



## Government Assistance To Farmers Against Tick-Borne Diseases During The COVID-19 Lockdown

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### Dear Editor

Ticks are responsible for transmitting viral, bacterial, and protozoal diseases to humans and animals and cause significant economic damage to the livestock industry worldwide. Mostly, farmers prefer to use acaricides, a key component of tick control strategies. However, the indiscriminate and irresponsible use of acaricides has developed detrimental effect on the increase in the contamination of the environment, acaricide resistance in ticks, and an increase of residues in milk and meat of the animals. There is now ample evidence that vaccination can provide significant immunity to tick and tick-borne diseases [1]. The COVID-19 virus, like its predecessor, the SARS virus (and other emerging diseases) is thought to have spread to humans through animal markets of Wuhan a central city in China [2]. Fortunately, the ticks do not spread this virus, but the COVID-19 virus is responsible for all those factors that can cause it to spread rapidly to animals.

The President of World Farmer's Organization had given his statement on the COVID-19 outbreak that "For the food to be available, we call on governments to ensure that farmers have the means, inputs, and a well-functioning sustainable value chain for us to keep feeding the world as we have always done before" [3]. With the rapid spread of COVID-19 around the world, the economic growth of many countries is slow down. In the context of COVID-19, without resources and under extreme pressure, small-scale farmers are demonstrating their flexibility and ability to truly meet the food needs

of local people. Besides, these farmers cannot get medicines for their small animals to control the tick burden issue due to financial constraints.

In many countries around the world, people have stopped using animal meat, in a way, farmers in poor countries are being forced to starve. It is the responsibility of livestock department officials to give farmers access to the local market and help them to sell their animals. In most of the developing countries including Pakistan, India, Egypt, and Iran, farmers also urgently need financial assistance from the government to pay their livestock utility bill rebates and interest-free loans for the purchase of anti-tick vaccines. If the government does not address this issue soon, the country where the economy is dependent on animals will suffer more.

Because of the COVID-19, the lockdown period is being extended in many countries of the world. Therefore, the government should also give some suggestions to the farmers such as (a) to restrict visitors to their farms, (b) identify and train off-farm staff who can work on the farm in any emergency, (c) to record standard operating procedures for safety that are necessary for animal welfare care, (d) to identify routine activities that are important for fieldwork, and cannot be postponed and (e) to train staff to vaccinate infected animal. If farmers follow these suggestions well, they can certainly protect their animals from ticks and tick-borne diseases. Of course, this cannot happen overnight, but it can be a step in the right direction to secure the local livestock market.

**References**

1. Kamran, K., Villagra, C.A., Iqbal, A., Kakar, A. and Schapheer, C. 29-kDa: A Potential Candidate for Anti-Tick Vaccine Antigen Source as Immunogenic and Stage Reactive Targeting Hard-Bodied Hyalomma Ticks (Ixodidae), *Indian Journal of Animal Research.*, **1**, 1-7 (2020). <https://www.researchgate.net/publication/339981170>
2. Guo, Y.R., Cao, Q.D., Hong, Z.S., Tan, Y.Y., Chen, S.D., Jin, H.J. and Yan, Y. The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak - an update on the status. *Mil. Med. Res.*, **7**(1), 11. Patent no. 11417685\_EN Rev. 02, 2020-07 (2020). <https://doi:10.1186/s40779-020-00240-0>.
3. WFO President's Statement on COVID-19. Available at [wfo-oma.org/wfo\\_news/wfo-presidents-statement-on-covid-19](http://wfo-oma.org/wfo_news/wfo-presidents-statement-on-covid-19). Accessed 19 April 2020.