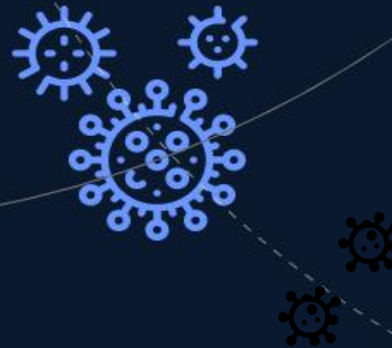


# COVID-19 IN LEBANON: NATIONAL & LOCAL CRISIS RESPONSE

*Challenges,  
Shortcomings  
& Opportunities*



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# **I. EXECUTIVE SUMMARY**

## EXECUTIVE SUMMARY

- This report assesses consecutive municipal lockdown decisions and their implications, proposing a way forward to improve the relevance, coherence, and efficiency of the response.
- It focuses particularly on decentralization and coordination with local authorities during the months of October and November of 2020.
- With the deepening of digital coordination between central and local authorities on the IMPACT platform, the partial lockdown criteria are better understood by municipalities, yet some confusion persists.
- Acceptance of the decision has significantly improved in the past two months, as municipalities have taken an active role of validating the number of positive cases in their regions.
- As acceptance for the decision has risen, conviction of the partial lockdown's effectiveness has become the driving reason for municipalities to enforce the lockdown rather than pure compliance.
- While presidents of municipalities deemed the risk in their towns controllable, the majority reported needing support from security forces to enforce lockdown measures.
- Despite auditing the data themselves, presidents of municipalities still have doubt about the data used by MoPH and perceive the decision as being taken unilaterally without their participation.
- Providing municipalities with clean and reliable data, and engaging them explicitly in the decision process is the remaining way forward to further refine the national and municipal COVID response.
- As municipalities are on the front lines of dealing with the pandemic, providing them with support is crucial for them to effectively perform their role.

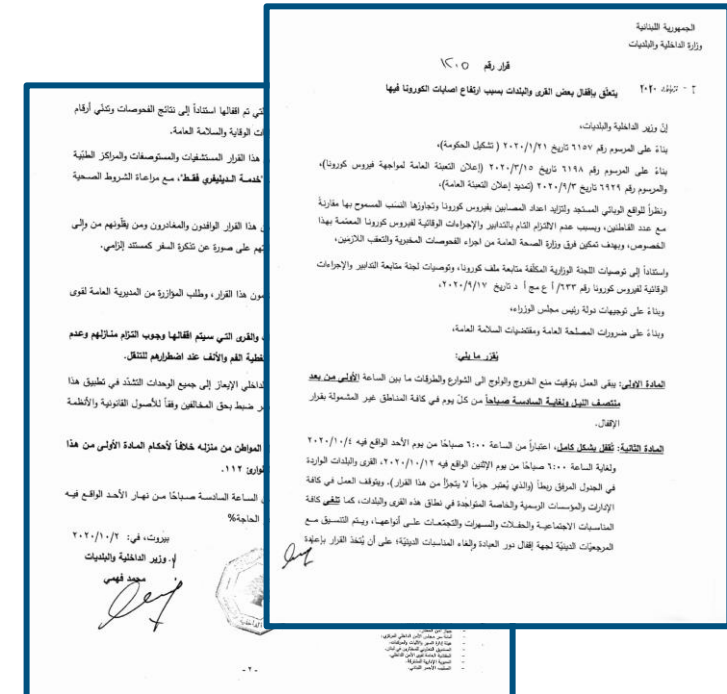


## **II. BACKGROUND & METHODOLOGY**

## BACKGROUND: CRISIS MANAGEMENT AND RESPONSE

A far-reaching local lockdown decision was taken on October 4 by the Lebanese Government upon the recommendation of the inter-ministerial committee in charge of the COVID-19 response in the country, upsetting local authorities worried about economic consequences. The key research question resulting from this dynamic relates to the extent and impact of decentralization of crisis management.

- Amid a surge in positive COVID-19 cases in the country, the Ministry of Interior and Municipalities issued several decisions putting a total of 215 municipalities under lockdown for 10 days (renewable) from early October till the end of November, before the issuance of the last general lockdown decision.
- The decisions identified areas where *"the number of registered cases has exceeded the permissible proportions compared to the number of residents."*
- It declared that *"activities in all administrative, public and private institutions located within the specified towns and villages will be suspended, in addition to the suspension of all social events, parties, and public gatherings of all sorts."*
- At the very beginning, the selection process was unilateral and centralized, based mainly on MoPH data, and alienating municipalities.
- Later and within a few weeks, the adoption and development of a new approach, shifting from centralized decisions to collaboration and coordination with local authorities, showed interesting and promising outcomes. This change will be assessed and analyzed in this report.



## METHODOLOGY: FROM THE FRONTLINE

*This report takes stock of consecutive ministerial decisions and their implications, proposing a way forward to improve the relevance, coherence, and efficiency of the response. It takes a qualitative and quantitative approach assessing perceptions among local authorities, at different points in time, as the situation evolved towards further decentralization.*

- **Desk research:** A review of local and international media was carried out in order to inform the background section of this document and develop the survey questionnaire.
- **Key Informant Interviews:** Several key informant interviews were held with relevant stakeholders familiar with COVID-19 national response.
- **Process analysis:** Current inputs, outputs, procedures, applications, and their interactions were reviewed in order to identify loopholes and enhancements with a detailed review of the IMPACT platform workflow.
- **Perception survey:** Two phone surveys were conducted, first on October 5 and 6 with a sample of 58 towns and villages (52%), and a second on November 12 and 13 with 89 towns (77%) included in the last partial lockdown decision. Surveys were conducted with the municipality presidents through a questionnaire including around 30 questions addressing both the current crisis situation in town and the local experience of the lockdown decision. It allowed to assess the decision's accuracy against the prevailing risks as well as the local response and perception.



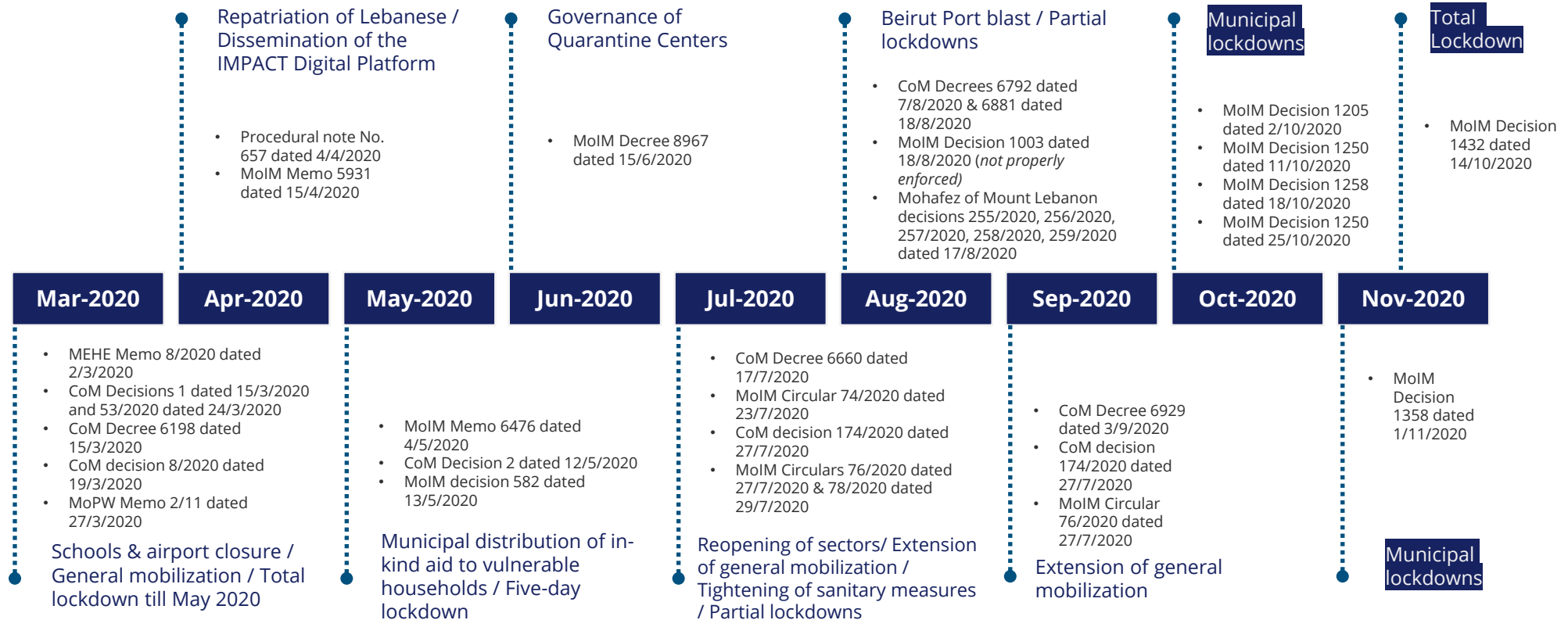


## **III. THE MINISTERIAL DECISION**



# TIMELINE: A SERIES OF (UNFORTUNATE) EVENTS

*In addition to the unprecedented health crisis, the country has been struggling with an enduring political deadlock, a debilitating economic crisis, and the aftershocks of the devastating blast at the Port of Beirut.*



## DATA AUDITING ON THE IMPACT PLATFORM

IMPACT is a government-wide digital platform being used to link municipalities to ministries, public institutions, and civil society, making them all key contributors to solution-design. At first, it was only used by municipalities and MoIM. Then, as of October 12, an explicit decision was made to integrate all stakeholders, including MoPH, on the platform for full coordination.

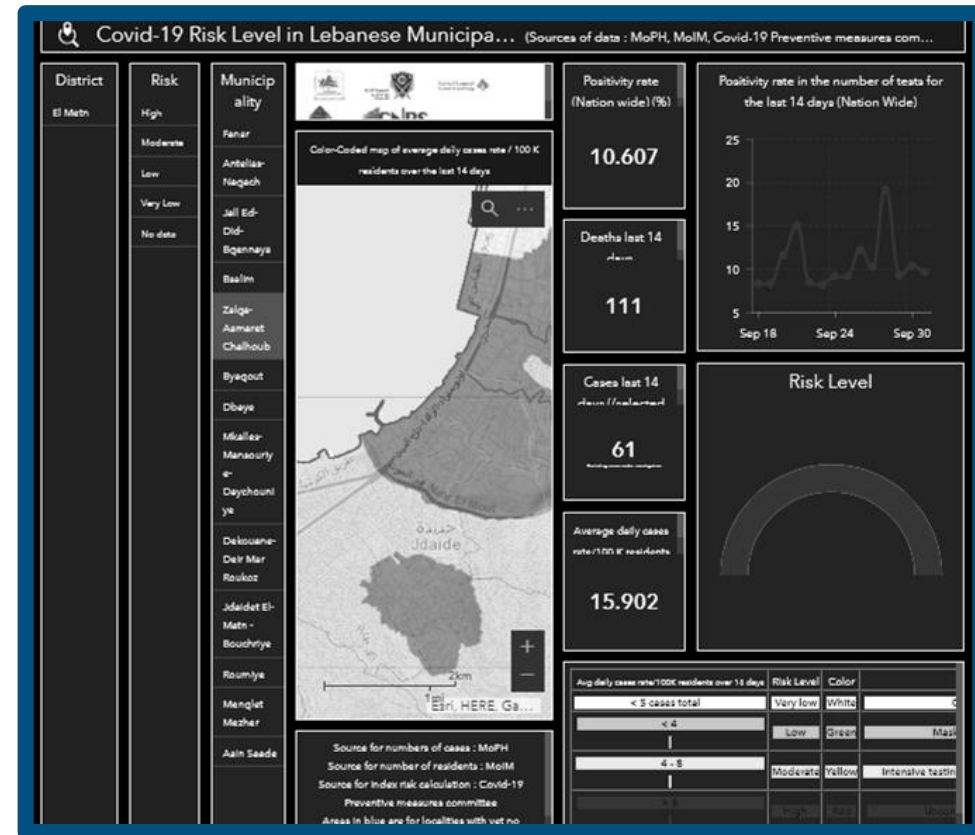
- The platform was gradually developed and integrated among various stakeholders to manage crisis response, from COVID-19 to the Beirut blast. Following the first lockdown decision, it has been extensively used by municipalities and Red Cross to validate number of positive cases,.
- IMPACT maps and provides access to data across sectors: state institutions logistics and human resources, country wide demographic data, agriculture and industrial mapping, environmental assessment, etc.
- It has evolved into a tool that supports incident reporting and crisis management through efficient workflows.
- It integrates an entire ecosystem including complaint and support centers, analysis teams and regular online reporting, and it allows for a degree of transparency previously unattainable.
- It has put in place an integrated “python playground” for data collation, cross validation, analysis and predictive modeling.



## DECISION CRITERIA: IN THE RED

The October 4 ministerial decision requiring local lockdowns was built on the number of positive cases provided unilaterally by MoPH. Later on, after strong complaints by local authorities, IMPACT was used to involve municipalities in the refinement of the data. The new process adopted by MoPH in collaboration with MoIM and local authorities became as follows:

- 1 Data about COVID positive cases is sent by MoPH to the Inter-Municipal Platform for Analysis, Coordination and Tracking (IMPACT) where municipalities, Qaimaqams, Governors, the Red Cross, and social workers can monitor, audit, and validate.
- 2 Following data refinement by municipalities and local teams, MoPH and MoIM compile aggregate numbers. A risk index is then calculated by the COVID-19 Preventive Measures Committee.
- 3 Towns and villages featuring a daily average of cases >8 per 100,000 inhabitants are put on lockdown.



### Lebanon Epidemiologic Profile

- More than 77% ICU beds occupancy by COVID-19 patients according to DRM
- 10.6% of PCR positive results

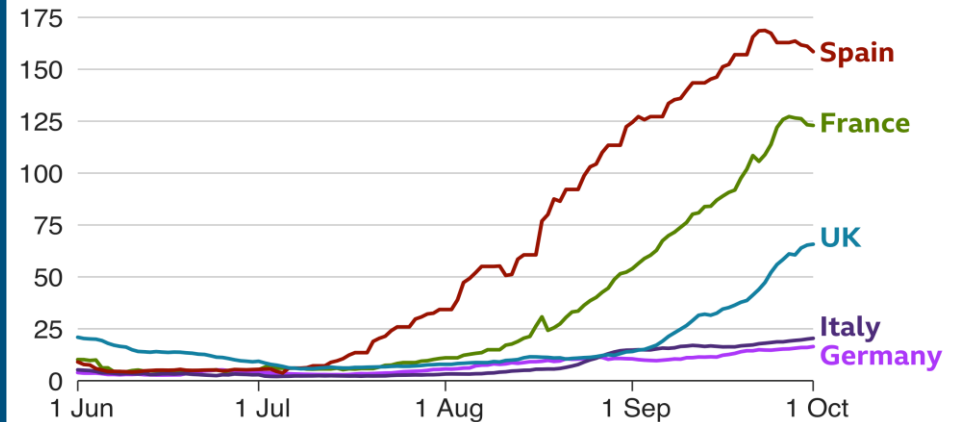
## INTERNATIONAL PRACTICE & THRESHOLDS

*Internationally, such local lockdowns are usually triggered by epidemiological surveillance indicators crossing specific thresholds, just like the case of Lebanon, but with variable thresholds.*

- United States: 100+ new cases per 100,000 inhabitants over the past week.
- Spain: 500+ cases per 100,000 inhabitants over the past 14 days, 35% of ICU occupancy by COVID patients and more than 10% positive PCR tests.
- France: Weekly incidence of 250+ infections per 100,000 inhabitants (general public) and +100+ per 100,000 inhabitants for the elderly, more than 30% of ICU occupancy by COVID patients.
- Great-Britain: 50+ cases per 100,000 inhabitants per week.

### Coronavirus cases increasing in European countries in recent weeks

Total cases per 100,000 people by week up to 01 October



Note: Countries do not always release figures every day, which may explain some of the sharp changes in the trendlines

Source: ECDC, data to 1 Oct

BBC

***Partial lockdowns are usually combined to an increase in local testing capacity to inform the regular revision of the lockdown decision.***

## IMPLICATIONS AND AFTERMATH

*On and all, the decision taken at the national level seemed to have tricky local ramifications that ended up changing the whole process, for the best.*

- The ministerial decision's enforcement was handed to the relevant local councils with the support of the Internal Security Forces.
- According to early media reports, it was contested by a number of municipalities and by local populations, posing questions as to the whole decision-making process:
  - How did local authorities react to the decision?
  - How was it perceived by the local populations?
  - What was done to improve the process?
  - Can more be done?



[File: Aziz Taher/Reuters]



## **IV. THE LOCAL RECEPTION**



## UNDERSTANDING THE DECISION: ROLE OF MUNICIPALITIES

*Between October and November, there has been a clear shift from unilateral provision of data by central authorities, to data coordination with municipalities through the IMPACT platform. Yet, despite auditing the data themselves, municipality presidents do not consider that they have taken part of the decision-making process.*

- After having reported discontent and objections on the data from the first partial lockdown in October, municipalities were tasked with validating the number of positive cases in their respective regions on IMPACT.
- Although all surveyed municipalities reported actively using the platform to manage the distribution of positive cases within their regions in November, 87% reported not having a role in decision-making process.
- It is as such clear that presidents of municipalities do not perceive their active role of validating and reviewing the cases assigned to them as constituting any role in the decision to lock down their localities.

Fig. 1 Did central authorities continue to take decisions unilaterally in November?

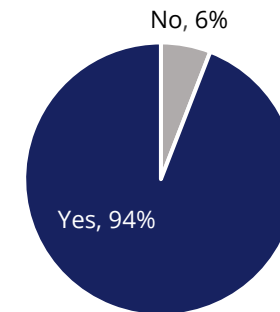
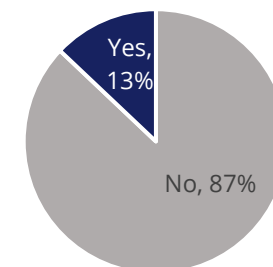


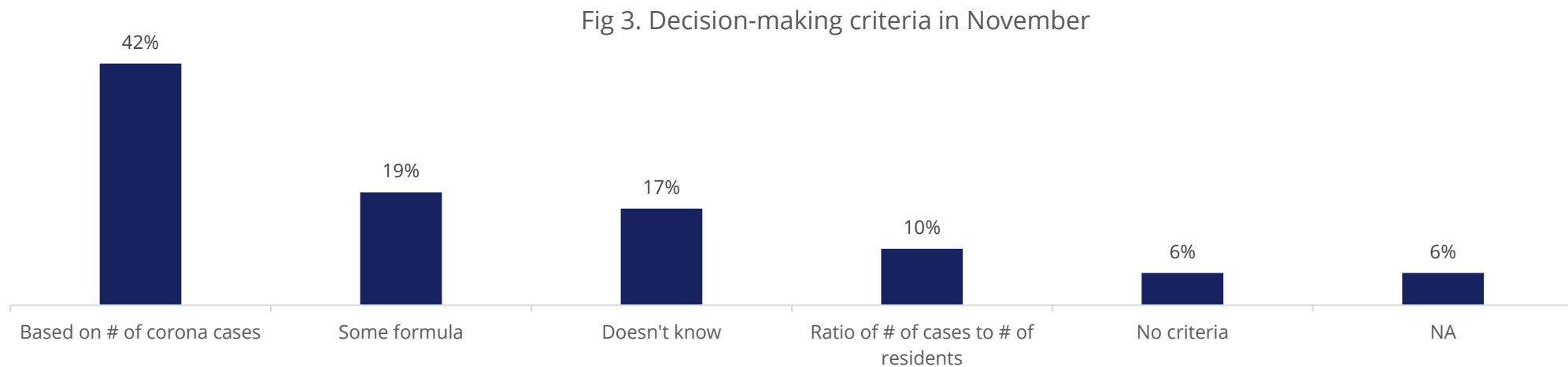
Fig. 2 Did the municipality play a role in the lockdown decision in November?



## UNDERSTANDING THE DECISION: THE APPLIED FORMULA

*The surveys have shown some improvement in the understanding of the criteria based on which the partial lockdown decision is taken. Several municipalities still do not understand the criteria, however.*

- A remarkable improvement has been noted in the understanding of municipalities of the criteria according to which a partial lockdown is decided. In the first survey, more than **60%** of municipalities reported not knowing the criteria to decide the closure, this number has decreased to around **29%**.
- More municipalities have some understanding of criteria to include them in partial lockdown decision with **10%** accurately specifying them.





## THE DECISION: ACCEPTANCE AND PERCEPTION

*Acceptance of the partial lockdown decision has significantly risen between the October and November partial lockdown decisions.*

- The acceptance level of the October decision was at **45%** moving up to **72%** in the second survey, with the rejection level going down from **51%** to **26%**.
- This higher acceptance could have been prompted by several factors, such as:
  - Fear of risk of spread of the virus
  - Better understanding of lockdown criteria
  - Higher acceptance following the enforcement of partial lockdowns on a number of regions since the first decision.
- It is evident however that presidents of municipalities have largely accepted the partial lockdown decision.

Fig. 4 Perception of October decision

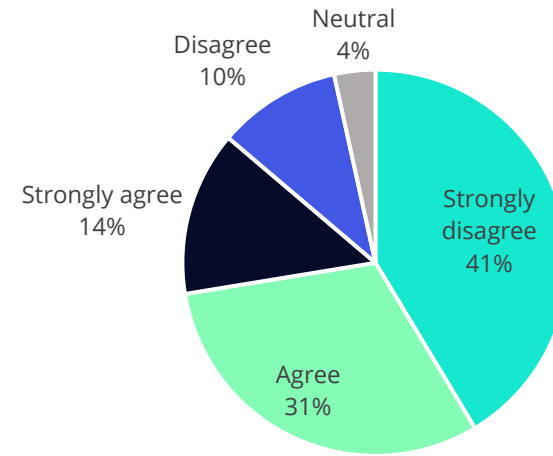
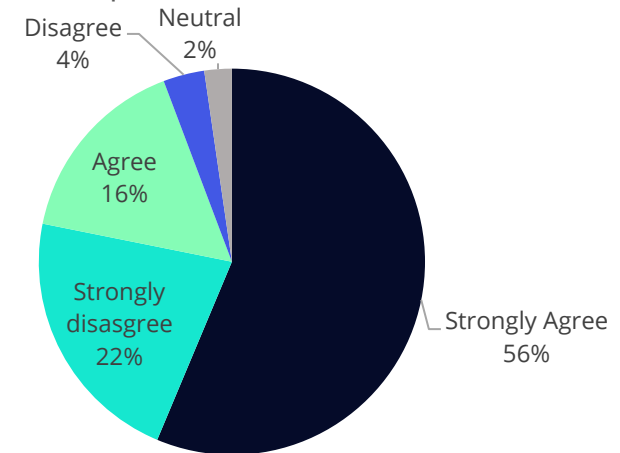


Fig. 5 Perception of November decision

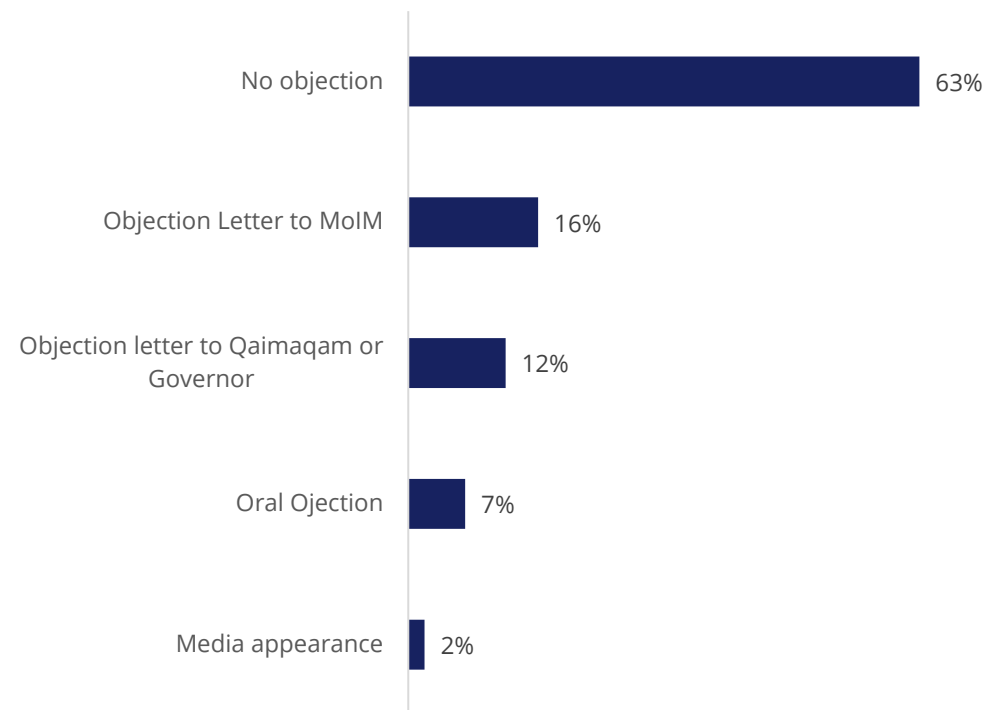


## THE DECISION: DISAGREEMENT, OBJECTIONS AND CONCERNS

*There is a noticeable drop, between October and November, in the number of objections presented to the partial lockdown decision. Nevertheless some municipalities did send objection letters to relevant authorities.*

- Almost **75%** of the municipalities surveyed had expressed their concerns and/or objection to the decision in the first survey. In the second survey however that number dropped significantly with **63%** of presidents of municipalities not having objected to the decision.
- In line with the administrative divisions in Lebanon, objection letters were sent, by municipalities, to the MoIM (**16%**) or to the relevant Qaimaqam or Governor to communicate with MoIM (**12%**).
- Verbal objections (**7%**) and media appearances (**2%**) were less used by presidents of municipalities to object the decision.

Fig. 6 Municipal reaction to MoIM decision



## THE IMPLEMENTATION: A SHIFT FROM COMPLIANCE TO CONVICTION

*With acceptance of the decision rising, presidents of municipalities reported higher compliance with the decision out of conviction in its effectiveness.*

- Abidance with the MoIM decision was at **95%** during the first survey and remained at **97%** during the second.
- The reasoning behind the compliance has significantly differed however, during the first survey, **60%** of contacted presidents of municipalities indicated that their compliance was in abidance by the law rather than out of conviction in the decision's efficiency or applicability (**34%**).
- The shift during the second survey is noticeable as **64%** of municipality presidents indicated their compliance out of conviction in the decision's efficiency and **33%** indicated compliance for abidance by law.
- **95%** of surveyed municipality presidents indicated their abidance with the general lockdown decision, with those refusing to comply highlighting the need for support in order to do so.

Fig. 7 Municipal compliance with October decisions

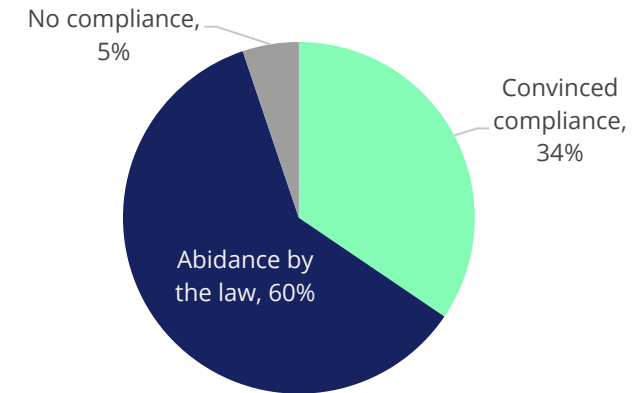
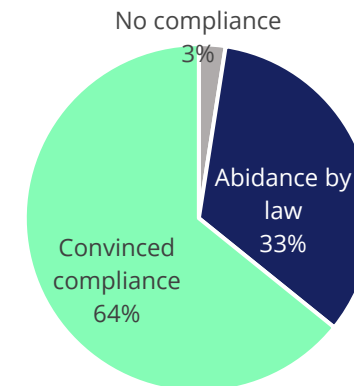


Fig. 8 Municipal compliance with November decisions



## THE IMPLEMENTATION: RISK AND CAPACITY TO ENFORCE

*Presidents of municipalities reported having the virus under-control in their regions, and yet highlighted the need for support from security forces.*

- Almost all contacted municipality presidents reported being able to control the risk they are exposed to because of COVID within their region.
- When asked about the existence of risk factors in their regions, around **60%** of presidents stated that no factors exacerbated the risk. The remaining however mentioned worries about social gatherings and citizens not taking the necessary preventive measures.
- It is worth mentioning however that the majority of municipalities (**63%**) declared lacking the means needed, in terms of logistics and human resources, in order to effectively implement the decisions.

Fig. 9 Control over risk

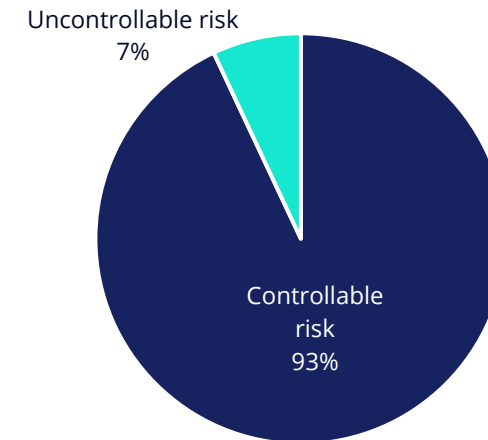


Fig. 10 Availability of resources

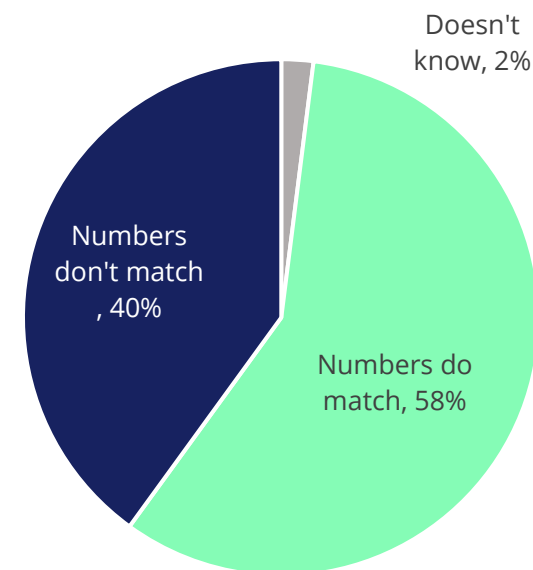


## DISCREPANCY OF DATA: NUMBER OF CASES

*Despite auditing the data themselves, municipalities still call into question the lockdown decision made by the MoPH.*

- **40%** of the presidents of municipalities surveyed stated that the data reported daily by MoPH is not accurate and does not match the data that the municipality has at the local level.
- This number has decreased from **50%** in the initial survey yet remains high.
- It is necessary to point out however that the data used in the decision is based on the numbers audited and reviewed by the municipalities themselves.

Fig. 11 Comparison between MoPH and municipality data

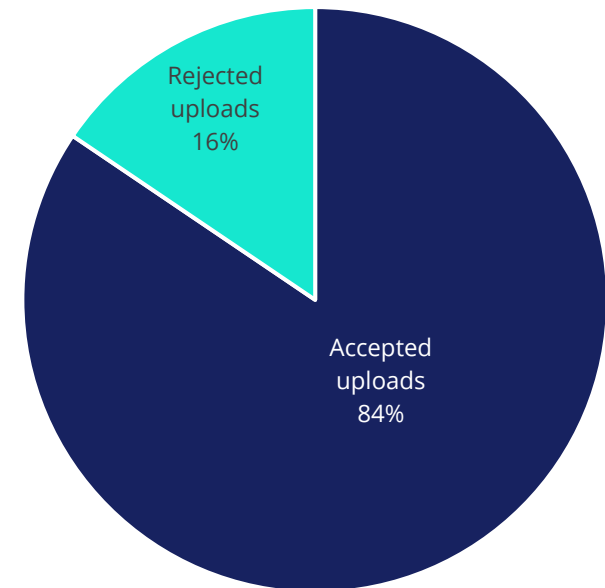


## DISCREPANCY OF DATA: AUDITING NUMBER OF CASES

*Municipalities are spending a considerable amount of time auditing MoPH data and adjusting it following their own input.*

- Municipalities have been actively reviewing the data from MoPH and reassigning positive cases amongst each other on the platform. On a daily basis, cases and their details are provided by MoPH and uploaded on IMPACT for municipalities to review and audit the names assigned. Municipalities can accept names, reject them because they are unable to contact them or because they should be assigned to a different municipality.
- Municipalities can then transfer cases to the corresponding municipalities, which in turn either accept or refuse the transfer.
- Since October 27, **16%** of the uploaded data by the MoPH has been rejected by municipalities for the above-mentioned reasons.

Fig. 12 Audit of MoPH data by municipalities





**V.  
SHORTCOMINGS  
& OPPORTUNITIES**

## CHALLENGES IN THE IMPLEMENTATION

*An analysis of the current processes reveals a series of challenges which resulted in the implementation of the decision, with some room for improvements.*

- The admission process of individuals coming in for a PCR test at laboratories is not standardized which results in inconsistencies in collected and reported data (e.g. provided by laboratories).
- Most municipalities reported lacking the resources in order to respond to the crisis and enforcing lockdown decisions.
- The reporting system with information sent by email, WhatsApp or through the MoPH application is causing delays and introducing missing or imprecise data.
- There's a risk on data security with information shared with multiple stakeholders, sometimes with no prior verification of the request's origin.
- Delays in data transfer towards municipalities are preventing them from taking the necessary measures.
- It seems most data collection blunders are concentrated at the source, especially regarding names phone numbers and addresses (with municipality name) which are needed to monitor quarantine.
- There's a unique opportunity to consolidate this collection through the integration of laboratories on IMPACT.
- This would also allow to build a predictive model to forecast COVID-19 evolution trends across the country and improve the policy response. Analysis can be based on existing data: time series, geospatial coordinates, demographic and population data, as well as by linking the COVID-19 module to other relevant modules on the platform.





## **VI. CONCLUSION & RECOMMENDATIONS**

# ACTIONABLE RECOMMENDATIONS

*By using IMPACT and joining forces, relevant stakeholders have been able to improve the accuracy, coverage, and consistency of the collected data, paving the way for a more effective and productive response. But the goal is yet to be reached.*

## *Inclusive participation*

- Allowing municipalities to participate has enhanced approval, and respect for lockdown decisions, yet more is needed with regards to this participative process, municipalities should not only be able to edit and revise data, they should also be integrated in the decision making process, maybe by providing comments and insights on the aggregate by-weekly COVID index and its implications (before lockdown decision finalization).

## *Enhance data collection*

- Reinforce proper data entry by municipalities in relation to important forms that are already on IMPACT such as: (i) weekly report on compliance with lockdown decisions, (ii) decisions, and (iii) needs in relation to implementation of the lockdown.
- Ensure a faster roll-out of IMPACT across key stakeholders, mainly laboratories which are still reporting in various forms to MoPH only with no direct link to IMPACT.
- Expand the scope of data collected on IMPACT, including municipal demographic data to allow refinement of biased demographic indicators.

## *Improve data accuracy and reinforce traceability*

- Activate the Analysis Unit at the MoIM for data verification.
- Reinforce link between analysis unit and DRM to coordinate data collected, analysis, and output.
- Take into consideration additional data and variables provided by IMPACT such as population age, number of persons with health problems, presence of hospitals and quarantine facilities, but also economic activity, factories and workplaces in town, etc.

## *Provide support*

- Provide municipalities with human resources support in order to enforce the lockdown decision.
- Push for in-kind aid to municipalities as they are the frontliners in the implementation of decisions.

# THANK YOU

**SIREN**  
ANALYTICS

For more information on IMPACT,  
please visit: <https://impact.gov.lb>