



AMERICAN UNIVERSITY OF BEIRUT

ISSAM FARES INSTITUTE FOR PUBLIC  
POLICY & INTERNATIONAL AFFAIRS

معهد عصام فارس للسياسات العامة  
والشؤون الدولية

# MUNICIPAL AUTHORITY AND ENVIRONMENTAL GOVERNANCE IN LEBANON



## AUTHORS

---

### CLIMATE CHANGE AND ENVIRONMENT TEAM AT THE ISSAM FARES INSTITUTE FOR PUBLIC POLICY & INTERNATIONAL AFFAIRS:

**Nadim Farajalla**, Program Director

**Manale Abou Dagher**, Researcher

**Farah Machmouchi**, Researcher

**Ghida Soubra**, Researcher

© All Rights Reserved. Beirut, February 2024.

This Policy Brief is published by the Issam Fares Institute for Public Policy & International Affairs (IFI) at the American University of Beirut and is available on the following website: <http://www.aub.edu.lb/ifi>

The views expressed in this document are solely those of the authors, and do not necessarily reflect the views of the Issam Fares Institute for Public Policy & International Affairs.

## INTRODUCTION

---

The environmental degradation and the eco-abusive practices that Lebanon is mired in are due to past development policies that are related not only to the environment but also to the country's economy<sup>1</sup>. Plotting a path for Lebanon to follow out of this dire situation requires an understanding of the critical elements that have contributed to this decline. These elements are related to the current policies and legal frameworks along with the fiscal and economic developments that have led to the present status of the environment.

Ensuring better environmental governance in the country can start by elaborating environmental policies at the level of municipalities which would support the country's economic development in a sustainable manner. Municipalities are responsible for Solid Waste Management, urban planning, licensing various establishments, resolving conflicts, and contributing to public interest projects. They also have the authority to set tax rates and secure financing for specific projects (Municipal Act, Law No. 118/1977, and amendments).

## CHALLENGES FACING MUNICIPALITIES IN ENVIRONMENTAL GOVERNANCE

---

Under the country's central government are eight regional governorates (or Mohafazats) which consist of a total of 26 districts (or Cazas). At the lowest level, the country is divided into over 1000 municipalities which (except for the largest urban areas like Beirut and Tripoli) represent in the range of thousands of people only (UNSCOL, 2023). Within the central government, environmental policy is crafted primarily by the Ministry of Environment (MoE) although other bodies have certain environmental responsibilities like the Ministry of Energy and Water (MoEW) and Ministry of Agriculture (MoA). At the level of municipalities, responsibility for environmental issues varies across municipalities and regions. More importantly, most municipalities are largely still dependent on the central government for financial support and various approvals since the bulk of power is still centralized (UNSCOL, 2023).

The number and size of municipalities vary greatly across the nation, with many local authorities finding it difficult to secure the financing and resources needed to fulfill their duties. Municipalities are required to join Municipal Unions; however, many choose to do so in order to benefit from shared resources, expertise, and collaboration with other local authorities. The effectiveness of Municipal Unions depends on a variety of factors, including the strength of local governance structures, the availability of resources, and the commitment of member municipalities to work together toward common goals.

---

<sup>1</sup> The analysis shown in this brief was based on data last collected in August 2023.

Challenges facing municipalities can be grouped into three categories, financial, political, and structural. These are discussed in the sections below.

1. Financially, Lebanese municipalities have few possibilities for raising funds. Most of them rely heavily on central government contributions, which amount to 50–70% of their overall budget (Sleiman, 2017). Municipalities collect 36 direct fees, while only three account for 83 percent of their total direct earnings (Harb and Atallah, 2015). Three-quarters of the Independent Municipal Fund's money is allocated to municipalities and unions using a registered population figure which does not account for the residents of municipalities but rather only those whose birth is registered at the municipality (Atallah, 2011). Further, between 33% and 87% of municipalities' expenditure is on personnel or temporary worker salaries (MoIM, 2011).
2. Since 1997, after the amendments of the Municipal Act (amended by Law No. 665 of 1997), politicians have hampered the efficient implementation of local governance, and have promoted the expansion of small, institutionally weak municipalities through gerrymandering and other similar measures (Sleiman, 2017). Due to the fragmentation of municipal districts, competition in local elections is largely between intra-sectarian, competing political groupings, often with a lack of any programmatic speech (Sleiman, 2017). The central government utilizes its discretionary authority to regulate the Independent Municipal Fund earnings, frequently issuing payments in violation of legally mandated timelines and transparency criteria (Atallah, 2011) and the majority of municipalities rely on the central government, particularly the political elite, to get resources and carry out local projects. This provides a suitable environment for corruption and strengthens patronage linkages that tie local service recipients with politicians and power brokers.
3. Lebanon is home to the highest number of municipalities per km<sup>2</sup> (Sleiman, 2017). At least 70% of extant municipalities are small, having a recorded population of less than 4,000 residents (Harb and Atallah, 2015). Moreover, 400 municipalities have only one employee, 87% have fewer than six, and an additional 400 have insufficient municipal administration (Atallah, 2011; Harb and Atallah, 2015). According to the Municipal Law the municipal council is in charge of making decisions in a municipality; however, at least five ministries and state agencies manage the municipal sector, depriving municipalities of some of the authority guaranteed by law (Harb and Atallah, 2015).

## CURRENT ROLE OF MUNICIPALITIES IN ENVIRONMENTAL GOVERNANCE

Based on the Municipal Act, Law No. 118/1977 and its amendments, municipalities have one of the major roles in environmental governance. Four main environmental priorities reflect this role which has the potential of either positively impacting policy implementation or obstructing it: (1) Land Use and Forestry; (2) Solid Waste Management; (3) Air Quality; and (4) Water and Wastewater Management.

## **LAND USE AND FORESTRY**

The responsibility for issuing building permits rests with the mayor – head of municipality. The building permit, in turn, is based on additional approvals from the appropriate institutions, such as the General Directorate of Urban Planning, the Engineers' Syndicate, the Union of Municipalities (if the union has a special unit for urban planning such as Matn, Jbeil, Batroun, and Koura), and the Governor of Beirut within the scope of the Beirut Municipality (in coordination with the mayor). In the absence of a municipal council in a town, the District Commissioner (Kaemakam) issues the building permit and is responsible for handling and managing the administrative and organizational issues of the town. In the absence of a District Commissioner, the administration is returned to the governor.

In coastal areas, coastal management is a basic service of local government. Municipalities participate in coastal management decisions, they also assist the central government and provide technical support (when possible and available), as well as conduct multiple education and communication strategies in their area. They also develop tailor-made governance arrangements for ports.

In elevated regions, quarries and crushers need the approval of the municipalities within which they operate to be able to carry out their work. Investors and operators of quarries must submit an annual report to the MoE on the proper conduct of business within their facility, noting that the annual reports also need the approval of the municipality.

Municipalities have been granted the authority to issue building/construction permits without having to consult relevant authorities, leading to non-compliance with forest protection laws and confusing regulations on reforestation. The cost of land degradation is increasing and hindering efforts to rehabilitate degraded land. Poor urban planning has exploited valuable areas, and the random use of pesticides and fertilizers is damaging soil and water quality. Additionally, quarries are being constructed without adhering to environmental regulations. This can be summarized by the lack of compliance with laws and decisions.

## **SOLID WASTE MANAGEMENT**

According to Legislative Decree No. 8735 of August 23, 1974 (on Maintaining Public Cleanliness), municipalities are in charge of maintaining public cleanliness by preventing the throwing of waste in waterways and in public properties of villages and private governmental/and municipal properties. Solid waste treatment includes road sweeping waste collection and e-waste.

According to Decree No. 9093/2002 amending Decree No. 1917/1979 that determine the foundations and rules for distributing the funds of the Independent Municipal Fund, financial incentives should be provided for municipalities that host solid waste treatment facilities especially, municipalities that agree to construct a sanitary landfill or solid waste treatment facility. These municipalities receive five times the share they receive from the Independent Municipal Fund and ten times if they accept waste from ten or more other municipalities.

Technical and infrastructure issues, such as a lack of expertise and equipment, further exacerbate the situation. Additionally, there is a need for greater awareness and behavioral change among communities, as well as a reduction in consumerism and the prevalence of the "not in my

backyard" mentality. The burden of waste generated by displaced Syrian refugees is also a contributing factor (UNDP, 2019).

The government has committed itself to the principle of administrative decentralization to enhance the role of municipalities through Cabinet Resolution 1/2015 which set an integrated plan for SWM, and Resolution 1/2016. However, this increasing attention (particularly from the international community through funding of solid waste management projects) towards empowering local authorities in that regard, should be coupled with proper capacity building to municipalities on appropriate solid waste governance including ways of revenue recovery from solid waste management.

## **AIR QUALITY**

Municipalities play a major role in monitoring and managing air quality to preserve the health of citizens from harmful emissions and noise. They are also empowered to implement air quality monitoring programs and provide citizens with air quality data. For example, municipalities can conduct routine monitoring of private generators and ensure that their emissions are controlled, along with required noise mitigation measures.

Municipalities play an important role in transport management by developing local transport plans, organizing/manage traffic through municipal police, install signal lights, and prevent the parking of cars outside designated parking lots. These measures help reduce congestion and the associated harmful air emissions from vehicle exhaust.

## **WATER AND WASTEWATER MANAGEMENT**

Laws 221, 241 and 247 in 2000 reformed the water sector in Lebanon reassigning mandates and defining new jurisdictions. These laws took away from municipalities any involvement in the installation and operation of water supply, irrigation, and sewerage systems, turning them over to Regional Water Establishments (RWEs). This created great confusion and tension and ultimately lack of cooperation and coordination between RWEs and municipalities who have had a historical role in water resources management, water service provision, and sewage collection at the local level. In many cases municipalities found themselves drawn into the role of water service provider due to the lack or untimely responsiveness of RWEs. This role was further facilitated and supported by international donors providing financial aid to municipalities to carry out this role. This resulted in some municipalities building sewage treatment plants and networks and drilling wells without coordination with RWEs. Such activities exacerbated the poor relationship between municipalities and RWEs.

Law 192/2020 was passed in 2020 to amend law 221 and its associated laws and enabled municipalities to play a more active role in water service provision. It required municipalities to coordinate with and seek mandate for all water related activities from RWEs and fill in any service provision gaps when needed.

Municipalities play an active role in managing flood risk within their jurisdiction. (For example, the Spanish government, through the Lebanon Recovery Fund, has trained several municipalities on Managing flood management structures).

Based on the Ministerial Order No. 118 of 2010, concerning the reorganization of groundwater drilling and extracting licenses, licensing process of wells should involve RWEs, MoEW and the municipalities, however the applications for permits are still centralized at ministry level (Gharios et al. 2021; Gharios and Farajalla, 2019).

Municipalities determine taxes based on the rental value of residential and commercial units. They also impose taxes on sidewalks and sewers (this term now refers to stormwater drainage systems). Revenues from these enable municipalities to maintain networks and aid in the installation of sewage, potable water, and stormwater drainage house connections as well as other water and wastewater related activities.

## POLICY RECOMMENDATIONS AT THE LEVEL OF MUNICIPALITIES

---

Municipalities can take some actions to reinforce their dormant role in environmental governance. A set of recommendations for municipalities are identified below in terms of (1) Sustainable developmental actions, (2) Monitoring, control, and procedural actions, (3) Communication and cooperation and (4) Capacity building and awareness:

### → SUSTAINABLE DEVELOPMENTAL ACTIONS

- Improve tax collection services within the municipality.
- Request the General Directorate of Real Estate Affairs to conduct the land survey process to determine and release the ownership of all lands that fall within its municipal jurisdiction and are not real estate surveyed; this is to protect them from encroachments on real estate properties.
- Implement forests rehabilitation and reforestation programs especially in lands that have been deteriorated as a result of wildfires, in turn, contributing to the restoration of the landscape value.
- Activate the role of municipal representatives in nature reserve committees.
- Develop an integrated local plan for solid waste treatment that adopts a hierarchical waste management system, including a mechanism sorting at source and advertising recycled products in local markets.
- Implement the proposed local plan through the establishment of waste management facilities within the municipal scope or within the scope of the Federation of Municipalities, as follows: sorting and recovery facility for source sorted recyclables, waste treatment facility, and a facility for the final disposal of waste that cannot be processed (probably an energy recovery incinerator or a landfill). This can be a public local initiative or a collaboration with the private sector.
- Improve solid waste collection and sweeping services via waste sorting bins, purchase waste compactors to transport waste to sorting and/or treatment facilities, distribute bags according to the established sorting mechanism, which are non-wrinkle, tightly tied, disposable and easy to carry by cleaners.
- Create pedestrian zones in city centers and large towns.

## MUNICIPAL AUTHORITY AND ENVIRONMENTAL GOVERNANCE IN LEBANON

- Develop and activate shared local means of transportation within the municipal jurisdiction, organize parking areas for public transportation, and arrange transit schedules.
- Work on moving the current generators that are located inside the neighborhoods to areas far from the residential neighborhoods.
- Prepare links specifying the locations of the generator's concentration within the scope of the municipality and the production capacity of each generator.
- Adopt the concept of clean production, or green production in the industrial sectors, while encouraging renewable energy technology.
- Establish industrial zones far away from housing, to mitigate the negative impacts on the population.
- Prepare a list of informational data on the licensed and unlicensed industrial and prior establishments.
- Allow building permits only if connected to operational wastewater treatment networks.
- Encourage rainwater collection systems for reuse in homes and private institutions, wherever possible.
- Develop flood and drought management plans in coordination with RWEs and relevant authorities.

### → MONITORING, CONTROL, AND PROCEDURAL ACTIONS

- Monitor that all institutions are licensed in accordance with applicable laws.
- Monitor building permits according to Legislative Decree No. 118 of June 30, 1977 and ensure compliance with the zoning conditions stipulated in the detailed master plan, if any, or adopt the guidelines of the comprehensive national plan for arranging lands according to the procedures in force in each of the regional departments of the General Directorate of Civil Planning.
- Expedite the removal of all urban violations within the municipal area, with the possibility of compensation for violators as a mitigating measure.
- Ensure that the quarry/crusher meets the environmental requirements before signing the work permit and monitor its proper implementation over the license period (five years).
- Ensure compliance with forest protection laws and regulations, cooperate with forestry commissioners in protecting forests and organizing patrols in forests that are subject to illegal cutting, and issuing seizure reports against violators.
- Report and fine noncompliant activities to the municipality's directives (sorting waste and open dumping).
- Based on the hierarchy of integrated SWM, municipalities should take the necessary implementation measures to monitor the reduction, recycling and composting of waste, through municipal decisions.
- Benchmark the open dumpsites located within the municipal jurisdiction, in preparation for their eventual removal and rehabilitation of the land on which they were formed.
- Monitor the maintenance of vehicles and buses within the municipal area and report noncompliant vehicles that have significant emissions.
- Establish a procedural mechanism to monitor the compliance of cars and trucks through a mechanical inspection (Law No. 341 dated 6/8/2001).
- Determine fines and issue seizure reports against operators or investors of unlicensed private generators.
- Control the operation and investment of private generators.
- Require the owners of private generators to adhere to the required technical conditions, especially those related to pollutant management.



## **MUNICIPAL AUTHORITY AND ENVIRONMENTAL GOVERNANCE IN LEBANON**

- Monitor the height of the chimneys of private generators to comply with the minimum height set by the Ministry of Environment.
- Prevent the discharge of domestic and industrial effluent as well as the dumping of municipal and industrial solid waste into waterways and set appropriate fines to be levied on violators.
- Ensure that no new wells are drilled, and existing ones expanded without permits issued by the MoEW.
- Monitor existing wells as to permitted depth and discharge and report any violations to the MoEW, which should in turn investigate the reported cases and prevent the use of unauthorized wells accordingly.
- Prepare an informational data list about the water bodies with descriptions of their present condition located within the municipal area.
- Control violations related to the waste of water resources (for example: “washing sidewalks”, “watering” the walls, etc.).
- Monitor the operation of water bottling plants that are established and operating according to the conditions in force and conduct periodic audits.

### **→ COMMUNICATION AND COOPERATION**

- Inform the General Directorate of Real Estate Affairs, the General Directorate of Civil Planning, the Ministry of Public Works and Transport (MoPWT) and the Ministry of Interior and Municipalities (MoIM) with all violations by conducting a comprehensive survey of the violating buildings within their municipal scope.
- Cooperate with neighboring municipalities and unions to exchange experiences and participate in the implementation of effective solutions.
- Work with the Ministry of Transport and Public Works to convert the energy used in private generators from red diesel to green to reduce air emissions.
- Cooperate with the MoEW to rationalize water consumption in all sectors within the municipal scope.
- Coordinate with NGOs, INGOs and donors concerned with the affairs of the displaced to communicate rationalizing water consumption in informal tented settlements.
- Coordinate with the MoEW and MoE to ensure compliance with the flood and environmental conditions for licensing the construction of residential or commercial buildings within rivers’ flood and riparian zones.
- Promote cooperation between municipalities and/or neighboring unions of municipalities to establish infrastructure for wastewater conveyance, treatment, discharge and reuse.
- Provide RWEs with data regarding buildings and industries located within the municipal domain.
- Coordinate with the RWE on matters related to all water and wastewater facilities within the jurisdiction of municipalities.
- Coordinate with the MoEW and RWEs to transport sludge and wastewater to sewage plants instead of randomly discharging and dispensing of them into waterways and set terms that force transport companies to comply.

### **→ CAPACITY BUILDING AND AWARENESS**

- Train the municipal police to monitor the proper implementation of building permits, protect environmentally sensitive areas from encroachments, and issue arrest reports against violators.

## MUNICIPAL AUTHORITY AND ENVIRONMENTAL GOVERNANCE IN LEBANON

- Involve municipal employees in technical, administrative, and supervisory training to improve capacity development.
- Train the municipal police to monitor open dumps and strictly prohibit their formation.
- Allocate a position within the municipal staff dedicated to pursuing new funding opportunities for environment-related activities.
- Design and launch intensive awareness campaigns to sort waste at source based on the hierarchical principle of integrated SWM.
- Cooperate with specialized educational references and work to increase environmental activities and topics within the school curricula.
- Train the municipal police to conduct periodic field checks on private generators that are not licensed by the Ministry.
- Carry out awareness campaigns to raise awareness of rationalizing water consumption and conserving it within the municipalities.
- Allocate a position within the municipal staff dedicated to follow up on emerging financing opportunities and improve the tax collection service within the municipal jurisdiction.

## POLICY RECOMMENDATIONS AT THE LEVEL OF GOVERNMENT

Reinforcing the role of municipalities in environmental governance lies also within policies implemented by the central government. Several policy recommendations for decision makers at the level of the Lebanese government are set below:

### → REINFORCING THE ROLE OF DECENTRALIZATION IN ENVIRONMENTAL SUSTAINABILITY

Decentralization is distinguished from non-exclusivity in that it is more independent as its governed directly by the local community through the so-called local administrations. It is essential to:

- Apply financial independence of the municipalities resources by defining direct and indirect revenues within a line called “the municipal fund.”
- Utilize economic decentralization which revitalizes the local economy and its development. It translates into an economic plan that is developed by an economic working group through a mandate from the ministry of economy. This economic role that enables economic decentralization can help achieve equitable development in all Lebanese municipalities.

It should be noted that decentralization may not be feasible at all levels. It was found that in SWM, decentralization could be manifested at the early stages of SWM system, then could move towards de-concentration as the process reaches the disposal phase. As for water/wastewater management, improving RWEs service delivery levels and their moving towards financial autonomy and accountability within the context of the local economy, is primarily contingent on equitable tariffs that pave the way to the expansion of the role of municipalities and/or municipality unions in supporting water authorities. The guiding principle in the matter of decentralization of WWTPs should be cost-effectiveness, reliability of operation and maintenance, and potential of

reuse of treated effluent. On the other hand, Public-Private Partnerships (PPPs) are suggested in the transport sector as a possible solution to reduce congestion and reduce the country's dependence on motorized vehicles. With respect to the energy sector, the approval and implementation of Law No. 462 of 2002 is a necessary step in developing renewable energy projects distributed across all Lebanese regions.

**→ STRENGTHENING SYSTEMATIC WASTE DISCHARGE, COLLECTION SYSTEM AND ENHANCING SERVICE QUALITY**

It is important to reinforce existing SWM laws and, above all, establish a SW public private network that can view solid waste as a resource instead of a burden. In light of the key role held by private initiatives in terms of recycling, reuse and export, the importance of this network lies in achieving sustainability of these private contractors that have stalled the imminent crisis and help expand capacities. To this end, achieving decentralization in early stages of SWM could be led by this network. Coordination with key stakeholders would be essential to allocate responsibilities to SWM actors and ensure that municipalities have the capacity to carry out sorting and collection practices in terms of personnel, expertise, equipment, and financial resources. Also, to ensure transparency and efficiency, it is important that local authorities are given the capacity to practice oversight audits to ensure existing sorting and composting facilities, within the jurisdiction, are operational.

**→ MUNICIPALITIES SHOULD BE FINANCIALLY AND TECHNICALLY SUPPORTED TO INCREASE LOCAL WATER STORAGE CAPACITIES IN TERMS OF AVAILABILITY OF TANKS, POOLS, OR RESERVOIRS**

In this context, collected water would not only serve irrigation purposes during drought seasons, but would also ease flooding and erosion episodes by reducing water runoff, and surface water contamination with sediment, fertilizers, or pesticides that might be transported into waterways during extreme rain events. As part of increasing water capture, proposed dams should be constructed and completed along with the required networks that link the water source with the consumer location, according to the set priority. Before the commencement of construction activities, EIA studies should be communicated along with related ecological compensation plans to acknowledge the public of the urgency of the proposed dams and any anticipated environmental risks coupled with the suggested mitigation measures.

**→ PASS THE DRAFT UPDATED MUNICIPAL ACT**

This draft law has been under revision of the parliamentary sub-committee (emanating from the national defense, interior and municipalities committees). Once approved, it would bring modernism to the old 1977 law and take into consideration financial, political, and structural challenges that municipalities are facing currently.

## REFERENCES

---

Atallah, S. (2011). The Independent Municipal Fund: Reforming the Distributional Criteria. Policy Brief, No. 01. The Lebanese Center for Policy Studies (LCPS).

Gharios, G. and Farajalla, N., (2019). Lebanon's Water Laws: Bridging Policy Frameworks to Address New Challenges. Issam Fares Institute for Public Policy and International Affairs, American University of Beirut.

Gharios, G., Farajalla, N., and El Hajj, R. (2021). Challenges of post-war policy reforms in Lebanon's water sector – lessons learned. Water Supply. <https://doi.org/10.2166/ws.2021.130>

Harb, M., and Atallah, S. (2015). Lebanon: A Fragmented and Incomplete Decentralization. In Local governments and public goods: assessing decentralization in the Arab world. Ras Beirut: The Lebanese Center for Policy Studies.

MoIM. (2011). Municipal Finance Studies Program Final Strategic Framework. Ministry of Interior and Municipalities Available at: <http://www.moim.gov.lb/UI/moim/PDF/StrategicFramework.pdf>

Sleiman, A. (2017). REFORMING DECENTRALISATION IN LEBANON: THE STATE OF PLAY. Briefing Paper, 80. Democracy Reporting International.

UNSCOL. (2023). Statement of the UN Special Coordinator on the municipal elections in Lebanon. UNSCOL. <https://unscol.unmissions.org/statement-un-special-coordinator-municipal-elections-lebanon>



Issam Fares Institute for Public Policy & International  
Affairs American University of Beirut P.O. Box 11-  
0236 Riad El-Solh / Beirut 1107 2020 Lebanon



961-1-350000 ext. 4150



+961-1-737627



[ifi.comms@aub.edu.lb](mailto:ifi.comms@aub.edu.lb)



[www.aub.edu.lb/ifi/](http://www.aub.edu.lb/ifi/)



[Issam Fares Institute for Public Policy &  
International Affairs IFI](https://www.linkedin.com/company/issam-fares-institute-for-public-policy-&-international-affairs-ifi/)



[aub.ifi](https://www.facebook.com/aub.ifi)



[@ifi\\_aub](https://twitter.com/ifi_aub)



[@ifi\\_aub](https://www.instagram.com/ifi_aub)



AMERICAN UNIVERSITY OF BEIRUT

ISSAM FARES INSTITUTE FOR PUBLIC  
POLICY & INTERNATIONAL AFFAIRS

معهد عصام فارس للسياسات العامة  
والشؤون الدولية