

## **Effect of lockdown on Humans, Animals and Environment**

The nationwide lockdown measure had been imposed by approximately 191 countries and local lockdown by five countries across the globe to curb the spread of Coronavirus pandemic. The lockdown have following effects on humans, animal and environment:

### **I. Effect on Humans**

#### *a. Livestock and agriculture farmers*

Ever since the lockdown consumption of milk and poultry products have witness a drastic decline. The fall in consumption of milk and meat affected 110 million farmers, directly or indirectly associated with production and delivery of livestock products in India.

Initially, many people didn't buy chicken because of rumours that Covid-19 might spread through poultry and then the poultry shops remained closed after the lockdown. The latest statistics shows Indian poultry industry is losing Rs. 1,500-2,000 cores daily.

Experts say there is increase in milk consumption by 7-8% but this milk come from co-operatives. However, milk produced by small farmers mostly goes to confectionary and tea shops which remained closed after the lockdown and farmers are finding difficulty in dealing with the extra milk. Moreover, Indian farmers struggle to harvest and sell crops during the restriction imposed on mobility. With agriculture business hit, 118.9 million (according to 2011 census record) farmers and their families employed in the sector will go hungry if the lockdown prolongs beyond expected.

#### *b. Healthcare services*

According to latest statistics, private healthcare services in India cater 66% of daily healthcare needs. Closing down of private healthcare facilities especially in smaller towns and cities which take care of a considerable proportion total health care burden will have severe implication on co-morbid patients and those who need emergency service. Poor section of the society without owing a car will be not able to reach the healthcare facilities in emergencies.

Mobility restriction and stigmatization of frontline health workers prevents health care givers from providing Antenatal Care Services (ANCs), and basic health care provision during pregnancy, delivery care and newborn healthcare which have potential risk of causing healthcare complications and consequential maternal and child mortality. In India even in normal times, the lack of access to healthcare services cause nearly 3,600 pregnancy related death of women per month and 2,800 deaths of child under five per day.

The postponement of child immunization can negatively affect child health outcome and lack of pharmacies will also affect menstrual hygiene practices.

#### c. Mental Health

World Health Organization (WHO) warned the Coronavirus crisis and the restrictive measures can have negative impact on people's mental health. Due to isolation, physical distancing and closure of work places it is natural to feel stress, anxiety, fear and loneliness.

#### d. Education

As of 21<sup>st</sup> April 2020, approximately 1.728 billion learners have been affected due to school closure across the globe. According to United National Educational, Scientific and Cultural Organization (UNESCO) monitoring, approximately 191 countries have imposed nationwide lockdown and five have imposed local lockdown impacting about 98.4% of world's student population. Adverse consequences of school closures include interrupted learning, confusion and stress for teachers, parents unprepared for distance and home schooling, challenges in creating and improving distance learning and challenges in measuring and validating learning among others.

#### e. Employment

The overall unemployment rate in India showed sharp rise since the nationwide lockdown imposed in March. According to Centre for Monitoring Indian Economy (CMIE) statistical profile, the unemployment rate in India has shoot up from 8.74% in March 2020, to 23.6% as of 24<sup>th</sup> April 2020. Such sharp rise in the unemployment rate may be attributed to closure of private firms and industries.

According to rapid assessment survey conducted by Jan Sahas, a civil society organization that focuses on human right of socially excluded communities as many as 92.5% of daily wage labourers have already lost about three weeks of their work which means loss of income proving to be catastrophic on several fronts. Over 80% of the country's migrants and daily wage population fears they will run out of food before the lockdown ends. Daily wage workers and migrant labourers were seen returning to their native places on foot as transport has been suspended as reported by Hindustan times.

#### f. Tourism

In small country like Bhutan whose GDP stands smallest in world at USD 1.6 billion, Bhutan's tourism industry significantly contributes more than 9% to GDP besides agriculture and hydropower, earns the highest hard currency reserves and provides the highest employment

opportunities to more than 50,000 Bhutanese in a population of little more than eight hundred thousand. With doors closed to tourist immediately after the country detected its first Covid-19 case on 5<sup>th</sup> March in an effort to combat the spread of the disease it has hit the tourism and hospitality sector hard. Currently there are a total of 271 certified tourist accommodation facilities comprising of 136 star hotels and 135 Village home stays, over 2300 tour operators and over 1500 guides catering the needs to the visitors to Bhutan, according to Tourism Council of Bhutan. All these sectors and service providers are hit hard by the Covid-19 pandemic.

## **II. Effect on animals**

### *a. Birds*

While drop in transportation during Coronavirus lockdown has led to lower pollution level across the globe, the shutdown in traffic has lowered noise pollution. According to WHO, noise pollution affects over one million people in Europe alone. Noise remains a big source of pollution not only for humans but also for animals.

Researchers found birds stand to benefit the most from reduction of noise pollution following the nationwide lockdown. The rise in human made noise also called 'anthropogenic noise' over the past decades have made difficult for birds sing, hear and be heard which is essential for finding a mate or defending the territory from predators. A recent study from the Max Planck Institute also suggests that chronic traffic noise can have negative effect on embryo mortality and growth in zebra finches. This means that the current lockdown coinciding with mating season could lead to not only more but also healthier hatching.

### *b. Other animals*

Birds aren't the only animal that stands to benefit from less noise. According to a recent study published in the journal *Biology Letters*, noise pollution affects any number of creatures ranging from frogs, to shrimp, to fish, mammals, mussels and snakes. According to a news report, reduced tourism in Venice has allowed nature to take control and the water canal have self-cleaned to reveal the flooding fish in water which were otherwise not visible. Beaches in Thailand with dread of heavy tourism are now seen highest number of rare reptiles not seen in two decades.

## **III. Effect on environment-a positive impact**

The Coronavirus has taken billions of people out of the street around the globe, slowed the industries and slashed international travel. With so many humans staying home to curb the transmission of the pandemic the air is clean, water is clean and animals are returning back to their natural habitat.

As major cities and countries across the globe impose lockdown measures to curb the spread of Coronavirus air pollution has dropped to unprecedented level. Smog has cleared over the India Gate war memorial, people of Punjab were able to see snow peak of Himalayas a view for decades that has been obscured by air pollution, the skyline usually obscured by air pollution over downtown of Los Angeles has cleared up and visibility of Eiffel Tower in Paris increased with cleaner air.

New Delhi alone has recorded a 60% drop in fine particulate matter, the world's deadliest air pollutant since the lockdown was imposed. In Philippines' capital of Manila, particulate matter dropped by 180% since quarantine measures were imposed. Satellite imagery distributed by National Aeronautics and Space Agency (NASA) and European Space Agency shows the decline in average nitrogen dioxide concentration from air pollution over China even after the lockdown. Similar satellite images were distributed for Spain and Northern Italy after the lockdown were put in place.

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