Dear Sir/Madam,

Please find attached our manuscript entitled 'Reducing antimicrobial usage in small-scale chicken farms in Vietnam: A three-year intervention study' which we are submitting for your consideration to be published in eLife journal. To our knowledge, this is the first study documenting an intervention to reduce antimicrobial use (AMU) levels in small-scale farming systems in low- and middle-income countries, as a part of the project named ViParc (www.viparc.org). Here we report the results of an intervention study, formulated as a 'before-and-after' study targeting small-scale commercial chicken farms in the Mekong Delta region of Vietnam. The area is considered a 'hotspot' of AMU in poultry production. Our intervention consisted of regular visits to the flocks (3 per flock) by a veterinarian to provide advice on health and husbandry to owners of small-scale farms, alongside the provision of antimicrobial replacement products. High resolution, weekly data on AMU and mortality was collected from a total of 330 small-scale flocks raised in 102 randomly selected farms over three years (2016-2019). We measured the impact of this intervention on AMU using dose metrics, as well as on mortality and flock bodyweight by comparing levels these parameters during the baseline and intervention phases of the project. Our study demonstrated that reductions of >50% of current levels of AMU are achievable in the Vietnamese small-scale farming conditions without compromising production. Results and the lessons from this study will help tackle excessive AMU in small-scale animal production in Vietnam and more generally, to other low- and middle-income countries in the region.

We hope that our manuscript meets the criteria for publication in the eLife journal.

Yours sincerely,

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On behalf of all co-authors