

# COVID-19 pandemic response in Iran: a dynamic perspective on policy capacity

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## Abstract

Iran's policy response to the COVID-19 pandemic illustrates how countries with pre-existing challenges manage acute crises. Already economically weakened by international sanctions, Iran's government was forced to consider short-term tradeoffs between public health and social stability in pandemic response, with imminent unemployment and food insecurity used to justify a policy pivot from mitigation to economic continuity. This article investigates the policy responses of Iran's government during the crucial first months of the pandemic, using data obtained through interviews structured around SWOT analysis (strengths, weaknesses, opportunities, and threats) and interpreted to elicit insights for policy capacity theory and practice. Explanations for Iran's initially ineffective pandemic response are found to include weakness in economic policy, failure to coordinate public health initiatives, priority of treatment over prevention, insufficient public engagement, and inadequate healthcare facilities. Policy recommendations emerging from the study are comprehensive and coordinated pandemic management efforts, community-based and proactive approaches, targeted economic stimulus, and a clear policy vision for crisis resolution. The discussion integrates policy capacity into explanations and recommendations to illustrate the applied value of the concept in crisis settings characterized by uncertainty and rapid onset.

**Keywords:** COVID-19; policy capacity; SWOT analysis; crisis management; social resilience

## 1. Introduction

As governments around the world scrambled to address the COVID-19 pandemic, varying levels of preparedness and capacity became evident – providing a natural experiment for comparing the effectiveness of crisis response policies. In the first year of the outbreak, the absence of a vaccine

elicited an array of policy interventions including travel bans, border restrictions, mandatory quarantine, screening protocols, mask mandates, and social distancing measures (Van Bavel et al., 2020; Sachs, 2020). The breadth and rigor of these interventions generated many undesirable political, economic, and social consequences, providing an opportunity for scholarly analysis in a context rarely seen in practice and nearly impossible to model experimentally. This study investigates the political, economic, and social context shaping Iran's COVID-19 policy response, drawing insights about policy capacity and community participation from a case that is underexplored but nonetheless provides insights into crisis response in resource-constrained settings.

Pandemic policy response has been researched from numerous angles, including – notably for this study – the role of collaboration and community participation (Cox and Perry, 2011; Wu et al., 2006). For example, Lee et al. (2020) highlight the role of leadership, citizen participation, and transparency in COVID-19 response efforts, while Hartley and Jarvis (2020) argue that community mobilization facilitated COVID-19 response even in a setting characterized by low levels of political trust and legitimacy. Italy's experience with the outbreak, one of the world's earliest and most severe, likewise highlighted the relevance of social and political factors, including low levels of collaboration among public organizations and decisionmakers (Ceresia and Misuraca, 2020) and the influence of existing social, political, and institutional conditions (Capano, 2020). In Vietnam, cooperative sentiment and social solidarity helped to complement top-down efforts in supporting a policy posture of preparedness and response (Hartley et al., 2021).

Community participation has been recognized also by practitioners as a crucial capacity in pandemic response. For example, Australia promoted participation and community-based trust as key components of its COVID-19 response plan (Australian Department of Health, 2020), and the UK recognized the role of community actors and the importance of public support in implementing COVID-19 response (UK Department of Health and Social Care, 2020). Explicit attention to such factors underscores the relevance of social and political context beyond policies and institutional conditions. In particular, the notion of community participation highlights the importance of individual agency in confronting a crisis like a pandemic, offering an alternative explanation of response effectiveness beyond governance capacity factors (see Asmorowati et al. (2020) for a study of human agency in the case of Indonesia's COVID-19 response).

Iran's first cases of COVID-19 were identified in February 2020, and the spread of the virus was rapid, geographically indiscriminate across urban and rural areas (Hazbavi et al., 2021), and characterized by multiple successive waves. The economic impacts of the pandemic response, felt acutely in a country already enduring international economic sanctions,<sup>1</sup> underscored the urgency for Iran's government to respond. Shortly into the crisis, Iran introduced policies to address the economic effects of pandemic mitigation measures, including the reopening of businesses, relaxation of quarantine laws, declaration of 'normalcy,' and generally indifferent official messaging regarding the types of restrictive responses common elsewhere. Underlying this policy approach was a strategy to shift the nature of short-term threats, trading outbreak mitigation for economic stability. Nevertheless, capacity deficiencies obstructed Iran's response efforts, exacerbating the health crisis while the economy continued to suffer. Investigating Iran's COVID-19 experience more deeply, this interview-based study examines the situational imperatives faced

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by Iran's government during the early stage of the crisis and the policy capacities needed to address them.

This article proceeds as follows. The following section provides a review of literature about policy capacity in general and in crisis situations. The subsequent methodology section describes the study's approach and acquisition of data. Following the findings section, the discussion utilizes the structure-institution-actors (SIA) framework (Bakır, 2017) to identify salient insights, and the subsequent section presents policy recommendations structured according to SWOT analysis. The discussion integrates elements of policy capacity in order to connect findings with analytical language legible to policy scholarship and the practices built upon it. The purpose of the study is to provide an account of a country case that – along with Italy and China – was one of the earliest to experience the crisis. The case reveals insights about tensions between political ambitions and scientific imperatives, some of which are common to all country contexts. The siting of findings within the policy capacity literature enables the case to be more easily compared with numerous other COVID-19 case studies taking a similar theoretical approach (e.g., special issue of *Policy and Society* journal: Volume 39, Number 3; Capano et al., 2020).

## **2. Literature review**

In studying pandemic policy response, the concept of policy capacity provides a systematic way to account for government capabilities. Painter and Pierre (2005) describe policy capacity as the ability of government to “to marshal the necessary resources to make intelligent collective choices, in particular to set strategic directions” (p. 2). Policy capacity as an analytical frame has been applied to numerous studies across issue domains and geographic contexts. It once received substantial attention in the development studies literature beginning with efforts to modernize institutions in the post-WWII era, with ‘capacity building’ becoming a well-worn buzzword among global development institutions (conceptualized as the capacity of agencies and organizations rather than as rules and norms; Eade, 2007; Olowu, 2003). Policy capacity has recently been conceptualized in broader and more nuanced ways, including various types of capabilities within and outside public organizations (Wu et al., 2015).

Policy capacity can be observed at all scales of government. With increased local autonomy and diffused capacities, however, have often come incoherence, fragmentation, and coordination challenges in policy initiatives. For example, in a study of China and Vietnam, Painter (2008) argues that decentralization, in concurrence with marketization, threatened policy cohesiveness and accountability. At the same time, policy capacity has also been cited as a catalyst for improving the effectiveness of interagency relationships. For example, in a Canadian study, Rasmussen (2008) links improvements in policy capacity with improvements in policy processes horizontally (between government agencies and departments) and vertically (across the cabinet and the bureaucracy). Further, policy capacity can be seen as the collective capacity of all agents involved in policymaking, formal and informal. For example, Press (1998) proposes a ‘systemic logic’ of environmental policy capacity based on social capital, collective social norms, and external policy constraints and opportunities. In an examination of environmental policy capacity in the Netherlands, Bressers and Plettenburg (1995) identify a variety of stakeholders that constitute the policy capacity setting: policy institutions, ‘green’ organizations, target groups (of policy), and media. Broadly speaking, these types of capacities can be labeled ‘integrative,’ reflecting the

ability of governments to align policy goals and instruments across agencies and layers of governance (Rayner and Howlett, 2009).

Given the broad conceptual nature of policy capacity and its enlistment of manifold constituents and stakeholders, it is appropriate to consider political dimensions as well. In a study of policy capacity in post-handover Hong Kong, Cheung (2007) outlines a broad spectrum of policy capacity constraints including weak political leadership, ineffective strategic frameworks, inadequate information and analysis, absence of mechanisms for policy and budget coordination, and counterproductive administrative culture. Cheung's (2014) later studies found that Hong Kong's policy capacity was undermined by a mismatch between the capabilities of legacy governance systems and emerging policy challenges and social conflict. The politics-bureaucracy divide, long canonical in literature about public administration and policy, has plausibly led to a view of policy capacity that focuses on mechanical and operational elements. Yet, as Cheung finds, policy capacity exists within broader social and political contexts, and should be understood accordingly.

The literature has begun to disaggregate the many notions of policy capacity into constituent elements, including political capacity, in an effort to more clearly articulate the impact of social forces on policymaking. Reflecting this conceptual re-orientation, recent efforts have been made to granularize and systematize the concept of policy capacity (Hartley and Zhang, 2018; Ramesh et al., 2016; Howlett and Ramesh, 2015; Wu et al., 2015). The framework proposed by Wu et al. (2015) places three types of competences (analytical, operational, and political) into the context of three levels of analysis (individual, organizational, and systemic); from this exercise in conceptual disambiguation emerge nine capacity types having unique analytical and practical characteristics. Examples are individual-analytical and organizational-political capacities, which provide operationalizable concepts and pointed guidance that fit various policy contexts.

Crucial to pandemic response, and to any crisis involving scientific understandings, is the notion of analytical capacity (Kakar and Hartley, 2020; Dunlop, 2014; Dunlop and Radaelli, 2013; Howlett, 2009). Described by Howlett and Oliphant (2010) as "the ability of organizations to produce valuable research and analysis on topics of their choosing" (p. 18), analytical capacity helps ground the policymaking process in systems to monitor and analyze conditions and forecast anticipated impacts of policy options. While analytical capacity is observed mostly at the organizational level (resources and processes to collect, analyze, and disseminate information) or system level (presence of knowledge and research institutions and their relationships with government), understandings about individual analytical capacity are the least prominent in the capacity literature. For example, in a study of how global indices like the World Governance Indicators measure and assess governance, Hartley and Zhang (2018) find that the individual level receives the least coverage among the three levels of analysis. External to capacity studies, individual behavioral perspectives such as those studied by Tversky and Kahneman (1979) have received substantial attention in public policy scholarship with respect to cognitive biases, information processing, and 'nudging.' Such work in part constitutes the foundation for behavioral and experimental studies of public policy and administration that have recently emerged (Grimmelikhuijsen et al., 2017). Combining the notion of capacity with these cognitive dimensions, studies about individual analytical capacity in the context of policymaking include those of Howlett (2015) concerning "analytical skills and resources [regarding knowledge

acquisition and utilization]” (p. 174) and Colebatch (2006) concerning individual policy efforts and their fit within organizational and political contexts.

Calling, in turn, for more attention on macro-level factors, Straßheim (2020) argues that “it might be important to shift the attention again from individual behavior to the conditions of collective action. [...] Public policy, however, needs to break free from the micro-focus proposed by behavioral economics and to pay more attention to institutional, cultural and discursive dynamics” (p. 10). It is pertinent to note that levels of capacity analysis can be ‘nested,’ in that the ability of individuals to develop and deploy particular capacities is bounded by institutional factors shaped by organizational and systemic capacities (see Bakır (2017) regarding the application of structures, institutions, and actors as an analytical frame). Organizational capacities are crucial in a crisis response scenario as they determine characteristics of the immediate setting (e.g., hierarchies and interdependencies) in which individual policymakers and analysts deploy their own capacities. As such, systemic capacities govern, to a substantial degree, how organizations function internally and engage externally.

Finally, amidst or immediately following a crisis, policymakers and policy analysts face a substantial challenge: the sudden flood of (often contradictory) information that in theory provides data for analysis but in reality increases ambiguity about causes and solutions (Zahariadis, 2012). Leaders respond often by hasty instinct and heuristics; depending on leadership style, these are moments where ideology and political survival can eclipse ‘rational’ deliberation. According to Farazmand (2007), “failure to respond to and govern effectively during crisis situations and to manage disaster-driven emergencies may result in the loss of legitimacy and cause system breakdown; it can create chaos and lead to crises with far-reaching consequences and uncontrollable outcomes” (p. 462). As such, it is prudent to acknowledge that policy capacity is not solely a technocratic issue but a socially, culturally, and politically embedded one. This study illustrates this phenomenon in a country, Iran, that faced the convergent crises of economic sanctions and a pandemic.

### **3. Methods**

The severity and acute onset of the COVID-19 crisis required rapid decisionmaking and synthesis of information relevant to nearly all policy domains. A crisis of such complexity invites an analysis that considers not only policy capacities and actions but also internal and external contexts. To this end, this study framed its data collection around SWOT analysis (strengths, weaknesses, opportunities, and threats) to provide a structure for examining how interviewees perceived the capacities and actions of Iran’s government. To connect the study to literature about policymaking and to illustrate practical implications, findings are interpreted through the lens of policy capacity as specified by Wu et al. (2015).

This study uses data obtained from both primary and secondary sources. Primary data were collected through semi-structured interviews conducted in late 2020 with individuals in Iran selected on the basis of expertise in pandemic response and public policy. The 25 interviewees included five people each representing executives, specialized experts, and academic experts in the fields of general social sciences, political sciences, and economics. The snowball method was used to identify interviewees. This study also draws information from secondary resources

including official statistics, official documents, and policy plans. Sources include the IPRC and Iran's National Headquarters for Coronavirus Control.

The questionnaire asked interviewees to list the strengths, weaknesses, opportunities, and threats faced by Iran in addressing the COVID-19 pandemic. Information obtained was coded, sorted into SWOT-based themes, and verified with interviewees. In considering factors internal and external to the policymaking environment, SWOT analysis is one useful framework<sup>2</sup> for understanding systemic crises – like a pandemic – that have interdependent determinants, universal reach, and locally unique implications. Further, SWOT analysis has value both as a descriptive tool and a practical guide for strategic planning and management (Wheelen and Hunger, 1995), and has been applied in a study of COVID-19 response in China (Wang and Wang, 2020). SWOT analyses are undertaken typically in applied settings, supporting management decisions in the private sector and policy decisions in the public sector. While SWOT analyses are not common as tools of academic research, the method is used here to capture the practical exigencies of COVID-19 response and to illustrate how methods of applied and theoretical research might interact to bridge the often lamented gap between practice and scholarship.

## 4. Findings

### 4.1 Background

Iran's Ministry of Health is responsible for pandemic response (Ardalan et al. 2011; Siavashi et al. 2011), and at the outset of the COVID-19 pandemic Iran's health minister was appointed to establish the National Headquarters for Coronavirus Control. The first cases of COVID-19 were officially identified in February 2020, and within two weeks the disease spread rapidly throughout the country. Iran's health system faced increasing stress as the pandemic intensified, due to substantial shortages of emergency personnel, specialized laboratories, medical equipment, and medicines. From February to the end of November 2020 – the first nine months of the COVID-19 outbreak – Iran had over 980,000 cases and over 48,000 deaths.<sup>3</sup> Response measures implemented over this timeframe precipitated significant economic and social challenges, with all public facilities closed including religious, business, entertainment, and sports centers. In the face of these challenges, the government implemented economic and social programs to support vulnerable individuals and small businesses, and pandemic restrictions were lifted gradually as the urgency to protect the economy grew.

Iran's fragile economic circumstances compelled the government to shift policy response from managing the pandemic to managing the economic consequences of it. This shift was an effort not only in strategic repositioning but also in responding to practical exigencies and implementation challenges. For example, distancing and quarantine policies were undermined by

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<sup>2</sup> It is recognized that there are multiple analytical frameworks useful for understanding COVID-19 response, including NATO (nodality, authority, treasury, and organization; Hood, 1986), complexity theory and soft systems methodology (El-Taliawi and Hartley, 2020), and various conceptualizations of policy instruments (Howlett, 2019). See Bakir and Woo (2016) for a discussion about the evolution of studies concerning policy instruments, including the conceptualization of instrument 'nestedness' within hierarchical and tiered systems of policy capacities and their impact on design.

<sup>3</sup> <https://coronavirus.jhu.edu/region/iran>

the government’s limited impact on and weak penetration in society. Further, the policy scope was, in some instances, poorly established; insurance protection was not extended to street vendors and informal businesses – both of which play a substantial role in Iran’s economy. The religious nature of Iranian society, with a multiplicity of rituals and mass ceremonies at religious sites, also posed a major challenge to social distancing protocols. Most factors mentioned by interviewees, especially concerning the economy, reflect the same types of challenges present in most other countries. However, Iran was uniquely vulnerable due to international sanctions. Iran’s strengths, from a purely operational perspective in coordination, included a consistent messaging apparatus based on the government's dominance over official media, along with a largely supportive culture of charitable action and mobilization capacity based in the religious community. The remainder of this section applies SWOT analysis to examine data concerning the Iranian government’s management of COVID-19 (Table 1).

**Table 1:** Internal factors (strengths and weaknesses) and external factors (opportunities and threats)

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Minister of Health appointed as the Head of COVID-19 crisis management (3)*</li> <li>• Participation by all government units (2)</li> <li>• Clinical measures largely supported by political elites, public charities, and communities (3)</li> <li>• Enlistment of universities and specialized research institutes (1)</li> <li>• Mobilization of nation-wide healthcare network (2)</li> <li>• Cooperation from media (2)</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate early-warning alert system (1)</li> <li>• Structural approach to prioritize treatment over prevention (1)</li> <li>• Shortage of facilities and human resources (2)</li> <li>• Coordination and management lacking inclusivity and comprehensiveness (2)</li> <li>• Regulations on infectious disease control lacking comprehensiveness (3)</li> <li>• Weak economic resilience amid externally imposed sanctions (3)*</li> <li>• Desensitization of public and lagging participation following government adoption of a normalization strategy (1)</li> <li>• Incompatibility between religious practices and social distancing protocols (1)*</li> <li>• Incompatibility between traditional medical practices and ‘modern’ medical protocols (1)*</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Improving and upgrading emergency health systems and pandemic control programs (2)</li> <li>• Developing capacity for cooperation and community participation in crisis management (1)</li> <li>• Strengthening the role of universities and research institutions in decisionmaking (1)</li> <li>• Upgrading e-government capacities (3)</li> </ul>	<ul style="list-style-type: none"> <li>• Delay (relative to other countries) in access to an approved vaccine for COVID-19 (as of May 2021) (3)*</li> <li>• Rising unemployment (3)</li> <li>• Recession and inflation (3)</li> <li>• Pessimistic outlook within society (1)</li> <li>• Vulnerability of high-risk populations (3)</li> </ul>

*Note: 1. Academic experts; 2. Executives; 3. Both*

*\* Factors characteristic of Iran in comparison to most other countries*

#### *4.2 Internal: strengths*

*Minister of Health appointed as Head of COVID-19 crisis management:* Interviewees indicated that the appointment of the Minister of Health and Medical Education as the head of the National Headquarters for Coronavirus Control gave political legitimacy to the actions of the task force and strengthened the effectiveness of communications to society about the urgency of the pandemic situation. The actions of the Minister and the task force were also largely supported by physicians, nurses, and medical personnel, allowing response measures to be seen as the pronouncements of a single, credible, and authoritative policy voice.

*Participation by all government units:* According to interviewees, government agencies and institutions were largely united in their support of COVID-19 response measures. Political differences and ideological fragmentation diminished somewhat as the severity of the crisis commanded attention from all divisions of government. The largely unified strategic vision was apparent in numerous spheres: new legislation, budget appropriations, management of response mechanics, judicial oversight, law enforcement, management of medical facilities and field hospitals by military forces, and reporting about these activities by the national media. Meetings were regularly held by the Supreme Economic Cooperation Council throughout the early stages of the pandemic, establishing a tone of urgency recognized across government units.

*Response measures largely supported by political elites, public charities, and communities:* Policies were introduced to provide aid to adversely affected households and to provide subsidies and loans to affected commercial enterprises; these programs were delivered respectively through the Unemployment Insurance Fund and the National Development Fund. The government also mobilized financial assistance through the Iranian Welfare Organization, Relief Foundation, and the Foundation of the Oppressed and Disabled. Interviewees considered this strategy a particular strength but also acknowledged the important role of community participation in activities like production and distribution of disinfectants, facemasks, and personal protective equipment (PPE). Community groups were also involved in charitable activities, including assisting needy families, producing and publishing educational content for students, and developing or assisting in campaigns related to protective behavior.

*Enlistment of universities and specialized research institutes:* Interviewees indicated that dozens of universities and specialized research institutes helped to develop and maintain databases about patterns of pandemic spread. This capacity was recognized as crucial in efforts to support an evidence-informed approach to response.

*Mobilization of nation-wide healthcare network:* According to interviewees, the existence of a nation-wide healthcare network, from local to provincial facilities, was a crucial early strength. These health centers provided systemic and coordinated capacity to assess, report, and control the outbreak.

*Cooperation from media:* Iran's official media made an effort to avoid stoking panic and stress within the public, according to interviewees. Information campaigns by the National Headquarters for Coronavirus Control sought to countervail potentially harmful or unproductive rumors about the pandemic.



### 4.3 Internal: weaknesses

*Inadequate early-warning alert system:* Findings indicate that the potential severity of the crisis was initially disregarded by government. Interviewees described management of and official messaging about the pandemic using phrases like ‘oversimplification,’ ‘disbelief in the emergence of a crisis,’ ‘low estimate of the crisis,’ and ‘[reticent] to issue early warning alerts.’ Interviewees also indicated that warning and awareness systems were not activated sufficiently or soon enough to raise public awareness. Among other examples of action and inaction related to initial minimization of the crisis, according to interviewees, were the failure to suspend flights from China and insufficient efforts to equip most healthcare facilities with diagnostic and treatment capabilities.

*Structural approach to prioritize treatment over prevention:* The response strategy was said by interviewees to be more reactive than proactive, and thus successful more in treatment than in prevention. According to one interviewee, “the inactivation of the warning and awareness system to sensitize the community” about the crisis exemplified the inadequacy of prevention measures.

*Shortage of facilities and human resources:* The pandemic disrupted supply chains for healthcare equipment and supplies. Interviewees cited substantial weaknesses in public access to basic and essential PPE (e.g., facemasks and disinfectants).

*Coordination and management lacking inclusivity and comprehensiveness:* According to interviewees, the National Headquarters for Coronavirus Control was not effective in fully mobilizing and managing the country’s resources and facilities – a failure attributed by interviewees to the influence of power hierarchies and conflicts within the taskforce. This failure was illustrated by disparities in resource disbursement by the government and cooperating institutions.

*Regulations on infectious disease control lacking comprehensiveness:* Interviewees indicated that the experience of Iran’s governing bodies in managing natural disasters was limited largely to earthquakes, floods, and storms. The government’s lack of experience in pandemic management manifested itself in various ways, including insufficient planning, weaknesses in social engagement, and inadequate training of personnel.

*Weak economic resilience amid externally imposed sanctions:* The government was initially reticent to impose strict lock-downs, arguing that such lock-downs would unduly stress the economy and that there was insufficient budget space for relief or stimulus programs. According to interviewees, the government required only that people stay home to prevent the spread – a measure less effective than mandatory lock-down may have been.

*Desensitization and lagging participation among the public:* According to interviewees, the government was unable to balance the incompatible approaches of normalizing (resuming) economic activity with leveraging social participation for response. By moving more towards normalization, the government attempted to present the crisis as a manageable situation and to demonstrate its ability to effectively mobilize response efforts. However, interviewees cited several missteps in government efforts to build public urgency and commitment to preventive measures: authorities’ and officials’ refusal to wear face masks, premature reopening of businesses, and potentially misleading propaganda about the capabilities of the healthcare system. According to interviewees, such messaging was responsible in part for collective desensitization

to the crisis and the consequent lack of public participation in observing containment and mitigation protocols.

*Incompatibility between religious practices and social distancing protocols:* In accordance with containment and mitigation strategies, the National Headquarters for Coronavirus Control restricted public gatherings to enforce social distancing protocols. Restrictions required the closure of schools, higher education institutions, restaurants, and many businesses, and the cancellation of cinema screenings, concerts, theater performances, and sports competitions. However, religious places were exempt due to political pushback, exposing worshipers to possible transmission.

*Incompatibility between traditional medical practices and 'modern' medical protocols:* COVID-19 prevention protocols and treatments were a controversial topic within the public and a focus of rumors about medical issues. Examples of popular but unproven treatments included using Vicks VapoRub (a cough relief ointment), eating garlic, drinking alcohol, inhaling baking soda or vinegar vapor, and mouth-rinsing with saltwater (Niktab et al., 2020). According to interviewees, rumors about the clinical aspects of the virus and methods to treat it became problematic as people began to believe them more widely, deepening public indifference to science-based advice and protocols.

#### *4.4 External: opportunities*

*Improving and upgrading emergency health systems and pandemic control programs:* While the pandemic was a major challenge for Iran's emergency response and medical capacities, it was also (as a practical mandate) an opportunity to develop institutional experience and knowledge, strengthen laboratory capacities, produce medical equipment, train and manage personnel, and launch a digital healthcare platform. As in most countries, the crisis was an impetus for Iran to build institutional learning and management capacities.

*Developing capacity for cooperation and community participation in crisis management:* The sudden emergence of the pandemic, accompanied eventually by some degree of collective ownership of the crisis, was an opportunity to promote a community-based concept of collective resilience and crisis management capacity. This was an especially crucial opportunity in a setting characterized by communication and collaboration gaps between government and society.

*Strengthening the role of universities and research institutions in decisionmaking:* The complexity and severity of the pandemic highlighted not only the value of expert insight but also, due to the extent of economic and social consequences, the value of expert insight across social and behavioral sciences and the incorporation of that insight into policymaking. Universities provided some of the analytical capacity needed to understand the crises, complementing existing capacities held within government and civil society organizations.

*Upgrading e-government capacities:* From interviewees' point of view, the capabilities of e-government and other virtual platforms facilitated the implementation of some response measures. Examples are the provision of related legal mechanisms like organizational bylaws and regulations and the technical infrastructure to enable telecommuting, distance learning, and e-commerce.

#### 4.5 External: threats

*Delay (relative to other countries) in access to an approved vaccine for COVID-19 (as of May 2021):* It was not until April 2021 that Iran announced the commencement of production of its first nationally developed vaccine (COVIran Barekat). A second nationally developed vaccine (COV-Pars) was in clinical trials as of May 2021. Meanwhile, Iran had been taking delivery of Russia's Sputnik V and the UK's Oxford–AstraZeneca vaccines.

*Rising unemployment:* According to interviewees, the rapid rise in unemployment associated with the economic impacts of virus containment presented a significant challenge to economic and social stability, especially given that a substantial share of Iran's labor force (roughly 70 percent; IPRC, 2020) is uncovered by unemployment insurance.

*Recession and inflation:* According to the Statistical Center of Iran, Iran's economic growth rate from March 2020 to November 2020 was -6.7 percent (IPRC 2020). Government expenditures to address the pandemic and offset the economic impacts – including support for vulnerable individuals and incentives for businesses – drove inflation and thus hampered broader economic recovery.

*Pessimistic outlook within society:* From the perspective of interviewees, the precarious economic situation of many individuals and households, inefficiency of the pandemic response system in resolving the crisis, and lack of certainty about when the crisis would end led to a generally pessimistic outlook within the public, raising the prospect that the crisis would escalate beyond social dimensions and have political and security implications.

*Vulnerability of high-risk populations:* Iranian households do not possess sufficient levels of preparedness for disasters, particularly in terms of local knowledge, social participation, and resource accessibility (Ardalan et al., 2011). Furthermore, Iran's rapid urbanization has over time driven many rural residents to live on the outskirts of large cities (an estimated 11 to 13 million people<sup>4</sup>), where disaster preparedness is weaker than in urban cores. Interviewees referenced the large number of people, around 45 million (Rahbari et al., 2020), who are structurally vulnerable to pandemics and other disasters – including people over 60 years old or having underlying medical complications.

## 5. Discussion

This study's application of SWOT analysis has enabled the identification of the advantages, disadvantages, opportunities, and challenges of Iran's COVID-19 response strategy. This section briefly discusses how the findings are connected to notions of policy capacity – including resources, policies, and constraints on both. As the interpretation of findings uses the framing language of policy capacity, it offers not only a systematic analysis of the case but also highlights practical strategies for policymaking, for fostering an enabling response environment (e.g., cooperation between government and non-government organizations), and for supporting opportunities for grassroots responses (e.g., community-based initiatives). The latter two approaches can be helpful in overcoming public resistance to mitigation measures – including, for

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<sup>4</sup> <https://www.borna.news/fa/tiny/news-1061305>

example, settings where social distancing protocols prohibit religious rituals and gatherings. These approaches can be deployed also when public trust in policy responses is undermined by lack of awareness or concern about negative peripheral impacts.

Policy capacity is a useful analytical lens through which to examine pandemic response, as the rapid spread of COVID-19 forced governments to act without a full understanding of the scope and nature of the threat – including the broader consequences of mitigation measures. The speed and effectiveness of crisis response are in part determined by levels of policy capacity, including the ability to analytically ‘scan’ the environment (e.g., internal and external conditions affecting the ability of a government to respond) and the ability to establish a strategic approach that reflects understandings about that environment (Howlett and Lindquist, 2004). This study finds that Iran underperformed on both accounts, with the government’s weak fiscal position undermining its capacities in analysis and response. Pandemic response can require substantial and immediate financial commitments (e.g., for healthcare, research, and economic stimulus), but Iran’s budget deficit (Dindarrostami et al., 2020) hamstrung response capacities. In May 2020 (scarcely two months after the pandemic began), fiscal and economic concerns led to the reopening of businesses by order of the president – even at the peak of the country’s COVID-19 outbreak and while the National Headquarters for Coronavirus Control urged continued closures. A sharp decline in tax revenue, challenges associated with enforcement of mitigation measures, and increasing economic pressure on vulnerable groups were three of the principal factors guiding the government’s decision to reopen the economy.

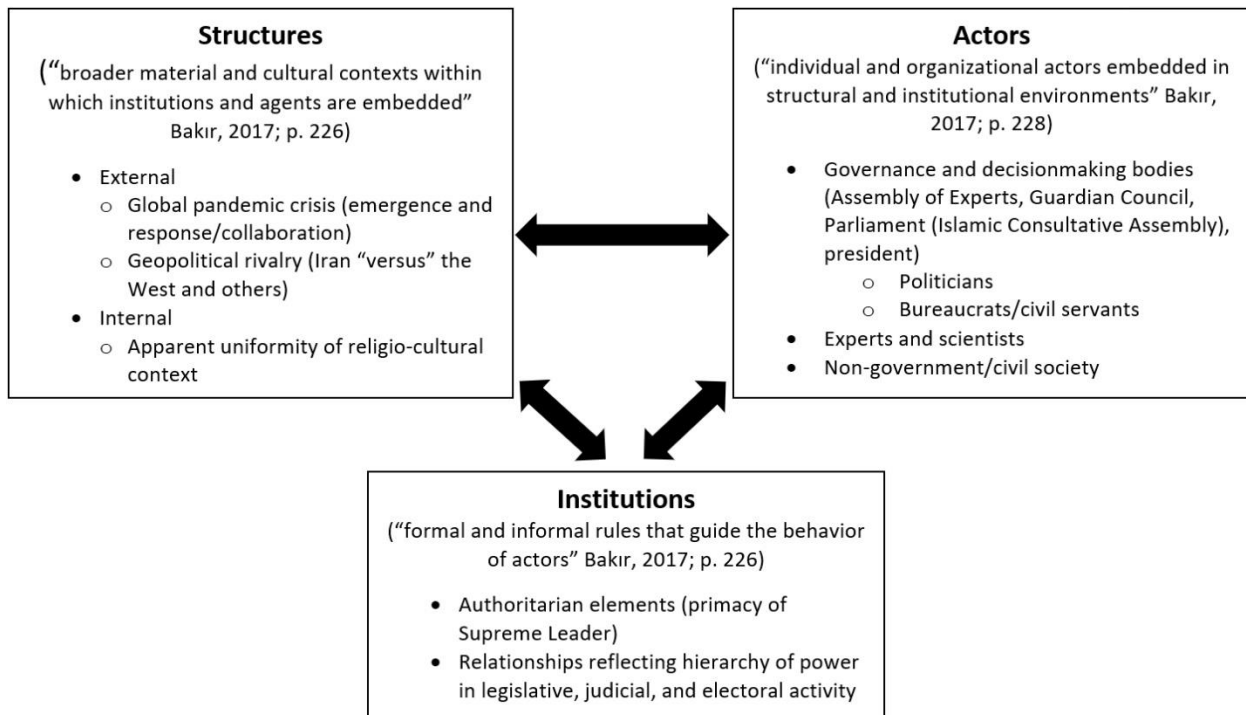
Compromised community capacity limited the effectiveness of distancing and quarantine measures, leaving the government to fight the pandemic by issuing mere requests for citizen compliance. Without the capacity to mobilize in a holistic and society-wide manner, Iran’s government applied its limited resources only to pandemic issues that were acute and appeared to be salient threats. As the case count increased, the government’s strategy became more reactive (treatment) than proactive (prevention). For example, to boost capacity quickly, the government increased the ranks of healthcare workers by 50 percent and provided a 15 percent raise in the salaries of medical staff. Additionally, the government sought to oversee the distribution system for medical assistance and developed operational guidelines for affected businesses and producers. However, according to the findings of this study, peripheral concerns like social and psychological issues received less attention despite the fact that these can be significant challenges in a pandemic (Khademian et al., 2021; McBride et al., 2020) and have likely effected policy capacities for COVID-19 response.

It is appropriate also to consider the role of structural factors (e.g., national policy style, administrative traditions, political regimes, and economic structure) and the institutional environment (rules and norms) in shaping COVID-19 response capacities. This analytical perspective is captured by the structure-institution-actors (SIA) framework (Bakır and Jarvis, 2018; Bakır, 2017) (Figure 1). The framework has been used to examine the relationship between global trends and local policy actions, including a study by Bakır (2020) concerning Turkey’s COVID-19 response and by Hartley and Ahmad (2021) concerning higher education administration reforms. Structures refer to the settings and contexts in which institutions (as rules and norms) function and actors make choices. Regarding the case of Iran’s COVID-19 response, structures can be classified as ‘external’ (dynamics of pandemic spread and response at the global level, including vaccine distribution; geopolitical rivalry impacting Iran’s diplomatic and

economic relationships) and ‘internal’ (cultural context shaping a shared understanding about the crisis within Iranian society). These structural factors in turn determine the design and function of public institutions within Iran, including political structures and processes.

While Iran has a presidential system, executive power lies in effect with the Supreme Leader, whose power eclipses that of the president, ministers, and members of parliament. For example, in early 2021 the Supreme Leader declared a ban (later relaxed) on imports of COVID-19 vaccines developed in Western countries (Hafezi, 2021). Since the Iranian Revolution (Islamic Revolution) of 1979, structural factors reflect an authoritarian style across policy styles, administrative traditions, and political regimes (Tezcür, 2012; Hen-Tov, 2007; Chehabi, 2001). Such institutions and practices are the effective norms and rules disciplining the behavior of individual actors across society, from politicians and experts (including public health authorities) to citizens. Reflective of issues concerning nearly any policy domain, the institutions governing Iran’s political and social systems facilitated the centralization of pandemic response and decisionmaking after an initial period of denial and blame (Alimardani and Elswah, 2020; San et al., 2020), with policies reflecting not only some practical economic and public health considerations but also factors enabling the preservation of political authority both internally and externally. Indeed, Iran’s government had the interest, if not the full capacity, to consider broader issues in its policy response. It chose in this case to focus on factors that would ensure the maintenance of governing legitimacy (e.g., trading prevention protocols for economic continuity and using the crisis as an opportunity to reinforce favored narratives about domestic and global politics); by contrast, factors that may have strengthened the power of communities to act in collaboration with government on response measures received less attention. Deeper analysis about this complex interplay of factors warrants additional research.

**Figure 1:** Structure-institution-actors (SIA) perspective on Iran COVID-19 response



## 6. Policy recommendations

For policy recommendations applicable to pandemics and other widespread and rapid-onset crises, this article returns to SWOT analysis to provide a structuring frame. Table 2 presents a framework for elements of strategic policy action derived from the overlay of the four SWOT components. These elements, appearing in the four boxes of the matrix, are described in this section and interpreted within the context of policy capacity.

**Table 2:** SWOT Strategies

	<i>Strengths</i>	<i>Weaknesses</i>
<i>Threats</i>	<p><b>ST</b></p> <ul style="list-style-type: none"> <li>- Develop comprehensive strategy for crisis management</li> <li>- Expand use of information and communications technology in pandemic management</li> </ul>	<p><b>WT</b></p> <ul style="list-style-type: none"> <li>- Target financial support to stimulate economic recovery and assist affected businesses</li> <li>- Build resilience by engaging the community in pandemic response</li> </ul>
<i>Opportunities</i>	<p><b>SO</b></p> <ul style="list-style-type: none"> <li>- Promote mental resilience within communities</li> <li>- Build organizational capacity to adapt to evolving conditions and new information</li> </ul>	<p><b>WO</b></p> <ul style="list-style-type: none"> <li>- Develop community-oriented pandemic management programs</li> <li>- Strengthen prevention capacities in public health management</li> </ul>

### 6.1 Develop a comprehensive strategy for crisis management

As pandemics precipitate a range of problematic consequences, management strategies must be comprehensive, covering all elements of society (social, economic, cultural, political, environmental, and others). Such strategies require cooperation among all divisions of government (i.e., integrative capacity; Rayner and Howlett, 2009) and a robust effort to facilitate community participation (i.e., community capacity; Hartley and Jarvis, 2020). Generally, a comprehensive crisis management strategy can facilitate cooperation to minimize capacity limitations and inconsistencies (organizational-operational capacity; hereafter, all mentions of policy capacity draw from the framework proposed by Wu et al. (2015) unless otherwise stated) and counterproductive competition for resources (organizational-political and systemic-political capacity).

### 6.2 Expand use of information and communications technology in pandemic management

Providing adequate infrastructure for information and communications technology (ICT) is crucial for facilitating the collection and analysis of data (organizational-analytical capacity) and communicating information to the public (systemic-political capacity). ICT infrastructure can also facilitate public service delivery (organizational-operational capacity), examples of which are the

provision of e-health services and the digitization of educational activities in response to social distancing measures. More broadly, the integration of pandemic monitoring capacities with ‘smart city’ (Allam and Jones, 2020) programs can leverage existing technological infrastructures and management systems to expand monitoring and service capabilities through mobile applications, detection systems, and service delivery mechanisms.

### *6.3 Target financial support to stimulate economic recovery and assist affected businesses*

To mitigate the economic impacts of pandemic mitigation measures, governments should pursue economic stimulus and business recovery in both direct and indirect ways. Examples are investment in ICT infrastructure, provision of job training programs, subsidies or investment support for small businesses, industry guidance on successful business practices under mitigation protocols, and the development of industrial and structural flexibility to meet the needs of pandemic response as they arise. Regarding social measures, possible government interventions include support for programs and charities to serving vulnerable groups, and plans to ensure not only the availability of resources but also their fair distribution (systemic-political capacity). Such measures help position an economy for faster post-pandemic recovery while strengthening its ability to withstand future threats.

### *6.4 Build resilience by engaging the community in pandemic response*

Prolonged continuation of social distancing protocols such as quarantine restrictions and lockdowns can exacerbate societal vulnerabilities, including occupational and food insecurities and ultimately political impatience and instability. Government interventions should thus target the alleviation of perceived insecurities through a visible and meaningful presence in the provision of staple items, food, social support, and good-faith communication and outreach (systemic-political capacity). Building capacity to deliver such provisions necessitates reliance on not only government capacities but also community capacity (e.g., NGOs, local organizations and committees, and individuals). Response planning processes should also be seen as an opportunity to engage citizens at community levels (a localized expression of systemic-political capacity), engender public buy-in of mitigation efforts, and incorporate local knowledge and wisdom in planning processes (systemic-analytical capacity).

### *6.5 Promote mental resilience within communities*

The effects of the pandemic caused substantial stress not only for businesses but also for households and individuals due to health threats, economic precarity, and social insecurity. Anxiety and mental disorders may be magnified during a pandemic (Moreno et al., 2020; Pfefferbaum and North, 2020), raising the need for interventions at personal and community scales. This challenge implies the necessity of providing mental health services and managing peripheral factors that impact mental health. An example effort is the development and communication of detailed plans and schedules for pandemic control and an ‘exit strategy,’ articulating the role of stakeholders and clarifying how individuals can envision their role in the mitigation and recovery effort. It is essential also to foster confidence and trust in the capacities of healthcare systems and social workers. Additional measures include ensuring the continuity of government services to maintain at least the perception – if not the reality – of stability in daily

life, and training mental health workers to recognize psychological threats and needs unique to pandemic and crisis situations.

#### *6.6 Build organizational capacity to adapt to evolving conditions and new information*

While government agencies often draw on experience to prepare for and manage crises, pandemics having unanticipated immediacy and severity test this reactive capacity. Agencies and organizations involved in mitigation and recovery must build the capacity to adjust quickly under rapidly evolving circumstances (organizational-operational capacity) and the capacity to observe previously unmeasured phenomena and integrate new types of information into existing management systems (organizational-analytical capacity). The COVID-19 pandemic was characterized by the constant flow of irregular and sometimes anomalous information (see Zahariadis (2012) concerning contradictory and ambiguous information), as monitoring capacities sought to keep pace with the evolution of the crisis. Continuous assessment and improvement of analytical capacities in crisis situations must be undertaken to ensure effective input into policymaking and meaningful communication to agencies, organizations, and society.

#### *6.7 Develop community-oriented pandemic management programs*

Effective management for pandemic mitigation requires the support, cooperation, and participation of the community. Community-centered pandemic and crisis management is strategically essential not only because governments often lack resources to effectively undertake mitigation measures but also because community organizations, groups, and individuals are on the ‘front lines’ of crises and governments cannot always respond as quickly as needed. As such, educating and mobilizing communities to monitor (analytical capacity across scales), report, and respond to outbreaks can be an effective and efficient strategy that also fosters ground-level buy-in and ownership of response measures (community capacity).

There are several measures governments can take to foster the development of community-centered pandemic management capacities. First, governments must adopt processes and plans to motivate community members to support response efforts and organize for collective capacity; this approach includes liaising with local leaders and establishing communication and trust between public health officials on one hand and community groups and individuals on the other. Supporting this communication should be infrastructures to facilitate the collection and exchange of information, including crowd-sourced data from self-reporting activities through mobile applications and other ‘smart’ platforms. Second, at a softer level, governments should endeavor to shape positive and productive attitudes and behaviors about public health and mitigation protocols; the foundation of such an effort is trust, such that information about evolving circumstances and newly recommended protocols are taken seriously within the community. Overall, the goal of such efforts is to create a society-wide understanding about how to respond effectively and in a coordinated manner.

#### *6.8 Strengthen prevention capacities in public health management*

Finally, governments must give robust consideration to prevention, even as a crisis continues to unfold and when (in the case of pandemics) clinical treatment is the highest priority. The principal



elements of such a strategy are presented in Figure 2. Prevention is a function of risk reduction, knowledge production, specialized training, public education, and revision (where needed) of prevention protocols. This is a comprehensive approach that requires shared vision, operational coordination, the capacity to monitor progress, and the capacity to cycle performance feedback into iterative policymaking processes. This recommendation reflects findings by He et al. (2020) in the case of China’s COVID-19 response; notably, the authors find that reactive capacity is stronger than proactive capacity, in that the Chinese government’s response progressively strengthened as the severity of the crisis grew. A policy posture that commits as much effort to prevention (e.g., through elements in Figure 2) as it does to reaction would in turn reduce the severity of the response needed for reaction.

**Figure 2:** Elements of a prevention strategy for pandemics



## 7. Conclusion

This study has examined Iran’s COVID-19 response through the perspective of SWOT analysis and distilled findings into policy recommendations through the concept of policy capacity, aiming to maximize relevance to practice and to the evolving literature on policy capacity. The study found that Iran’s healthcare system lacked the necessary policy capacity to effectively respond to the COVID-19 pandemic. In its policy response, Iran’s National Headquarters for Coronavirus Control was expected to take complete responsibility, but its development was constrained by a complex array of contextual factors that diminished its effectiveness. Iran’s severely weakened economy, in part the consequence of international sanctions, was particularly vulnerable to destabilization and prompted the government to announce economic normalization and reopening at the height of the outbreak – despite insistence by the National Headquarters for Coronavirus Control that businesses remain closed. The government proceeded to categorize threats in a

hierarchical manner and to allocate resources towards the most acute threats. This action had the effect of prioritizing threats to the stability of society (e.g., food and job insecurity) and threats to the credibility of government over more clinical factors.

In addition to limitations across standard elements of policy capacity, Iran's response was characterized also by a lack of connective capacity among agencies and across sectors. Insufficient cooperation and coordination, a deeply rooted problem before and during the crisis, constrained effective pandemic response. As the pandemic and its effects worsened, communities grew increasingly frustrated and pessimistic. These factors converged to generate a situation with high precarity, anxiety, and potential instability. Some of these factors would be experienced by almost any country in similar crises, while others were unique to Iran based on particular economic, political, and socio-cultural factors. Nonetheless, insights drawn from Iran's experience offer broader policy lessons and, at a theoretical level, exhibit how SWOT analysis can be used as a descriptive-analytical device to understand rapidly evolving policy challenges with high practical salience.

In closing at a broader conceptual level, the analysis highlights the relationship between political interests and scientific knowledge in the management of acute crises, with implications for studies about state-society relations and the fact-values interface. These implications are applicable not only to pandemics but also to ongoing crises like climate change. At this higher realm of interpretation, the findings of this study are relevant to multiple country contexts. Indeed, the tension between cautionary approaches to public health and maintenance of economic stability is salient across political systems; in democratic systems, elected leadership must consider the political and electoral pushback resulting from business closures while, in authoritarian systems, political elites are motivated to maintain legitimacy in the view of citizens and the international community. Additionally, the pandemic elicited political efforts to deny the severity of the crisis, in both democratic countries (e.g., the United States and Brazil) and authoritarian countries (e.g., Iran and Tajikistan). As future scholarship reflects on COVID-19 as a natural experiment in comparing policy capacity, mobilization, and effectiveness, efforts should be made to identify patterns associated with regime type and structure. This study of Iran thus contributes one account of how an authoritarian government responded by trading mitigation for economic stability, a decision made in part due to the country's already weakened economic position. At the same time, Iran's slow, inefficient, and often internally contradictory policy responses had the effect of prolonging the pandemic in a way that undermined economic recovery. At a time when some authoritarian governments used policy responses to the COVID-19 crisis to further solidify their control over society (Akbari, 2020; Thomson and Ip, 2020), Iran appeared to seek economic continuity by withholding such interventions. The notable implication, deserving further research, is that not all authoritarian governments can be expected to behave the same way in an acute crisis.

**Research ethics statement:** This research was conducted independently without funding or support from any institution. Interviewees voluntarily participated in the study, were informed prior to interviews about the aims of the research, and were given anonymity across the process and in the write-up. Researchers obtained verbal consent from each interviewee prior to the interviews, and no harm or duress were inflicted on interviewees.

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