

Covid Research and Treatment

Short Communication

Impacts of COVID-19 on Food Security and Poultry Production

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Abstract

Treated crude oil exploration water (TCOEW) is a significant byproduct created from petroleum exploration activities and Zoonotic diseases in poultry have additional reservoirs in other mammals than humans, which complicating their control, however chickens are not susceptible to intra-nasal infection with COVID19; but indirectly affected Human health, Economy, Environment, Animal productions as well as the Social and economic conditions.

Keywords: COVID19, drugs , vaccines, Human health, Poultry Production

Introduction

In November 27.12.2019, the Coronavirus Disease (COVID-19), caused by Severe Acute Respiratory Syndrome Corona-virus 2 (SARS-CoV-2), which is a highly infectious disease, originated from Wuhan, China, resulting in severe health implications. To date, a total of 5,824,622 deaths and 410,022,236 human cases have been reported. The pandemic impacts the humans as well as the poultry production Worldwide and be more severe in developing countries, due to their dependency on importing and exporting necessary to supplies utensils. feed, drugs, and vaccines. In addition, due to the lockdown and trade limitations have negatively impact-ed poultry industries, worldwide. Coordinated activities were taken at the private and governmental bases were taken to safe the workers at poultry farms as well as at slaughter houses. In addition, to supply of poultry farmers with feed, and to improve the management systems, as well as to improve breeding efficiency, veterinary services, and marketing of egg and meat, which have to be ensured to secure a sustainable poultry production chain. Due to the implementation of lockdowns and trade limitations as control strategies, considerable collateral health

damage [1] and unprecedented economic crisis have been reported [1], including the agricultural value chain, such as the livestock production sector, especially in developing countries. Thus, the negative impacts might have more devastating consequences on the most vulnerable people and poorest nations. In this review, we have discussed the effects of the COVID-19 pandemic on poultry production, along with measures that need to be implemented to ensure sustainability in developing countries.

Coronavirus infections in Humans belong to Genus: Beta-coronaviruses which include, Middle East Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome, (SARS), as well as to the New Coronavirus (COVID-19). After experimental investigation chickens as well as ducks are not susceptible to infection with SARS-CoV-2. The virus survives in the environment, at lower temperatures, at very high or very low relative humidity (RH) as well as on metallic surfaces for longer than other environments in additions, high dust concentration inside poultry houses, increase the incidences of respiratory disorders among poultry workers, Infections by workers in poultry processing facilities were ob-

served in several countries' worldwide.

Clinical signs of COVID-19 in Human includes, Fever, dry cough, fatigue, shortness in breath and some cases; diarrhea and vom-iting can be observed

According to WHO-2024

Since mid-February 2025, according to data available from senti-nel sites, global SARS-CoV-2 activity has been increasing, with the test positivity rate reaching 11%, levels that have not been observed since July 2024. This rise is primarily observed in coun-tries in the Eastern Mediterranean, South-East Asia, and West-ern Pacific regions. Since early 2025, global SARS-CoV-2 variant trends have slightly shift-

ed. Circulation of LP.8.1 has been declining, and reporting of NB.1.8.1, a Variant Under Monitoring (VUM), is increasing, reaching 10.7% of global sequences reported as of mid-May. Recent increases in SARS-CoV-2 activity are broadly consistent with levels observed during the same period last year, however, there still lacks a clear seasonality in SARS-CoV-2 circulation, and surveillance is limited. Continued monitor-ing is essential. WHO advises all Member States to continue ap-plying a risk-based, integrated approach to managing COVID-19 as outlined in the Director-General's Standing Recommendations [1]. As part of comprehensive COVID-19 control programmes, vac-cination remains a key intervention for preventing severe disease and death from COVID-19, particularly among at risk groups.

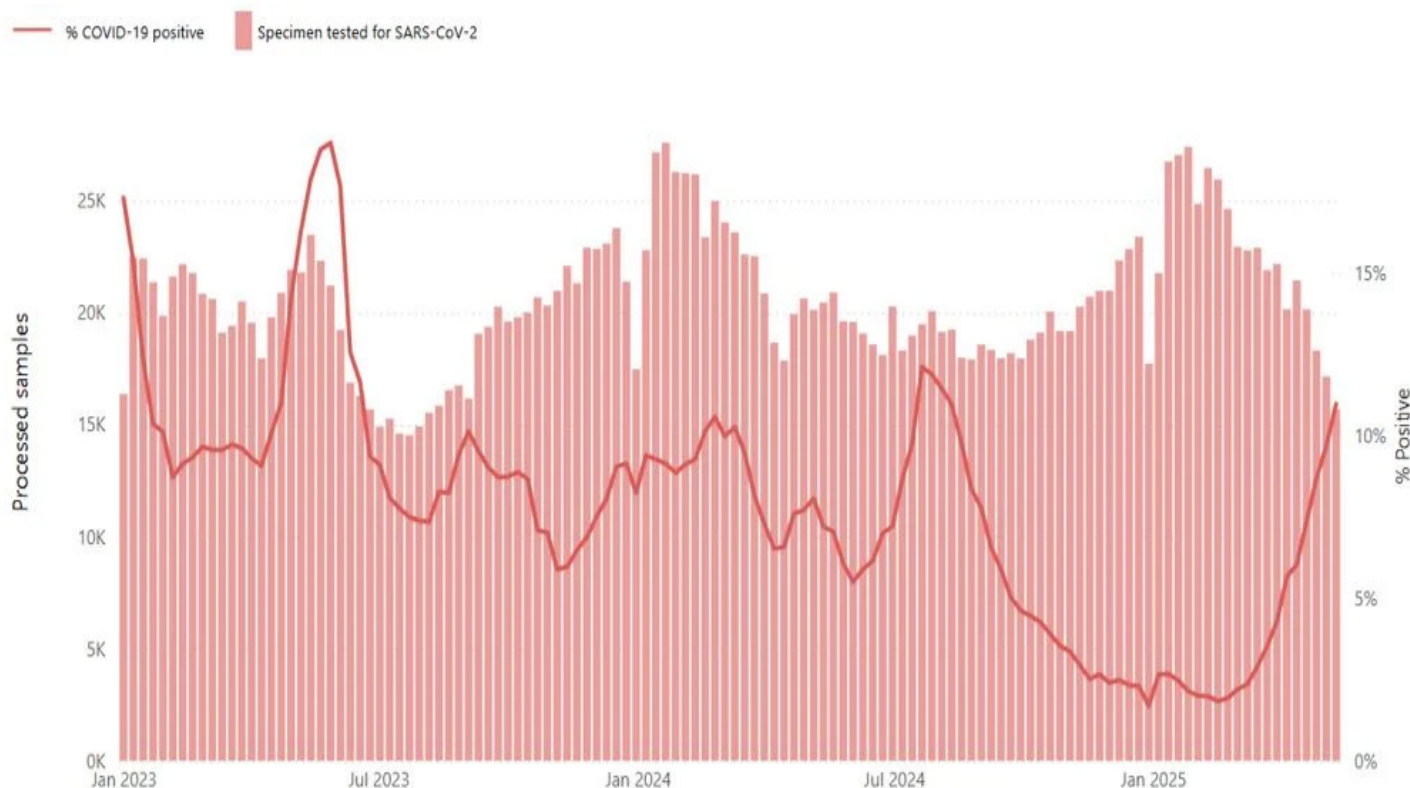


Figure 1: SARS-CoV-2 tested specimens and percent positive reported from sentinel sites to eGISRS from countries, areas and territories from January 2023 to May 2025

Impacts of COVID-19 on Food Security and Poul-try Production

The COVID-19 pandemic, unlike previous pandemics such as SARA-CoV and Ebola, severely impacted the food supply chain indirectly through dis-ruptions of the downstream stages such as transport and logistics [1]. It affected all di-mensions of food security, including availability, access, utili-

zation, stability, and sustainability, depending on the industry, the locality, and the financial status of the af-fected region [1]. Figure 2 illustrates the impacts of the COVID-19 pan-demic on poul-try production.

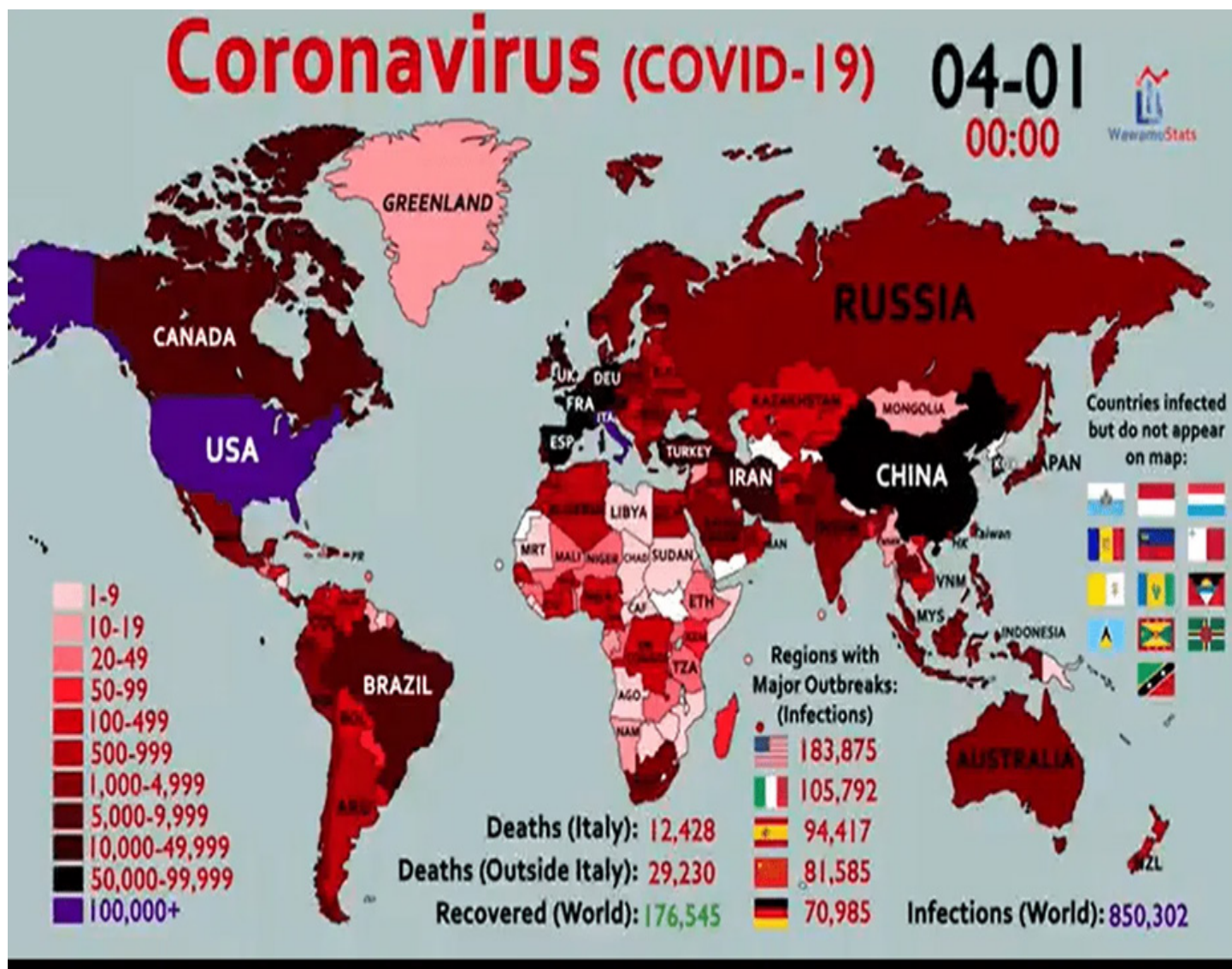


Figure 2: Impacts of the COVID-19 pandemic on poultry production.

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