

## Supplementary Material

## Understanding the Motivation of Western Java Smallholder Broiler Farmers to Uptake Measures Against Highly Pathogenic Avian Influenza (HPAI)

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## 1 Appendices

**Appendix 1.** Univariable and multivariable logistic regression model results showing the association of broiler farmers' attitude, subjective norm, and perceived behavioral control with intention to implement C&D of farm area and barn once in every two days.

Variables	Univariable model					Multivariable model ( $R^{2b}$ = 0.51)				
	Weak Moderate		Strong p <sup>a</sup>		Weak	Moderate	Strong	р		
		Odds ratio (95%	<b>√₀ CI</b> )	- -	Odds ratio (95% CI)					
1. AT	ref.	1.92 (0.61-6.1)	10.8 (2.9-40.34)**	0.001	ref.	21.94 (1.44-333.95)*	211.28 (11-4055.68)**	0.001		
2. SN			,			,	,			
Farmers	ref.	1.4 (0.34-5.8)	3.08 (1.2-7.96)*	0.063						
TS		ref.	3.9 (0.34-44.9)	0.274						
Vet nucleus		ref.	< 0.0001	0.999						
Vet govt		ref.	< 0.0001	0.999						
TS medicine		ref.	0.63 (0.14-2.95)	0.561						
<b>3. PBC</b>			,							
Money	ref.	8.73 (1.11-68.52)*	14.55 (1.87-113.02)*	0.006	ref.	15.18 (1.16-198.66)*	4.49 (0.166-121.76)	0.108		
Time	ref.		9.82 (2.24-43.13)**	0.002	ref.		27.36 (0.86-869.37)	0.061		
Skill	ref.	2.15 (0.27-16.98)		0.46						

AT= Attitude, SN= Subjective norm, PBC= Perceived behavioral control; OR= odds ratio; CI= confidence interval

<sup>\*</sup> significant at p < 0.05; \*\* significant at p < 0.01.

 $<sup>^{</sup>a}$ Variables with p value lower than 0.25 in the univariable model were given in bold and included in the multivariable model.

<sup>&</sup>lt;sup>b</sup>Nagelkerke *R*<sup>2</sup>.

**Appendix 2.** Univariable and multivariable logistic regression model results showing the association of broiler farmers' attitude, subjective norm, and perceived behavioral control with intention to implement AI vaccination to their chickens on the seventh day in every production cycle.

Variables	Univariable model					Multivariable model ( $R^{2b}$ = 0.47)				
	Weak	Moderate	Strong	p <sup>a</sup>	Wea	ak Moderat	e Strong	p		
		Odds ratio (95	% CI)	_	Odds ratio (95% CI)					
1. AT	ref.	1.17 (0.37-3.62)	4.04 (1.38-11.89)*	0.004	ref.	4.76 (0.78-29.15)	20.43 (3.44- 121.43)**	0.001		
2. SN										
Farmers	ref.	1.3 (0.25-7.25)	0.97 (0.39-2.37)	0.924						
TS		ref.	412712551.1	0.999						
Vet nucleus		ref.	12 (1.21-119.22)*	0.034		ref.	106.11 (5.47- 2059.99)**	0.002		
Vet govt TS medicine 3. PBC		ref.	<0.0001 <0.0002	0.999 0.998			,			
Money & time	ref.	10.7 (3.03-37.8)**	7.65 (2.72-21.5)**	<0.001	ref.	34.94 (5.32- 229.62)**	38.39 (6.16- 239.14)**	<0.001		
Skill	ref.	2.02 (0.89-4.62)		0.094		,	,			

AT= Attitude, SN= Subjective norm, PBC= Perceived behavioral control; OR= odds ratio; CI= confidence interval

<sup>\*</sup> significant at p<0.05; \*\* significant at p<0.01.

<sup>&</sup>lt;sup>a</sup>Variables with *p* value lower than 0.25 in the univariable model were given in bold and included in the multivariable model.

<sup>&</sup>lt;sup>b</sup>Nagelkerke *R*<sup>2</sup>.

**Appendix 3.** Univariable and multivariable logistic regression model results showing the association of broiler farmers' attitude and subjective norm with intention to report an incidence/outbreak of AI on the farm to the authorities.

Variables		Univariabl	le model		Multivariable model			
	Weak	Moderate	Strong	p <sup>a</sup>	Weak	Moderate	Strong	p
	Odds ratio (95% CI)			_	Odds ratio (95% CI)			
1. AT								
Morbidity & mortality		ref.	0.57 (0.23-1.45)	0.237				
Selective depopulation risk	ref.	< 0.0001	<0.0001	0.622				
2. SN								
Farmers	ref.	4.74 (0.56-38.89)	2.52 (1.01-6.3)*	0.088				
TS		ref.	< 0.0001	0.999				
Vet nucleus		ref.	< 0.0001	0.999				
Vet govt		ref.	< 0.001	0.999				
TS medicine		ref.	0.36 (0.05-2.86)	0.332				

AT= Attitude, SN= Subjective norm, PBC= Perceived behavioral control; OR= odds ratio; CI= confidence interval

<sup>\*</sup> significant at p<0.05; \*\* significant at p<0.01.

<sup>&</sup>lt;sup>a</sup>Variables with *p* value lower than 0.25 in the univariable model were given in bold and included in the multivariable model.

**Appendix 4.** Univariable and multivariable logistic regression model results showing the association of broiler farmers' attitude, subjective norm, and perceived behavioral control with intention to join stamping-out without any compensation in case of an HPAI outbreak on the farm.

Variables		Univaria	ble model		Multivariable model ( $R^{2b}$ = 0.17)				
	Weak	Moderate	Strong	<i>p</i> <sup>a</sup>	Weak	Moderate	e Str	ong p	
		Odds ratio (95% CI)							
1. AT		ref.	1.49 (0.79-2.83)	0.219					
2. SN			,						
Farmers	ref.	0.27 (0.06-1.2)	0.69 (0.33-1.45)	0.212					
TS		ref.	1.12 (0.07-18.13)	0.94					
Vet nucleus		ref.	1974468944	0.999					
Vet govt		ref.	1.09 (0.26-4.5)	0.911					
TS medicine		ref.	2.88 (1.14-7.25)*	0.025					
<b>3. PBC</b>		2.7	9.18			2.61	8.23		
	ref.	2.7 (1.3-5.6)**	(3.25- 25.9)**	<0.001	ref.	(1.25- 5.43)*	(2.89- 23.4)**	< 0.001	

AT= Attitude, SN= Subjective norm, PBC= Perceived behavioral control; OR= odds ratio; CI= confidence interval

<sup>\*</sup> significant at p < 0.05; \*\* significant at p < 0.01.

<sup>&</sup>lt;sup>a</sup>Variables with *p* value lower than 0.25 in the univariable model were given in bold and included in the multivariable model.

<sup>&</sup>lt;sup>b</sup>Nagelkerke *R*<sup>2</sup>.

**Appendix 5.** Univariable and multivariable logistic regression model results showing the association of broiler farmers' attitude, subjective norm, and perceived behavioral control with intention to join stamping-out with 50% compensation in case of an HPAI outbreak on the farm.

Variables		Univariable	e model	Multivariable model				
	Weak	Moderate	Strong	p <sup>a</sup>	Weak	Moderate	Strong	р
	Odds ratio (95% CI)				Odds ratio (95% CI)			
1. AT		ref.	1.46 (0.75-2.83)	0.268				
2. SN			, ,					
Farmers	ref.	1.04 (0.23-4.71)	0.86 (0.39-1.86)	0.905				
TS		ref.	2.1 (0.13-34.4)	0.599				
Vet nucleus		ref.	6.8 (0.69-66.98)	0.101				
Vet govt		ref.	0.29 (0.036-2.49)	0.263				
TS medicine	ref.		1.25 (0.5-3.11)	0.635				
3. PBC	ref.	1.75 (0.83-3.7)	1316312835	0.345				

AT= Attitude, SN= Subjective norm, PBC= Perceived behavioral control; OR= odds ratio; CI= confidence interval

<sup>\*</sup> significant at p < 0.05; \*\* significant at p < 0.01.

<sup>&</sup>lt;sup>a</sup>Variables with *p* value lower than 0.25 in the univariable model were given in bold and included in the multivariable model.