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### GOVERNMENT ACTIONS AND FACTORS THAT CONTRIBUTE TO PERU'S RANKING AS THE COUNTRY WITH THE SECOND HIGHEST NUMBER OF COVID-19 CASES IN LATIN AMERICA: BEYOND CONJUNCTURE

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#### **ABSTRACT**

The COVID-19 pandemic is devastating many countries. Despite countless global containment and quarantine efforts, the death toll continues to rise. This manuscript aims to comment on the specific case of Peru, the first country in Latin America where the government adopted drastic containment measures. However, a series of social factors continue to affect its current status as the country with the second highest number of infections in the Americas and the fifth in the world (as of June end).

#### **INTRODUCTION**

The epidemic of the SARS-CoV-2 virus that causes the COVID-19 disease has spread worldwide with more than 12 million people infected across the globe and over 500 thousand deaths (information as of June 30, 2020). (Dong, Du, and Gardner, 2020) Following some initial statements downplaying the situation, which lead to delays in containing the virus, on January 30, 2020, the Director-General of the World Health Organization (WHO) declared the COVID-19 outbreak a public health emergency of international concern and published a set of temporary recommendations. Almost a month and a half later, on March 11,

2020, the WHO declared COVID-19 a pandemic, (OMS, 2020) that is, a new virus against which the population does not have natural immunity, which causes massive infections and high rates of infection and mortality. The delay in the WHO's actions was highly criticized, given the disease's alarming levels of spread (the virus had already spread to more than 100 countries), its severity, and the striking levels of inaction in many areas. After the declaration, preventive measures by governments became stricter, with many countries deciding to close their borders and implement community quarantines and temporary business closures. Many of these measures were based on the experience of the country reporting the outbreak (Yezli and Khan, 2020). In this way, countries that implemented decisive and early interventions helped to reduce the spread of the disease and flatten their "epidemic curves". (Fisher and Wilder-Smith, 2020), (Lee, Chiew, and Khong, 2020). Despite the measures adopted and the efforts to stop the spread, the pandemic has resulted in a global public health crisis. Thus, in the past few months, it has been substantially affecting aspects of human society, such as medical care, economic structures, and especially social relationships. In this sense, people were asked to practice social distancing and to stay at home, being only able to leave for essential activities (Williams, 2020). In the beginning, many governments around the world stated that the measures were unnecessary and later demanded compliance (Kent, 2020). In some countries, these changes have no predicted timeline because of the increase in the number of infections and the resulting changes in social distancing guidelines (Kami, 2020)

At the time of writing this article, as of July 11, the pandemic caused by COVID-19 has reached 12,466,337 reported cases around the world (Jhons Hopkins University 2020). The five countries with the largest number of infections are the United States (3,184,573), Brazil (1,800,827), India (793,802), Russia (712,863), and Peru (319,646); the disease has claimed a total of 559,622 lives to date.

In the last few decades, there have been several pandemics, but none of the previous ones have reached the number of infections and deaths that have resulted from COVID-19. In 2003, SARS-CoV infected 8,098 individuals in 26 countries around the world, with a mortality rate of 9% (Shereen et al., 2020). MERS-CoV in 2012 amounted to 2,494 people infected and claimed more than 858 lives.<sup>6</sup> In addition, it is worth mentioning the pandemics such as A-H1N1 flu in 2009, polio in 2014, Ebola in 2014 (West Africa), Zika in 2016, and Ebola (Democratic Republic of Congo) in 2019.

In the Latin American context, the COVID-19 pandemic arrived at a time when the region was going through a stage of economic weakness and macroeconomic vulnerability. In the past decade, the global financial crisis (2010–2019) led to the regional GDP growth rate to decrease from 6% to 0.2%. In fact, the 2014–2019 period presented the lowest growth since the 1950s (0.4%) (Cepal, 2020). Considering this scenario, the COVID-19 pandemic may be the cause of the greatest socioeconomic crisis in the region.

Peru, specifically, had an average economic growth of 4.9% in the last two decades, a rate much higher than that of the great majority of Latin American

countries (BBC News 2020). Peru has a population of 32,131,400 in habitants (Instituto Nacional de Estadística e Informática (Instituto Nacional de Estadística e Informática (INEI), 2019). According to a study by the National Center for Strategic Planning (Ceplan), in 2013, 19% of Peru's GDP came from the informal sector. Therefore, informality is estimated to be present in 70% of the country's economically active population (El Peruano Diario Oficial, 2020). Based on the above, before the pandemic, the context had a positive macroeconomic trend. However, it lagged as a result of health care system deficiencies and lack of coverage, which has always signified a weakness, thus causing the government's concern in enacting rapid measures to ensure that the pandemic is contained. Contingencies of the pandemic began on March 6, the date when the first case arose. As of March 16, under Supreme Decree No. 044-2020-PCM, a state of emergency was declared at the national level. This decree included the suspension of domestic transportation—excluding cargo and merchandise—and temporary border closure and the subsequent suspension of international passenger transportation (MTC, 2020). Employment, household income, and government revenue were greatly affected.

In addition, although some studies suggest the need to establish prevention measures and appropriate action protocols for similar cases (Faulkner, 2001), few economic systems have developed an appropriate healthcare strategy. Despite the WHO (2005) advising countries to develop plans for pandemic management, when the crisis began, very few were fully prepared, and 75% of the countries do not have sufficient health care capacity to react satisfactorily to major infectious disease outbreaks.

We analyze the contingency measures adopted by Peru, the top-ranking country in Latin America, in combating this health emergency (Table 1, Table 2); further, we discuss the factors that are currently influencing its position as having Latin America's second highest and the world's fifth highest number of COVID-19 infections.

### **COVID-19 PANDEMIC IN PERU**

In Peru, the first case of COVID-19 was confirmed on March 6, in a Peruvian with a history of travel to Spain, France, and the Czech Republic. Other cases were confirmed among people who were in contact with this infected individual (Minsa, 2020). Responding to this alert, Peru was the first country in Latin America to drastically apply quarantine measures. On March 15, with just 71 reported cases and 0 deaths, the president of the Republic provided a solid governmental response in the initial stage, with decrees beginning on March 16, including the Supreme Decree No. 044-2020-PCM: "Supreme Decree that declares a national state of emergency due to the serious circumstances that affect the life of the nation as a result of the COVID-19 outbreak," in addition to special emergency decree No. 026-2020 "Emergency Decree that establishes various exceptional and temporary measures to prevent the spread of the coronavirus (COVID-19) in the national territory." The first document highlighted an action that had not occurred in many decades: implementing quarantine as a national security measure, effectively used to manage the rate of infections and the implementation of relatively ambitious economic safety

nets to protect families and companies (Vázquez-Rowe and Gandolfi, 2020), guaranteeing citizens food, medicine, and continued services, including water, sanitation, electricity, gas, fuel, telecommunications, cleaning, solid waste collection, funerals, and more, This made Peru one of the most prudent countries, with a quick reaction compared to other countries such as Italy, Spain, and the United Kingdom (Table 1) (Gestión-2, 2020). In terms of epidemiological control, four teams were formed to help locate potential carriers of the virus: Team 1 was in charge of following up on family contacts; Team 2 identified individuals who may have contracted the disease at an airport, and teams 3 and 4 identified and followed up with individuals who were in contact with them in clinical settings. In addition, the National Institute of Health (INS), an institution affiliated with the Ministry of Health (MINSA), was given the role of the only official institution authorized to process samples and deliver results, while the MINSA served as the official source of authorized information on the subject of coronavirus in the country.

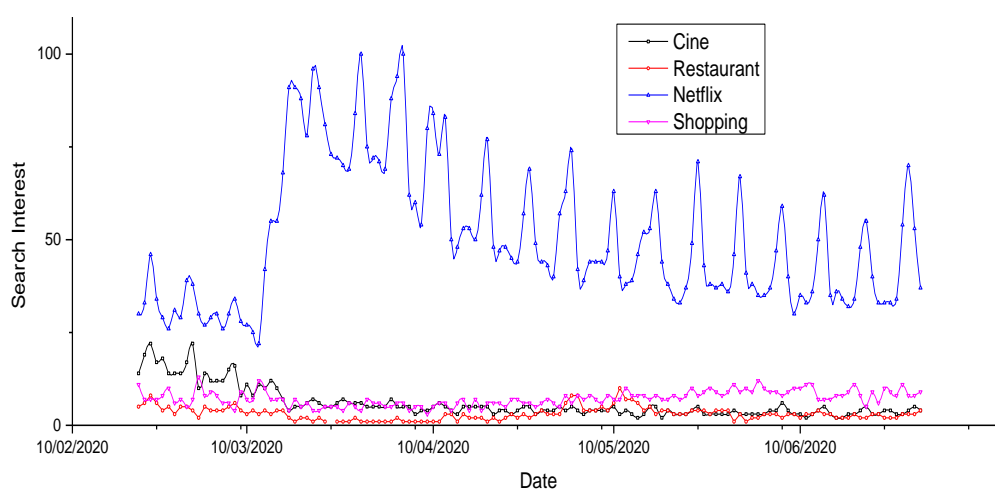
It should be noted that in Latin America, few countries have implemented strict hygiene measures to combat the pandemic. Several Asian countries had strictly implemented decisive, early measures that led to the reduced spread of the disease and flattened their epidemiological curves (Vernon J. Lee, Calvin J. Chiew, and MPH, 2020), (Fisher and Wilder-Smith, 2020)

Given the rapid spread of the COVID-19 pandemic, changing Peruvians' lifestyle and behavior was essential and urgent to prevent the easy transmission of the virus. Social distancing is a strategy that has been chosen by a majority of governments worldwide; it is aimed at reducing potential contact between infected and non-infected people. When this measure was first implemented in Peru, it turned out to be problematic because of its impact on social norms, the economy, and especially on the people's psychological well-being (Yezli and Khan, 2020)

The benefits of a strict quarantine in Peru were visible after the first weeks of mandatory confinement, and the closure of non-essential services considerably reduced the virus's reproduction rate, offering encouraging signs of a flattening infection curve (Strzelecki, 2020)

The principles presented by Mavragani are widely used nowadays by various researchers to analyze the evaluation of individuals' decisions. Mavragani describes how to select the appropriate keyword(s), region(s), period, and category based on data collected from Google Trends (GT) (Mavragani and Ochoa, 2019). GT contains data from different geographic locations that are segmented into countries, territories, and cities. Users can also set a custom time range (Strzelecki, 2020)

Research has been conducted on the potential use of GT to monitor public concern regarding the management of COVID-19 in Taiwan (Husnayain, Fuad, and Su, 2020); or on issues related to public interest research on COVID-19, comparing GT data with data from COVID-19 cases in recent infections (Effenberger et al., 2020).

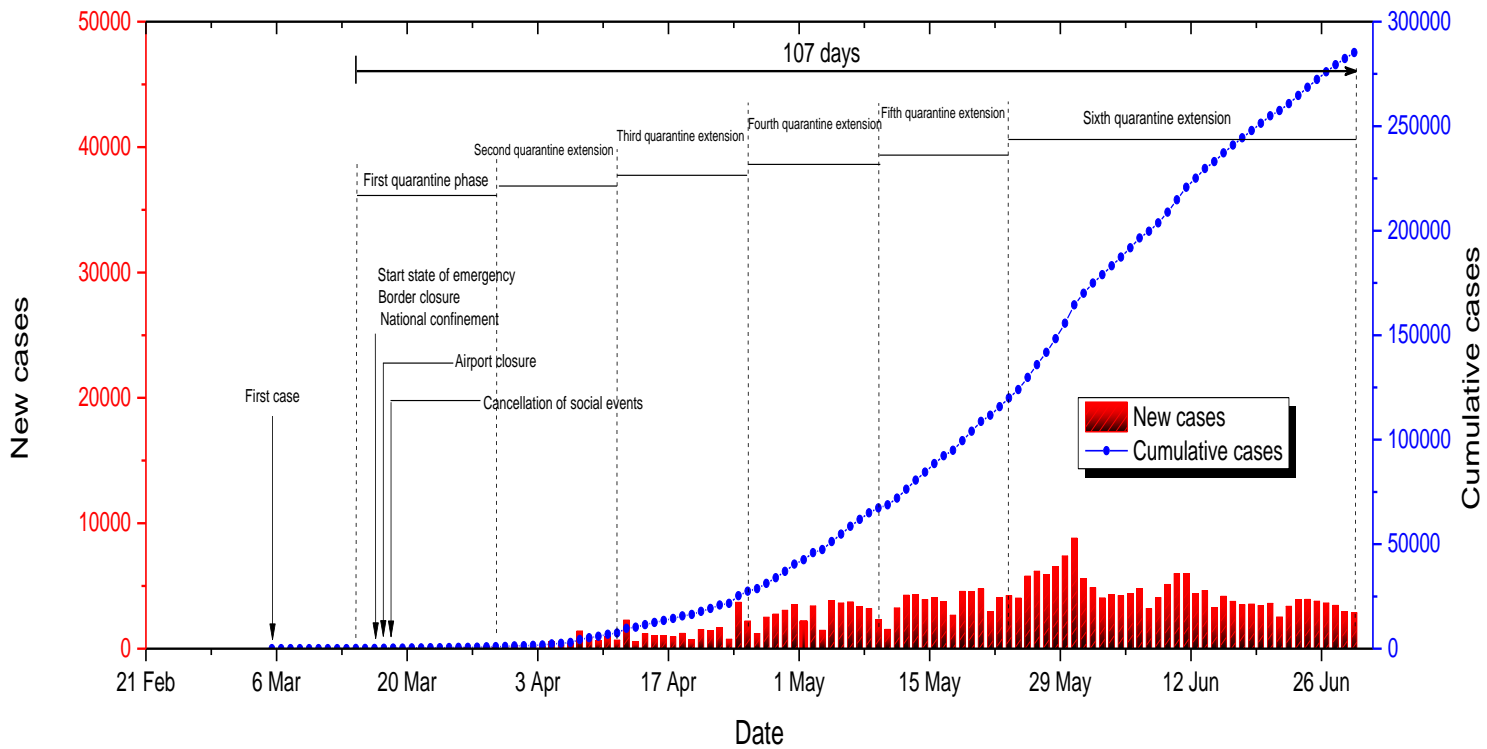


**Figure 1.** Search trends for the most representative leisure activities in Peru before and after the pandemic.

In Fig. 1, using the GT application, the fluctuations in Google search results are shown for data ranging from February 21, 2020—before any COVID-19 cases were found—until June 30—the date when the quarantine was lifted in some specific regions of Peru and the gradual return of some economic activities began. In the search, keywords related to the most representative leisure activities among Peruvians were used, such as movie theater, restaurant, Netflix (audiovisual entertainment app), and shopping. We see that the behavior in the final weeks of February has a fairly constant and moderate trend, with people engaging in activities normally despite the high rate of infections in Asia and Europe. However, as of March 6, the day when the first case of COVID-19 was reported, a slight downward trend can be observed, indicating a social phenomenon never seen before, where people would go to supermarkets and stand in long lines to be able to buy basic necessities, as the government was beginning to show the first signs of the beginning of a national quarantine.

When the state of emergency decree was made official on March 15, all non-essential activities were restricted, including the closure of movie theaters, restaurants, and shopping centers selling clothing and devices. This led to a turning point that signified a drastic change in this type of search; an increase in Netflix use was noted, which indicates that it is one of the most prominent activities at the time of quarantine. It is worth mentioning that this corresponds to 54.7% of people in the country who have access to the Internet (Instituto Nacional de Estadística e Informática, 2018), and also have a culture of adherence to and respect for government regulations. At first, it seemed to

indicate a positive reception of what was foreseen. However, the results later showed other more significant determining factors that motivated the development of a drastic level of infection. As of April 10, a new inflection point is seen in declining Netflix searches and a trend toward growth in some activities, especially shopping, because of the fact that the government began to provide financial aid by distributing stipends and even withdrawing a percentage of the pension fund, at which point there was an indication that people preferred going to stores to buy devices such as televisions, sound equipment, among others, despite them not being necessities. Leading to “social disorder,” (Diario Líbero Perú, 2020), the shopping trend in the following weeks and months continued to increase—one of the reasons why it became a driving factor in the rapid spread of infections and coincides with the results shown in Figure 2.



**Figure 2.** Evolución cronológica de la curva de contagios y acciones gubernamentales dictadas por el gobierno peruano.

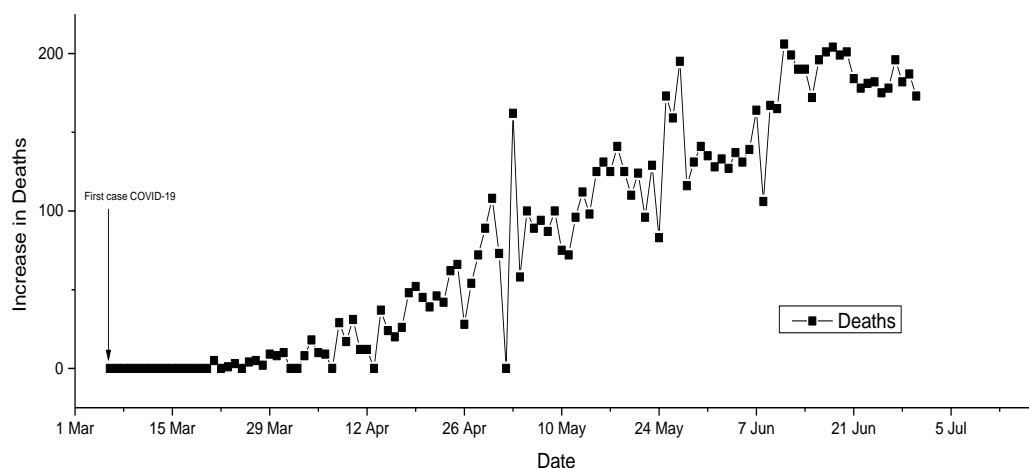
After 3 months of quarantine, we can say that government efforts to flatten the curve of infections failed. The numbers have exploded in the last 2 months, making Peru the country with the fifth highest infection count worldwide, only surpassed by the United States, Brazil, India, and Russia. As of June 30, 285,213 cases have been reported, of which 174,535 have been discharged and 9,677 people have died, with a fatality rate of 3.39% (Worldometer, 2020)

Figure 2 clearly shows the immediate actions implemented by the government, beginning with the case zero occurrence. Even with these measures, the country's infections increased rapidly.

After 45 days, Peru had the third highest number of confirmed deaths by COVID-19 in South America and the second highest number of infections, only behind Brazil, whose population is six times that of Peru. At that time, the situation was critical; despite rapid and strict government intervention, the consequences of a neglected health care system began to be felt. For decades, leaders had not prioritized addressing health care system deficiencies; at the beginning of the pandemic, the country had 276 intensive care unit (ICU) beds to care for COVID-19 patients, with a ratio of one bed for every 100,000 people, a reality that placed the country at the lowest rank in the region.

Although no country's economy can withstand an eternal quarantine, in macroeconomic terms, Peru is one of the most stable nations in the region. It has the third largest international reserves in Latin America, only behind Mexico and Brazil, and its public debt and inflation are among the lowest. In other words, if any Latin American country has the capacity to financially resist confinement, it is Peru. However, despite this macroeconomic strength, with an average GDP growth of close to 5% in the last 20 years, Peru's health care investments is among the lowest in all of the Americas. A prime example of the social and health care reality is seen in the lines of Peruvians desperate to refill medical oxygen tanks so that their relatives who are sick with COVID-19 could breathe because of the shortage and saturation in hospitals.

This "healthcare weakness" generated immediate attention from the government, which aimed to expand the number of ICU beds, first exceeding 800 beds, and in turn, increasing the beds for patients who do not need mechanical ventilation. These actions were implemented while this accelerated increase in cases continued (Fig. 3).



**Figure 3.** Reported daily deaths from COVID-19 in Peru.

**Table 1.** Legal frameworks implemented by the Peruvian government in the COVID-19 state of emergency framework

PCM DECREE	2020	Date	ISSUE
N° 044-2020-PCM		March 15	The National State of Emergency is decreed.
N° 045-2020-PCM		March 17	Guidelines for people returning to the country.
N° 046-2020-PCM		March 18	Decreases mandatory curfew from 8:00 p.m. to 5:00 a.m. at the national level.
N° 051-2020-PCM		March 27	Extension of the National State of Emergency as of March 31 (for 13 days).
N° 053-2020-PCM		March 30	Mandatory curfew from 6:00 p.m. to 5:00 a.m., with the exception of the departments of Tumbes, Piura, Lambayeque, La Libertad, and Loreto, where the mandatory curfew was from 4:00 p.m. to 5:00 a.m.
N° 057-2020-PCM		April 02	Travel permitted for one person per nuclear family. Travel is allowed for men on Mondays, Wednesdays, and Fridays, and for women on Tuesdays, Thursdays, and Saturdays. On Sundays, the mandatory curfew is in effect for everyone.
N° 061-2020-PCM		April 06	Mandatory curfew on April 9 and 10, Holy Thursday and Good Friday.
N° 063-2020-PCM		April 08	Personnel from the Comptroller General's Office of the Republic and the Institutional Supervisory Bodies are exempt from the mandatory curfew.
N° 064-2020-PCM		April 10	Extension of the State of Emergency and mandatory curfew from 6:00 p.m. to 4:00 a.m. at the national level, with the exception of the departments of Tumbes, Piura,



		Lambayeque, La Libertad, and Loreto, which have a mandatory curfew from 4:00 p.m. to 4:00 a.m.
N° 068-2020-PCM	April 13	Social program: “Te Cuido Perú” provided monitoring and assistance to people affected by COVID-19 and those who live with them in their homes during the mandatory social isolation phase.
N° 070-2020-PCM	April 16	Processing of phone and location data from COVID positive and suspected positive persons.
N° 075-2020-PCM	April 23	Extension of the National State of Emergency from April 27, 2020 until May 10, 2020.
N° 080-2020-PCM	May 02	Economic activities are gradually and progressively resumed. The “Reopening of Economic Activities Multi-sector Working Group” was formed.
N° 083-2020-PCM	May 09	Extension of the National State of Emergency from May 11 to May 24, 2020. The mandatory curfew was modified, in effect from 8:00 p.m. to 4:00 a.m., with the exception of the departments of Tumbes, Piura, Lambayeque, La Libertad, and Loreto, with a curfew in effect from 4:00 p.m. to 4:00 a.m. On Sunday, the mandatory curfew is in effect for everyone. The capacity at markets, banks, and other locations is reduced to 50%. Children and adolescents under 14 are allowed to go out under supervision for 30 minutes within a 500-meter distance from their home.
N° 094-2020-PCM	May 23	Extension of the National State of Emergency from May 25 to June 30, 2020. Mandatory curfew from 9:00 p.m. to 4:00 a.m., with the exception of the departments of Tumbes, Piura, Lambayeque, La Libertad, Loreto, Ucayali, Ica, and the provinces of Santa, Huarmey, and Casma in the department of Ancash, with a curfew in effect from 6:00 p.m. to 4:00 a.m. Mandatory national curfew on Sunday.
N° 101-2020-PCM	June 04	Phase two (2) of the resumption of activities was approved after coordination with local governments.
N° 110-2020-PCM	June 18	Expansion of economic activities in Phase 2 of the Resumption of Economic Activities.

N° 116-2020-PCM	June 26	Measures for residents in the New Social Coexistence and extension of the National State of Emergency due to COVID-19.
N° 117-2020-PCM	June 30	Phase 3 was approved for the Resumption of Economic Activities, with the exception of activities that take place in the urban areas of Arequipa, Ica, Junín, Huánuco, San Martín, Madre de Dios, and Ancash.

**Table 2.** Legal frameworks for financial support in the COVID-19 state of emergency framework

<b>EMERGENCY DECREE 2020</b>	<b>DATE</b>	<b>ISSUE</b>
Emergency Decree 026-2020	March 15	Remote work authorization. COVID positive people; the “EsSalud” social security granted a subsidy to workers whose monthly remuneration is up to PEN 2,400.
Emergency Decree 027-2020	March 16	PEN 380 to support households in poverty or extreme poverty, signifying an investment of PEN 1,170,250,340. PEN 121,445,310 was granted to the Ministry of the Interior and the Ministry of Defense to finance the implementation of actions to ensure internal national order.
Emergency Decree 028-2020	March 19	PEN 100,026,487 to finance the acquisition of diagnostic tests to prevent and control COVID-19. An additional PEN 2,500,000 was allocated to finance the systematization and technological support related to diagnosing COVID-19.
Emergency Decree 029-2020	March 19	Financing for micro and small businesses and other measures to reduce the impact of COVID-19 on the Peruvian economy.
Emergency Decree 030-2020	March 20	EsSalud was able to make use of buildings for prevention and care activities related to the COVID-19 emergency. The Pan-American Village building was set up for this, with PEN 28,441,703 allocated.
Emergency Decree 031-2020	March 23	The COVID-19 diagnosis hotline capacity was expanded. A budget of PEN 3,500,000 was also established to acquire goods and services for temporary accommodation and all daily meals for a maximum period of 14 days for Peruvian citizens returning from abroad during the term of the Health Emergency.

Emergency Decree 033-2020	March 27	PEN 213,650,000 for local governments to acquire and distribute basic necessities to families, in support of vulnerable population groups. Monetary subsidy of PEN 380 to support vulnerable households with self-employed workers, which signified a total of PEN 300,666,200.
Emergency Decree 034-2020	April 01	Special withdrawal of up to PEN 2,000 from the pension fund in the private pension system.
Emergency Decree 035-2020	April 03	Installments for pending invoice payments for electricity and natural gas pipeline networks for vulnerable population groups.
Emergency Decree 036-2020	April 09	Increase in the monetary subsidy amount for economically vulnerable self-employed workers, signifying a total of PEN 294,929,780.
Emergency Decree 037-2020	April 11	Distribution of fabric face masks for community use, to support vulnerable population groups, within the COVID-19 health emergency framework, signifying PEN 35,000,000.
Emergency Decree 039-2020	April 16	Formation of rapid response teams in the regional government health care implementation units, funding PEN 20,059,468. Financing was allocated to carry out clinical follow-ups, representing an expense of PEN 14,940,537.
Emergency Decree 042-2020	April 18	Monetary subsidy of PEN 760,000, to support households living in poverty or extreme poverty in rural areas, signifying 836,180,640.
Emergency Decree 044-2020	April 20	Second monetary subsidy of PEN 380 to support vulnerable households, which signified a total of PEN 921,858,820.
Emergency Decree 048-2020	April 26	PEN 7,500,000 to finance the acquisition of goods and services necessary for quarantine accommodation and food for people who must travel within the country.
Emergency Decree 049-2020	April 26	Financing for micro and small businesses to reduce the impact of COVID-19 up to PEN 500,000,000.
Emergency Decree 050-2020	April 28	Financing of 26,257 to acquire personal protective equipment.
Emergency Decree 052-2020	May 05	Monetary subsidy of PEN 760 to support households living in poverty and extreme poverty. Signifying a total investment of PEN 1,226,802,800.

Emergency Decree 055-2020	May 13	Authorization to establish temporary isolation and care centers nationwide, with a total allocation of PEN 392,340,946.
Emergency Decree 057-2020	May 18	Allocation of PEN 22,474,487 to local governments to adopt hygiene measures in food markets.
Emergency Decree 059-2020	May 20	COVID-19 kit and implementation of technological improvements in the Peruvian Observatory of Pharmaceutical Products, signifying PEN 213,957,583.
Emergency Decree 065-2020	June 03	Ensured continued assistance of health security measures for people who traveled within the country. To do so, an economic budget was established in order to acquire goods and services necessary for quarantine accommodation and food for displaced people.
Emergency Decree 066-2020	June 04	Measures issued to increase production of and access to medical oxygen systems to treat coronavirus and strengthen the health care response.
Emergency Decree 068-2020	June 13	Measures issued to provide complementary food assistance to vulnerable population groups, in the context of the emergency.
Emergency Decree 070-2020	June 19	Guidelines for the resumption of economic activity and services to the population through public investment and current spending.
Emergency Decree 071-2020	June 22	Ministry of Health (MINSA) intervention for indigenous communities and rural population centers in the Amazon due to the COVID-19 emergency, signifying PEN 74,558,670.
Emergency Decree 073-2020	June 24	Implementation of fifty (50) temporary markets to adopt complementary economic and financial measures in order to generate optimal conditions to facilitate the supply and distribution of essential products in cities across the country. PEN 6,098,792 was allocated for this initiative.
Emergency Decree 074-2020	June 26	Electricity stipend for pending payments from the months of March to December 2020, with a maximum amount of PEN 160.

***“Factors that are influencing the spread of COVID in Peru” context analysis***

As seen in Figure 2, the quarantine in Peru has been extended six times, with a total of 107 days of confinement. Many experts in the field applauded the promptness of the measures and economic aid packages at the beginning. However, 60 days after the restrictions began, the country continued to rank

second for the most cases on the continent and twelfth in the world (Dong, Du, and Gardner, 2020) . This notable increase is the result of a health action policy implemented by the government, as the Latin American country that has administered the most SARS-CoV-2 molecular detection tests and IgM/IgG antibodies. By way of review at that time, Peru had taken 750,526 samples, followed by Mexico, with 193,589; Argentina, with 116,689; and Colombia, with 214,536. The experts indicate, first, that the non-flattening of the curve is caused by some pre-existing problems in the Peruvian economy and society, the latter being the most important, which will be discussed below:

### ***Overcrowding***

Peru is not a densely populated country. Rather, its population distribution is very irregular, and most of it is concentrated on the coast, where the population density is very high—particularly in Lima, where almost 30% of all Peruvians live (INEI-1, 2018). The following data reflect the seriousness of the context, since Lima has an average metropolitan area of 3,620 inhabitants/km<sup>2</sup>, and Peru, excluding Lima, has 18 inhabitants/km<sup>2</sup> in less than 1% of the national territory. Lima's population density is 200 times higher than that of the rest of the country, which would not be so serious if it were not for the fact that, in addition, there are many tiny, overcrowded, poorly ventilated, and poorly constructed homes. For these reasons, the Peruvian capital has experienced half of the deaths throughout the country.

### ***Informal employment***

In Peru, about 70% of the economically active population is part of the informal economy, or they carry out trade activities in which they obtain their income on a daily basis. This is associated with the growth of the population and the scarcity of sources of work, which entails very significant challenges for economic actors at all levels, ranging from global to national activities that have suffered a sudden halt. This has direct implications particularly for the economically vulnerable sector, which in the country is made up of the aforementioned high percentage. Moreover, in this current context, there is a minimal capacity to generate income among self-employed and informal workers, who have come to not care about the condition of their health because they live on a small income that allows them to survive. We are talking about households in which workers even arrange their working logistics on a daily basis. In these months of quarantine, social phenomena have been observed, such as those already mentioned above and others related to not adhering to the new norms of social coexistence.

The informal economy is not exclusive to developing countries. Today, economic globalization has shown that the practice of producing wealth and creating employment outside the legal framework is a phenomenon in the developed world, as well (Barragán, 2005).

### ***Crowds in grocery stores***

Selling essential products in markets, stores, and other locations in the same category were one of the priority activities for which the government ensured continual operation, with residents having to adhere to strict conditions. Unfortunately, because these were disregarded, they quickly became large sources of infection as huge crowds of people congregated without complying with the safety protocols, not using masks properly, not keeping an appropriate distance, consuming food while buying, etc.

With the government's focus on other areas of national emergency (e.g., health, economy, etc.), after a month and a half of the quarantine and the markets operating with almost no security measures, the government began to administer rapid tests in these centers, which showed alarming results: in some of them, like the Lima Fruit Market, 89.6% of vendors tested positive (Gestión-2, 2020). Later, of the 2,000 markets that operate nationwide, 380 were taken over to turn them into supply centers that ensure their healthiness and avoid coronavirus infection (Peruano, 2020)

### *Family logistics*

There are various circumstances in the Peruvian context that trigger the need to frequently go out to the streets, such as the economic issue of family groups relying on daily income; a reduced income leads to people going out every day to buy ingredients in small quantities, to the extent that only 21.9% of poor households in Peru have a refrigerator (INEI-1, 2018). This reality makes it impossible to adhere to appropriate logistics and have an adequate supply for several days. There are also other circumstances, such as the tradition of eating fresh products.

### *Crowds in financial centers*

The banking sector has also seen large crowds. This has occurred since the government began to issue decrees on withdrawing a percentage of pension funds, along with social stipends. Despite insistence by the MINSA on a series of protocols that had to be respected and the presence of the police force, it was impossible to manage this great mass of people. Fig. 2 shows a notable increase in the number of infections coinciding with the opening of these economic packages. This is how "EsSalud" social security used a "Heat Map" of the Intelligence and Data Analysis Unit to show the incidence of coronavirus by zones. It should be noted that banking institutions generally require health safety protocols; however, there were long lines outside, thus presenting a high risk factor. It is worth mentioning that these services are beyond the scope of the health sector.

### *Gaps in the health sector*

The COVID-19 pandemic has unraveled a series of major deficiencies in the health care sector. Furthermore, the leadership of the health ministry, instituted

by former president Pedro Pablo Kuczynsky and then replaced by the current president Martín Vizcarra, has changed seven times—all in the 4 years of the administration's tenure. The outlook of previous administrations was identical, that is, bad investment strategies and not paying attention to the minimum priorities necessary to be able to comply with varying contexts. Thus, the strategies aimed at managing the pandemic have been showing negative impacts, immediately motivating the investment of large amounts of money to be able to partially alleviate health problems. Policies by recent governments in this sector are fundamentally aimed at disease management rather than prevention and at reducing the economic barrier to accessing health services.

Currently, despite the rapid actions carried out by the government sparing no expenses, doctors continue to demand better hygienic conditions and ease of use of personal protective equipment, among other issues.

The context outside the capital of Lima is even more serious, considering the precariousness of hospitals and qualified health personnel that have led to collapse as a result of high rates of infected people. The regional health centers are administered by the regional governments in coordination with the central government, with the regional administration being even more critical. The data indicates that only 3 out of 25 regions have spent more than 50% of the budget allocated by the central government as a measure to manage the pandemic. This has led to the initial optimism from actions taken by the current central government to become overshadowed and aggravated.

## **CONCLUSION**

The COVID-19 pandemic is bringing out many social, economic and health aspects that have not been taken into account in the public and sectoral policies of various governments, an opportunity that for some privileged countries has been a reason to take advantage of their potential cultural development and technological, in order to provide from medical supplies to the long-awaited vaccine; In the case of Peru, this pandemic is demarcating situations that for years have been deficient, however the great economic development is allowing to have a sustainability that allows generating a speedy recovery, but even so there are issues related to the social that remain to be improved, That said be the step, they were mostly issues that influenced to be within the five countries in the world with a high rate of infections at the height of the pandemic a situation of which it is still prone.

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