Secondary effects of COVID-19 on One Health

Garima Sharma^{1,2}, Tushar Kumar Dey^{1,2,3}, Shailesh Garlapati², Delia Grace^{1,4}, Rajeswari Shome³ and Johanna F. Lindahl^{1,2,5}

¹International Livestock Research Institute, Nairobi, Kenya, ²Uppsala University, Sweden, ³ICAR-National Institute of Veterinary Epidemiology and Disease Informatics, India, ⁴Natural Resources Institute, University of Greenwich, UK, ⁵Department of Clinical Sciences, Swedish University of Agricultural Sciences, Uppsala, Sweden

Background

The first case of COVID-19 in India was reported on 30 January 2020. COVID-19 severely disrupted agriculture and supply chain activities. The poultry industry became the victim of the fake news linking the spread of COVID-19 by eating chicken or eggs. This study assesses the poultry industry actors' perceptions on the pandemic and how it affected their businesses. The study highlights the One Health issue of food security and how a food value chain can be affected during a pandemic.

Methods

- Online news media articles were searched to find reports on the effect of COVID-19 on the poultry industry from February 2020 until June 2020.
- In addition to the media review, we also interviewed poultry farmers through an online survey created in the tool Netigate. The survey questionnaire asked about participant information, poultry farm information, knowledge, and impact of COVID-19.

A man in Guwahati talking about his poultry farm. Photo: ILRI Flickr

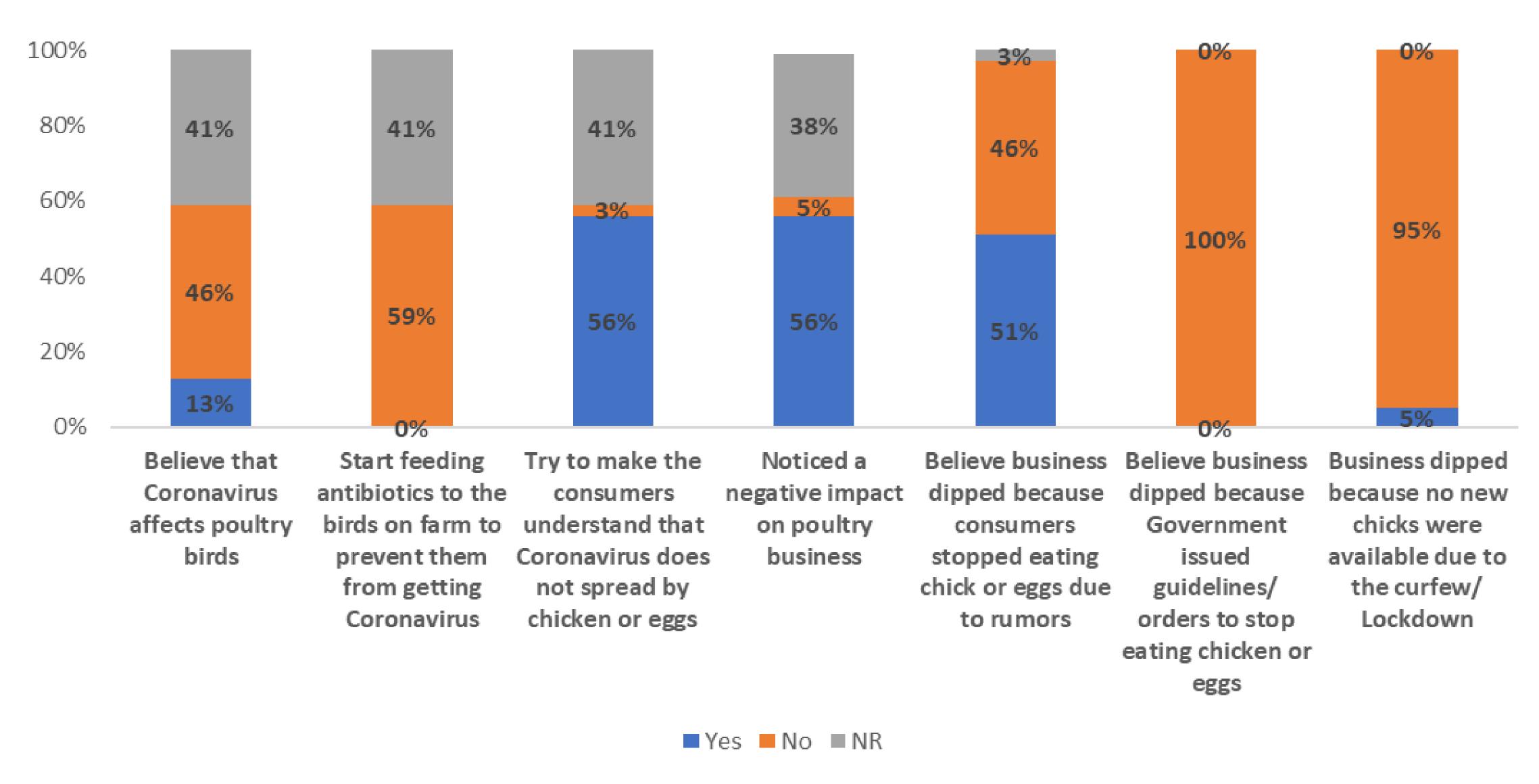
Results

Media article review

A fake video linking the spread of COVID-19 to chickens circulated on social media, consumption decreased considerably, prices of chicken and eggs reduced. Many poultry farmers started culling the birds on a large scale and many retailers started giving away the chickens for free. The poultry industry of India that suffered a huge loss started regaining sales by the end of April. By the first week of June, the sales that dropped to 10% rose to 60% and the chicken prices have skyrocketed from Rs 30 per kg to Rs 280.

Online survey results

- 39 participants responded to the online survey.
- Most (72%) of the total respondents had heard about COVID-19.
- Many (56%) noticed a negative impact on the poultry business and most (51%) of them believed business dipped because consumers stopped eating chicken or eggs.
- 56% of the participants tried to make consumers understand that coronavirus does not spread by eating chicken or eggs.
- 18% of the participants recently culled (killed and buried) the birds. 31% of the total respondents gave away the birds for free.



Graph showing the perspectives and practices of the Indian poultry farmers related to coronavirus and poultry. NR: no response

Conclusion

Here we see how one fake video disrupted the whole poultry value chain and caused a huge loss to an industry. The consumers easily believed the rumours because poultry in India already had a bad reputation for conforming to hygienic standards due to the 'wet markets' (private butcher shops). Safeguarding the production, supply chains and public health from such pandemics requires a multidisciplinary approach where teams from various departments work together to prevent, respond to and recover from such events.

Garima Sharma drgarima111@gmail.com. ILRI Delhi Block-C, First Floor, NASC complex, DPS, Hill Marg, Pusa, New Delhi, Delhi 110063







