon, the area south of Beirut up to Sidon, and to the north up to Batroun do not have a land register. Here, nothing has changed since the time when Lebanon was a French mandate¹² and this situation, which provides ample ground for endless controversies regarding the ownership of land, will not change anytime soon.

According to official figures, there are about 410,000 Palestinian refugees in Lebanon¹³, although the actual figure is probably lower. Still, they are a significant part of the country's population. About 221,000 of the registered Palestinian refugees¹⁴ live in camps on the periphery of the cities of Beirut, Sidon, Tyros, and Tripoli. Legally, these areas are "humanitarian havens" and fall into the responsibility of UNRWA. They are thus outside of Lebanon's planning, utilities, and administrative structures and constitute a "special zone" hardly integrated into the Lebanese state.¹⁵

Provided Palestinian population growth in Lebanon has proceeded alongside patterns in the Gaza Strip (in 2010 3.29%, the sixth highest in the world)¹⁶ and on the Westbank (in 2010 2.13%) this would imply severe consequences for urban planning. The planning authorities will thus no longer be able to ignore the growing need to plan for their Palestinian populations.

Weak state structures

Modern urban planning began in Lebanon already during the French mandate. After the mandate had ended, administrative structures in urban and regional planning were quickly co-opted by a dynamic private sector. Traditionally, the Lebanese state has always kept interventions and regulation to a minimum.¹⁷

Still, to get the permission, for example, to build a department store about 20 bureaucratic procedures have to be gone through. Among the institutions involved are the Order of Engineers, the Direction d'Urbanisme, the Ministry of Public Works / Department of Urbanism, the water and sewage, electricity, and telephone authorities, the Ministry of Finance, and the municipality. Yet, none of these will assess what effect construction will have on the environment, none of them will review whether it fits into an overall concept of development; the interests of residents are not looked into, nor are there any efforts to optimise the project or to even adapt basic infrastructure to its needs.

Via the Higher Council of Urban Planning, each projected development – be it a major improvement of infrastructure, be it a small local master plan – is being directly submitted to government officials for approval. At the same time, planning authority (DGU) employees will spent at least part of their working hours on allotting apartments in housing projects. The result is an enormous backlog made even worse by the freeze on recruitment for all authorities that has been in place since 1995.

Lebanon's Ministry of the Environment was created in 1993. Since then it has had the support of numerous international projects, yet it is chronically understaffed, has hardly any backing from within the government, and is continuously sidelined when it comes to reviewing and enforcing environmental legislation¹⁹ and policies. In addition, there are no guidelines governing when, for example, an area should be declared a nature preserve and no action plans for how to implement legal provisions.

Master plan or no master plan, every building application will be submitted to the chief of the local administration, too. Local authorities, though, rarely have the expertise nor the funds necessary to handle sustainable urban planning – and frequently there is a lack of political will to do so in the first place. How building applications will be dealt with is therefore mostly

up to the discretion of the mayor or of influential citizens. Most local authorities have only been established in 1998. In many parts of the country, especially in the north, there still are no local authorities.²⁰

Overall, due to a lack of funds, staff, weak institutions, and overlapping responsibilities the efficiency of urban, regional, and environmental planning in Lebanon is poor. The unwillingness to co-operate and co-ordinate efforts makes this bad situation even worse.²¹

In response, a further authority has been created, the Office of the Minister of State for Administrative Reform, OMSAR. Its job is to draft fundamental reforms²², yet this is a slow process – something confirmed in a report on Lebanon's institutions published by the Worldbank²³ as well as by everyday experience with the country's labyrinthine institutions.

Depletion of resources

In order to make reconstruction after the civil war as effective as possible the Council of Development and Reconstruction (CDR) was created as early as 1977. The CDR is not a ministry but an independent authority that reports directly to the cabinet. With the end of the civil war, the CDR became the central planning authority for reconstruction and regional planning. The CDR is better funded and its staff is much more qualified than that in ministries, never mind in the local authorities.

In theory, with its National Physical Master Plan for the Lebanese Territory (NPMPLT), the CDR has created the basis and the guidelines for the drafting of local master plans. In its final report the council addresses numerous criteria and problems of regional planning, yet does not seem to be following up on them. For example, groundwater zones with the highest hazard level are pointed out, yet in actual planning there are no corresponding measures to protect groundwater in such areas. Generally, natural resource management (groundwater, surface water, agricultural areas, mineral resources) do play little to no role in regional planning. Other than designating national parks, environmental issues are mostly absent. For the implementation, there are merely hazy recommendations, no legally binding rules or time lines. As there was little interest in the issue of national master plans, it took parliament four years (2005 - 2009) to ratify the report and plan.

When drafting local master plans it is not necessary to prove that they are based on the national plan – or at least do not contradict it. Thus, the national master plan, while a step in the right direction, has very little effect other than being a general sort of recommendation. According to the planning authorities, it has yet to be used by relevant decision makers.

In order for speculators to maximise profit margins, very little care is taken to regulate the size of lots or building density. This means that little heed is taken to protect communities or the environment. Usually, local authorities lack the expertise necessary to grasp how a building's size is interrelated with street spaces, a neighbourhood, a community, a whole region. Thus overriding aspects of a building's function and quality are disregarded, as are environmental factors such as pre-existing pollutions and the ways in which such stresses may accumulate.

To make sparing use of land is a criteria generally ignored. The actual expansion necessary is never even discussed in urban or regional planning – and that although there are plenty of empty lots and brownfield sites. In order to evaluate how much construction is needed, reliable population statistics would have to be ascertained.

With the exception of a few nature preserves in the mountains, the preservation of scenic landscapes and possibilities for recreation are being completely ignored. This is highly problematic especially in urbanised areas where there is little public space for recreation and hardly any possibility to enjoy nature and landscape.

In 2002, an environmental legal framework was passed which, for the first time, enables environmen-



Beirut's suburbs, Photo: W. Frommherz-Hassib



Beirut's suburbs, Photo: W. Frommherz-Hassib

tal impact assessment for projects of a certain size. A first such assessment was performed as part of the management plan for the Tannourine cedar forest²⁴, yet the practice is all but established.

Theory and reality

Already today, if compared to actual developments and the current construction boom, many statements in the national master plan have become only so much paper. At present, the CDR is drafting a detailed master and management plan especially for the coastal areas. By the time it is finished, new resort developments, housing, and industrial estates will already be in place. Thus, planning – environmental and urban planning especially – can do nothing but react to the unstoppable course of affairs.

At the same time, the metropolis Beirut is spreading unchecked into a nature preserve planned for the catchment area of the Beirut River. This will, once and for all, thwart any chance to create a recreational area nearby the city.

The Jeita source provides 80% of Beirut's water supply. Rapidly growing uncontrolled construction with hardly any effluent disposal has already contaminated the source with bacteria. The national master plan, instead of protecting the Jeita catchment area, designates it as threatened, yet does not provide any planning recommendations. In reality, the area is one of the hotspots of new construction. In addition, the reform of the water sector, passed in 2005 as part of the National Action Plan, has run into political obstacles and thus gained little traction.

A further problem is the lack of adaptation of laws sometimes dating back to as far as the 1920s. Thus,



Beach resorts with gated areas. Photo: TerraServer 21.04.2009

the penalty for operating an illegal quarry is 100 LL (0.068 \$)²⁷, making the regulator a laughing stock. Private investors are still exploiting the almost boundless lack of legislation and regulation to make their profits on the back of the general public, of nature, and the environment.

Extraction for reconstruction

In order to build, two things are necessary – land and building materials. Even before the present boom,

Lebanon needed about 3 million m3 of gravel and sand per year to produce concrete and cement (not counting major projects).²⁸ Over half of Lebanon's quarries are in Mount Lebanon province. Many are illegally operated and ignore all environmental issues. Frequently their operation will cause tremors and thus not only irretrievably harm nature and landscape but also damage buildings and utility lines.

Of the Lebanese coastline, about 250 km in length, only 49 km of beach and 11 km of cliffs still remain (21%). The rest is covered by urban settlements (about 50%), industry (10%), beach resorts (7.5%), ports (5.3%), dams and garbage dumps (4%). The coastal area is already strained by settlement pressure and erosion caused by Egypt's Aswan Dam which retains sediments that would otherwise reach the eastern Mediterranean.²⁹

Against this background, the extraction of sand, either directly at the beaches or off shore, as well as the extraction of gravel from riverbeds, will have catastrophic consequences for the coastline. Many beaches, especially in Greater Beirut District and in the south of the country, have already been heavi-



Considerable settlement activities within groundwater high risk areas. Source: Atlas du Liban (map edited by the author). Photo: TerraServer 1.1.2000

ly depleted if not altogether destroyed. The problem has been exacerbated by the major land reclamation projects of the 1990s. About a third of the material extracted was used for reclamation projects in Greater Beirut District (Dbayeh, Beirut Central District, international airport).³⁰ All efforts by the government, to limit the extraction of sand or stone, be it the 1995 and 1996 Master Plan for the Management of Quarries, be it the implementation of Decree 8802/2002, have so far failed.³¹ In 2005, and after taking legal measures, 18 NGOs led by Greenline managed for the first time to have two illegal sand extraction operations in Jiyeh and Nahr El-Kalb stopped.³²

Lebanon's waste and sewage issue is still unsolved. Although there is countrywide waste collection, waste is neither sorted nor disposed off in an appropriate manner. Already in 2005, in its National Master Plan, the CDR has pointed to this problem and has called the situation, especially in the agglomerations, an emergency³³; yet, nothing has changed about the laws or their implementation. It is hard to imagine what the consequences will be, once all the buildings presently under construction will be occupied.



Garbage dump on the coast near Sidon. Photo: Green Line

Depending on the region, between 35% and 74% of Lebanese households are connected to a sewer system, yet most of it is ancient, in a very bad state, or seriously undersized. In addition, most of the sewage remains untreated and is disposed off into a watercourse or the ocean.³⁴ Even worse is the uncontrolled seepage of uncollected sewage – either because there is no sewer system or because of leaks – into the ground water. This problem is exacerbated by the uncontrolled urban sprawl.



Uncontrolled housing sprawl and development of linear settlements in the Bekaa Valley. Photo: TerraSever 15.11.2002

Urban sprawl is not only a wasteful use of land and landscape. It also leads to very high connection charges. Water mains, sewers, and power lines do have to negotiate long distances making them costly, as a few households have to share the bill.

Thus, as was the case during the civil war, citizens will try to help themselves, getting their water from tank trucks, installing their own power generators, or siphoning power. Sewage will remain untreated; waste will be disposed off by just burning it or by throwing it down the next ravine.

Add to this, that for each building permit there is a fee to pay for infrastructure, yet almost universally the money will seep away into unknown channels, as there is no accountability for how the funds are being used.

Privatisation of public space

Although, in Lebanese law, the entire coastline is regarded as inalienable public property one of the greatest problems is its privatisation. In the whole of Greater Beirut District there is only one public beach, Ramlet El-Baida. When, in 1998, the NGO Greenline discovered that this beach, too, had been sold to two companies and that some influential politicians were involved in the deal, public pressure mounted to such a degree that plans to build a beach resort in the location had to be shelved.³⁵ Yet, the sale of the property has still not been revoked and the investors' plans might still be realized. According to Decree 144 – though dating from 1925 it is still in force – private use of public space can only be provisionary and may last, at most, for one year (the lease fees are minimal).

Local urban planning – if at all existant – is almost exclusively focused on individual buildings. No effort is



Uncontrolled burning of waste. Photo: W. Frommherz-Hassib



Intensive use of public space at Beirut's Corniche. Photo: Waltraud Frommherz-Hassib

being made to follow a policy for sustainable development, adequate infrastructure, or even open spaces, never mind any form of residents' participation. The public and semi-public spaces that are left consist of nothing but gaps between buildings or streets used for parking and the placement of rubbish bins. Inhabitants of Beirut have to make do with 0.8 m2 of open space per inhabitant, while central European cities allot ten, even twenty times as much. Yet, in Arab cities, too, public or semi-public spaces are indispensable for a number of reasons and activities. Public space is the location people move in, exercise, pass time; it has important ecological and microclimatic functions and offers a place where to relax. Especially in places where living conditions are cramped, public space is an extended living space for the socially disadvantaged, people who do not have the means to go to cafés or restaurants. In a heavily fragmented city such as Beirut – and against the background of Lebanon's diverse society - active use of public spaces can be an important social catalyst providing a place where to meet, where to form a shared identity, develop a political culture. Public space has to be more than superficial enhancements at a few privileged locations; public space is the sine qua non of every liveable city.

Raising awareness

In Lebanon there are numerous environmental NGOs – 137 alone are registered with the Ministry for the Environment.³⁶ Their expertise and the way they operate are widely divergent: There are coalitions of experts and activists such as Greenline³⁷, environmental and social activists such as Indyact³⁸, international organisations such as Greenpeace, as well as groups



Public access to the Mediterranean in Beirut. Photo: Waltraud Frommherz-Hassib

with a purely local focus. A group such as APSAD³⁹, which is trying to preserve the country's cultural heritage, works in close collaboration with state agencies, while others focus on certain neighbourhoods.

Universities, too, are increasingly active in making urban, regional, and environmental planning not just a multisectoral task but also in offering tuition. In 2006, dedicated urban planners joined forces as part of Alba University's Institute of Urban Planning in order to scientifically evaluate post-war reconstruction. Since then, the group Majal⁴⁰ has extended its activities to include sustainable methods of planning; the group offers consulting services concerning technical and legal aspects, participative planning (as part of good governance)⁴¹, and sustainable urban planning.

Since 2001 – a first in the Arab region – a programme for landscape design and eco management has been established at Beirut's American University. Here, landscape architects to be are being tutored in aspects of their trade that go beyond designing parks for mansions. They learn how to design open spaces and how ecosystems work; they engage in issues such as social responsibility and the history and culture of landscapes.

A study published by the architecture department of Beirut's American University gives additional impetuses. Its aim was to improve the residential environment during the reconstruction of Beirut's Haret Hreik neighbourhood that was severely damaged during the 2006 war. In the course of a so-called "design charrette" citizens participated in the design of street spaces and squares with the aim to make them easier to navigate, more walkable, more accessible, better ventila-

ted and lighted, and greener – and thus more liveable. From the very beginning, the authors of the study knew that the planners, who were actually in charge of the project, would have quite different priorities. The main aim, therefore, was to get the attention of the media and create public debate. This was only partly successful, as discussions were brief and limited to a small circle of experts. In the end, reconstruction did nothing but create new buildings. Nothing was changed about site density and residents still have to cope with congested streets, lack of light, bad air, and humidity.⁴³

Conclusion: No sustainable development without the involvement of the state

In Lebanon, the instruments of urban and regional planning remain blunt. They are not able to deal with the problems caused by the construction boom during reconstruction and are unable to solve them in a sustainable way. Urban development is almost exclusively focussed on the short-term economic gains of certain interest or ethnic groups. Where there are local master plans at all, they are mostly obsolete and, as is the case with the national master plan, they are being sidelined by the construction boom. Sustainable, social, and economic factors go almost unheeded. There is a major imbalance between the structural framework – political, administrative, and social factors – and economic growth.

The developments described above are not solely the effect of the ruthless pursuit of profit by an economic elite. They are being facilitated by a state that does not have a monopoly on power, by a state that is impotent to develop and enforce a legal system and to follow transparent guidelines.



A flyer promoting Greenline's campaign for the right to public green spaces and natural resources (supported by the Heinrich Böll Foundation, Middle East Office, Beirut)

Lebanon's "weak state" is a symptom of an overall political culture based on the interwovenness of economic and political elites along religious divides: "Political decision makers and the construction industry's interests on the real estate market are tightly interwoven. This is a generally known fact and politicians are not even trying to hide it."

As long as decision makers in ministries and local authorities do get a cut from building and real estate speculation, and as long as they are not accountable for the dire consequences their actions are having on the population and the environment, the situation will only get worse.

Sustainable urban and regional planning has to be comprehensive. Thus, a pragmatic, non-partisan solution must finally be found for the Palestinian refugee camps. The aims formulated in the national master plan have to become mandatory for all local planning. In order to achieve this, a corresponding administration of justice has to be developed and enforced. Keeping in mind the questionable simile of calling Beirut a "Hong Kong of the Arab world," one should remember what the mayor of Seoul once said concerning the redevelopment of his city: "Only a city one would like to live in is a city where one will invest."



Beirut City Center, Photo: Ute Mai

Interviews

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- Ali Darwish, Agro-economist, General Director Green Line
- Ninette Fadel Nasr, The Ministry of Transport and Public Works: Directorate General of Urbanism (DGU)
- **Ghaleb Faour**, National Council for Scientific Research, CNRS, Remote Sensing, GIS
- Samir Feghali, Council for Development & Reconstruction, CDR, Head of Department National Land Use Planning
- Jala Makhzoumi, American University of Beirut, AUB, Associate Professor of Landscape Architecture, Coordinator Landscape Design and Ecological Management Program
- **Zahra Ramadan**, The Ministry of Transport and Public Works: Directorate General of Urbanism (DGU)
- Lina Yamout, Ministry of Environment

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Endnotes

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- http://staff.aub.edu.lb/~webinfo/inthnews/local%20news/ april2009.html
- Israel's 2006 attacks led to the destruction of many roads, bridges, about 15,000 housing units and 900 factories, markets, farms, shops, and other commercial establishments. For more details see: ICG Report No. 59, Israel/ Hizbollah/ Lebanon: Avoiding renewed conflict, November 1, 2006, p.1, http://www.crisisgroup.org/en/ publication-type/media-releases/2006/mena/Israel%20 Hizbollah%20Lebanon%20Av oiding%20Renewed%20 Conflict.aspx
- ⁶ The zoning plan is a land-use plan and regulates uses and the size of construction.
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- ¹² Verdeil, E., et al., 2007, p. 21, Figure I-15
- 13 http://www.unrwa-lebanon.org/Refugees.aspx
- 14 http://www.unrwa-lebanon.org/Refugees.aspx
- L. Mousa, 2008, p.77, 90. In June 2010, an initiative to grant Palestinian refugees more rights was introduced into parliament by Walid Jumblatt, leader of the Druze community and chairman of the Progressive Socialist Party. Among other things, the initiative proposes the right for Palestinians to own property. It is to be expected that this motion will fail due to the opposition of rightwing, especially Christian parties. See: Lebanon: Beirut Rally Demands Palestinian, June, 28 2010, http://arabreform.net/spip.php?article3380
- http://www.cia.gov/library/publications/the-world-fact-book/geos/gz.html
- 17 Kögler, O.; 2005, p. 46
- ¹⁸ http://www.doingbusiness.org/ExploreTopics/DEalingLicenses/Details.aspx?economyid=109
- ¹⁹ http://www.dailystar.com.lb/article.asp?edition_ ID=1&article_ID=111988&categ_id=1#axzz0qqBaRGUd
- ²⁰ Verdeil, E., et al., 2007, p. 26, Fig. I-17
- ²¹ Bödeker, J.M., 2008, p. 120-121

- OMSAR's vision statement reads: "Bringing the Lebanese post-war public administration into the 21st century through an optimal and coherent introduction of Institutional Development (rehabilitation and reform) and Information Technology (systems and communications) measures that render streamlined, transparent and traceable processes fulfilled by productive civil servants for the benefit of both the general public and government." Yet, on the ministries website is the following statement: "There is little doubt that changes are occurring, however the tangible outcomes are not always apparent because much of the work is long-term planning and development. The short-term changes, on the other hand, though tangible, may not seem quantitatively significant at this time."
- ²³ In 2007, as compared to 2000, only the sets of rules have improved. On the other hand, responsibility, political stability, legal process, and anti-corruption measures have all seen a decline. http://siteresources.worldbank. org/INTLEBANON/Resources/AAG-LBAM09.pdf p.2
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- 25 http://www.bgr.bund.de/cln_144/nn_323902/DE/Gemeinsames/Oeffentlichkeitsarbeit/Pressemitteilungen/ BGR/bgr__100319.html
- ²⁶ Conseil du Développement et de la Reconstruction (CDR), 2005, p. 52
- ²⁷ Böedeker, J.M., 2008, p. 123
- ²⁸ CDR, 2005: NPMPLT, Final Report, IV.8.1
- ²⁹ Matter carried by water, i.e. sand and mud from the river Nile, is withheld by the dam and does no longer reach the sea – and thus ocean currents cannot deposit it along the coast of the eastern Mediterranean. The result is, that currents, rather than depositing matter along the coast, will cause erosion.

- 30 CDR, 2005, NPMPLT, Final Report, II.7.3
- 31 CDR, 2005: NPMPLT, Final Repot, IV.8
- 32 Dekret 472/2005: 353/2005
- 33 CDR, 2005: NPMPLT, Final Repot, IV.8.3
- 34 http://www.gtzwaterlebanon.org
- 35 http://greenline.org.lb/new/english/projects_campaigns/ advocacy empowerment/public beach.html
- 36 Bödeker, J.M., 2008, p. 130
- 37 http://greenline.org.lb
- 38 http://www.indyact.org
- 39 APSAD (L'Association pour la Protection des Sites et Anciennes Demeures au Liban), http://www.apsadonline. com/
- 40 http://www.majal-lebanon.com
- 41 "We define governance as the traditions and institutions by which authority in a country is exercised for the common good. This includes (i) the process by which those in authority are selected, monitored and replaced, (ii) the capacity of the government to effectively manage its resources and implement sound policies, and (iii) the respect of citizens and the state for the institutions that govern economic and social interactions among them." Source: http://info.worldbank.org/governance/, 2009-10-25
- 42 Fawaz, M. + Ghandour, M.; 2007
- 43 http://www.taz.de/1/leben/alltag/artikel/1/goettliche-planung/
- 44 Kögler, O., 2008, p. 58
- 45 http://www.spiegel.de/reise/fernweh/0,1518,676024,00. html