



PIDE COVID-19 NEWSLETTER

March 22, 2020

No.2

Global News

- COVID-19 case count jumps to more than 277,000 with more than 11000 deaths.
- No new coronavirus cases in Wuhan for third straight day.
- Medical device manufacturing is highly regulated, depends on proprietary global supply chains, and requires significant expertise to ramp up and run.
- The US State Department announced to provide one million dollars to Pakistan to help fight coronavirus.
- According to the World Food Program about 300 million children who depend on school meals are missing out due to closures triggered by the coronavirus pandemic.
- 75 million Americans under virtual lockdown as restrictions tighten.
- Starbucks will close its cafes in the United States in response to the coronavirus crisis, though it will remain open for delivery and drive-through customers.

Global Response

- Jordan blows sirens for start of nationwide curfew for indefinite period. It has 85 reported cases; the decision came after identification of 16 new cases yesterday.
- US President Donald Trump said that he would invoke the Defense Production Act of 1950 to boost manufacturing of critical medical supplies. That act, passed during the Korean War, grants the president broad powers to direct businesses to produce specific goods that are critical to the national defense.
- California police to use drones to patrol coronavirus lockdown.

Local News

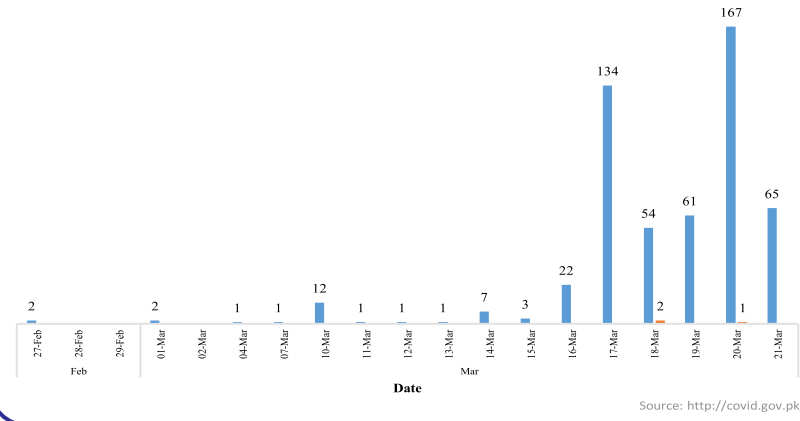
- 10 doctors in Abbasi Shaheed Hospital in Karachi told to self-isolate.
- All international flights to Pakistan suspended for 2 weeks.
- Railways minister says 34 trains to stop running until 15th of Ramazan.
- AJK suspends inter-provincial transport for 3 days.
- Cambridge Assessment International Education has cancelled all O- and A-Level exams in Pakistan.

Local Response

- PM Imran Khan says that government will announce economic package on March 24, 2020.
- CM Balochistan says facilities in Taftan being improved.
- Army Chief directs forces to expedite assistance of civilian administration.
- SBP takes measures to support exporters affected by loss of demand due to COVID-19.
- Punjab Primary and Secondary Healthcare (PPSH) Secretary says that 127,000 face masks being produced in Punjab everyday.
- Karachi Expo Centre has been turned into a field hospital.
- 240-bed quarantine centre established in Jhelum.

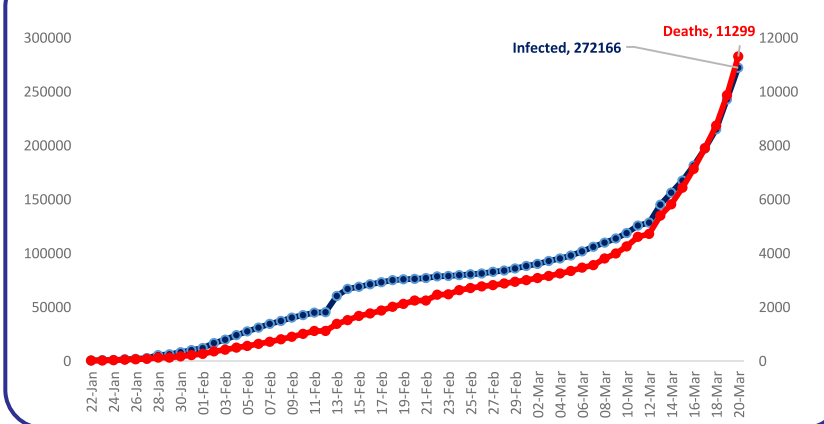
The daily spread of COVID-19 in Pakistan shows two peaks when number of infected reported in three digits one on March 17, 2020 and other on March 20, 2020. The highest 167 cases are reported on March 20, 2020, and on March 21, 2020 only 65 cases are registered which are less than half of the previous day. So far, the total number of cases registered is 534. The total number of deaths remained three; two on March 18, 2020 in KP and one on March 20, 2020 in Sindh (see Chart.1).

Chart.1: COVID-19 Number of Cases and Deaths in Pakistan



Comparison between two reveals that at the ends, the rate of coronavirus infected cases and death rate almost coincide except for the last few days when the death rate grows higher than the rate of infected cases, possibly due to higher death rate in Italy. In the middle, death rate remained lower than the infected rate, this is the period when COVID-19 prevailed mostly in China (see Chart.2).

Chart.2: Number of Infected Cases and Deaths



Idea by VC PIDE, Dr. Nadeem Ul Haque
 Prepared by:
 Dr. Zulfiqar Ali Kalhoro, Dr. Saud Ahmed Khan, Dr. Hassan Rasool
 Dr. Ahsan ul Haq Satti, Dr. Amena Urooj and Ms. Fizzah Khalid Butt

Expert's Advice:

PTV needs to start broadcasting primary school classes for different grades. Top five private TV channels be sponsored and allocated one class each to engage kids at home.

Expert's Opinion:

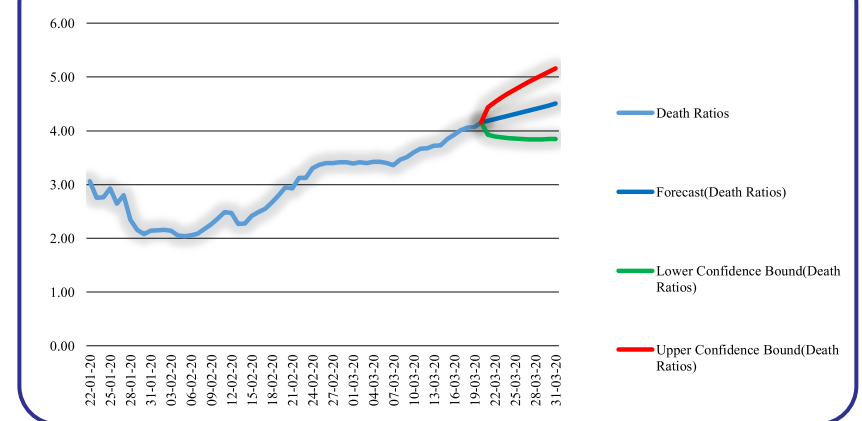
“Unsurprisingly, sectors and product groups recover at different speeds, thus requiring distinct approaches. Stock prices fell across all sectors in the first two weeks that China's epidemic accelerated, but leading sectors, such as software and services, and healthcare equipment and services, recovered within a few days and have since increased by an average of 12%. The bulk of sectors recovered more slowly but reached prior levels within a few weeks. And the hardest-hit sectors such as transportation, retail and energy, representing 28% of market capitalization for China's largest stocks are still down by at least 5% and showing only minimal signs of recovery” (HBR Report).

Strategic Choices to overcome COVID-19:

Complete Lock Down, Invent the Vaccine, or Wait for the herd immunity i.e. once enough people get COVID-19, it will stop spreading on its own.

Simulated forecast predicts that the death ratio (number of deaths divided by number of infected) is increasing over the time. The current death ratio is 4.15% and it is predicted that at the end of this month, this ratio may increase by 4.52% with 95% confidence interval of (3.85%, 5.16%), (see Chart.3 for details).

Chart.3: Death Ratio of Coronavirus Infected Patients



Environmental Impacts:

Due to the impact of coronavirus outbreak on travel and industry, many regions experienced a drop in air pollution. Since last three months, the European Space Agency observed a marked decline in nitrous oxide emissions from cars, power plants and factories in the Po Valley region in Northern Italy, coinciding with lockdowns in the region. The Centre for Research on Energy and Clean Air reported that methods to contain the spread of coronavirus, such as quarantines and travel bans resulted in a 25% reduction of carbon emission in China. In the first month of lockdowns, China produced approximately 200 million fewer metric tons of carbon dioxide than the same period in 2019, due to the reduction in air traffic, oil refining and coal consumption.

Despite a temporary decline in global carbon emissions, the International Energy Agency warned that the economic turmoil caused by the coronavirus outbreak may prevent or delay companies from investing in green energy.