





Impact of COVID-19 on Livestock Production and Animal Health

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SUMMARY

COVID-19 is caused by SARS-CoV-2 and spreading rapidly amongst human in the world (almost 24.3 million cases with 829,664 deaths as of 27th August 2020). The macro economic impacts were deep recession level, loss of jobs and increase in poverty rate. Infections (contracted from humans) in cats, dogs, lions, tigers and minks have been reported in many countries. Studies are being undertaken with regards to infection in other livestock. It is safe to trade in live animals as well as its product.

Livestock production and animal health was impacted arising from reduced access to inputs and equipments, labour shortage, overstocking due to inability to sell. Losses happened due to transport disruption, reduced meat supply seen due to reduced slaughtering or processing capacity. Distributors were unable to deliver due to market closure or limited market access. There were reduced demand due to market closure, fake news and suspension of school feeding programme. Reduced purchasing power was due to loss of jobs and reduced income. While testing, diagnostic, surveillance and reporting at laboratory level was reduced due to movement control (of people and vehicles). Disease control programs were reduced or suspended and there was slow response to disease outbreak. Programmes and activities planned by international organisation was suspended or cancelled and the priorities for funding were affected.

Various mitigation efforts can be undertaken. Some of these would include communicating with governments for assistance and exemptions for movements, communicating with suppliers and service providers to secure services and supplies, adhering to standard operating procedures, personnel and personal biosafety and biosecurity measures, enhancing e-commerce trade including use of online and SMS platforms, maintain all aspects of disease prevention and control, promote local sourcing, encourage collective marketing and purchasing, communication materials for stakeholders, cash transfers, loan moratorium, retraining on digital marketing, subsidies and having contingency plan. Many of these measures were undertaken by governments in Asia, however the success depends on how well each governments implement it.









Exposure of humans or animals to SARS-CoV-2 from wild, livestock, companion and aquatic animals : Qualitative exposure assessment

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SUMMARY

The likelihood of exposure of humans to SARS-CoV-2 in COVID-19 affected areas through "contact with" livestock or their products was "Negligible" with Medium uncertainty. For the fact that;

- Pigs, chickens, ducks, geese, turkey and quail have demonstrated no susceptibility to SARS-CoV-2 after experimental infection.
- Only gamma- and deltacoronaviruses have been detected in poultry, whereas no infection with betacoronaviruses has been reported so far.

The likelihood of exposure of humans to SARS-CoV-2 in COVID-19 affected areas through "handling or consumption of" livestock or their products was in the range of 'Negligible' to 'Low' with Uncertainty range of 'Low' to 'High.'

For the fact that;

- Surface contamination of food products is possible where food hygiene standards were not followed.
- SARS-CoV-2 is isolated and preserved long on surfaces with protein from traditional market environment across pH and surfaces.

<u>Reference</u>

El Masry, I., von Dobschuetz, S., Plee, L., Larfaoui, F., Yang, Z., Song, J., Pfeiffer, D., Calvin, S., Roberts, H., Lorusso, A., Barton-Behravesh, C., Zheng, Z., Kalpravidh, W. & Sumption, K. 2020. Exposure of humans or animals to SARS-CoV-2 from wild, livestock, companion and aquatic animals: Qualitative exposure assessment. FAO animal production and health, Paper 181. Rome, FAO. https://doi.org/10.4060/ca9959en

