

1 **Table 1** Demographic characteristics of respondents (n = 1022) in Malaysia, Vietnam,
 2 Thailand and China
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	Respondents, n (% of total responses within country)			
	Malaysia	Viet Nam	Thailand	China
Total	124 (12)	210 (21)	307 (30)	381 (37)
Role in industry				
Working directly with animals in slaughter and transport	31 (25)	25 (12)	70 (23)	179 (47)
Supervisors, business owners or managers	49 (40)	17 (8)	62 (20)	131 (34)
Farmers	6 (5)	14 (7)	128 (42)	10 (3)
Livestock veterinarians in field or in advisory roles	30 (24)	116 (55)	17 (5)	53 (14)
Other	8 (6)	38 (18)	30 (10)	8 (2)
Gender				
Male	96 (77)	146 (77)	153 (52)	294 (78)
Female	32 (23)	43 (23)	143 (48)	85 (22)
Age				
Under 25	8 (6)	12 (6)	85 (29)	61 (16)
26-35	45 (36)	89 (47)	59 (20)	168 (44)
36-45	27 (22)	58 (31)	74 (25)	89 (23)
46-55	31 (25)	26 (14)	42 (14)	51 (13)
Over 56	13 (10)	4 (2)	36 (12)	10 (3)
Religion				
Buddhist	15 (12)	60 (32)	293 (97)	63 (17)
Atheist	0 (0)	121 (64)	0 (0)	249 (66)
Muslim	75 (60)	0 (0)	1 (0)	0 (0)
Christian	23 (19)	2 (1)	3 (1)	11 (3)
Other	11 (9)	5 (3)	5 (2)	56 (15)
How knowledge gained				
Formal qualifications in agriculture	56 (36)	165 (51)	151 (47)	191 (39)
Hands-on farm employment	56 (36)	75 (23)	84 (26)	139 (28)
Other	42 (28)	84 (26)	84 (26)	162 (33)
Residential zone				
Rural	62 (51)	80 (42)	153 (52)	126 (33)
Urban/ metropolitan	59 (49)	110 (58)	144 (48)	253 (67)

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6 **Table 2** Least square means of responses for statements about animal welfare during
7 transport and slaughter in respondents from China (n = 381, reference group), Thailand (n =
8 307), Malaysia (n = 124) and Vietnam (n = 210).

	Mean response ¹	Odds ratio ²	95% Confidence Interval ²	P value ²
The welfare of the animals during slaughter is important to me				
China	3.85			
Thailand	4.01	0.32	0.19-0.52	<0.01
Malaysia	4.57	0.26	0.12-0.54	<0.01
Vietnam	4.24	0.36	0.23-0.61	<0.01
The welfare of the animals during transport is important to me				
China	3.87			
Thailand	4.13	0.22	0.13-0.36	<0.01
Malaysia	4.53	0.26	0.13-0.55	<0.01
Vietnam	4.18	0.61	0.38-0.98	<0.01
The welfare of the animals while being slaughtered is satisfactory in my workplace				
China	3.18			
Thailand	3.39	0.55	0.34-0.88	<0.01
Malaysia	3.94	0.31	0.15-0.64	<0.01
Vietnam	3.66	0.40	0.25-0.64	<0.01
The welfare of the animals while being transported is satisfactory in my workplace				
China	3.15			
Thailand	3.58	0.40	0.25-0.64	<0.01
Malaysia	3.82	0.26	0.13-0.54	<0.01
Vietnam	3.63	0.32	0.20-0.51	<0.01
Most people who are important to me would approve of me making improvements to the welfare of the animals in my care				
China	3.88			
Thailand	4.28	0.24	0.14-0.40	<0.01
Malaysia	4.38	0.33	0.16-0.71	<0.01
Vietnam	3.94	1.00	0.61-1.64	0.99
I intend to make improvements to the welfare of animals				
China	3.58			
Thailand	3.81	0.52	0.32-0.84	<0.01
Malaysia	4.11	0.31	0.15-0.64	<0.01
Vietnam	3.82	0.62	0.39-1.00	0.04
I am confident that I can make improvements of the welfare of animals				
China	3.66			
Thailand	4.15	0.17	0.10-0.28	<0.01
Malaysia	4.24	0.28	0.13-0.60	<0.01
Vietnam	3.70	1.01	0.62-1.62	0.97
In the past I have tried to make improvements to the welfare of the animals in my care				
China	3.77			
Thailand	3.91	0.67	0.41-1.11	0.12
Malaysia	4.03	0.74	0.34-1.60	0.44
Vietnam	3.31	3.50	2.15-5.69	<0.01

¹ Likert scale from 1 (strongly disagree) to 5 (strongly agree)

² Probability of Thailand, Malaysia or Vietnam differing significantly from China.

Derived from multivariable ordinal logistic regression models including all demographic factors

11 **Table 3** Least square means of responses to statements about influencing factors in the
 12 personal evaluation of animal welfare during transport and slaughter in respondents from
 13 China (n = 381, reference group), Thailand (n = 307), Malaysia (n = 124) and Vietnam (n =
 14 210), listed from the highest to the lowest rated.

	Mean response ¹	Odds ratio ²	95% Confidence interval ²	P value ²
<i>Laws</i>				
China	3.72			
Thailand	3.83	0.75	0.46-1.22	0.24
Malaysia	4.07	0.80	0.39-1.64	0.54
Vietnam	3.97	0.64	0.41-1.00	0.05
<i>Personal knowledge</i>				
China	3.62			
Thailand	3.73	0.63	0.38-1.04	0.71
Malaysia	4.12	0.44	0.20-0.93	0.03
Vietnam	3.92	0.52	0.33-0.83	<0.01
<i>Importance to peers</i>				
China	3.47			
Thailand	3.86	0.31	0.19-0.51	<0.01
Malaysia	4.06	0.36	0.17-0.76	<0.01
Vietnam	3.65	0.78	0.50-1.22	0.20
<i>Importance in workplace</i>				
China	3.61			
Thailand	3.67	0.66	0.41-1.07	0.09
Malaysia	4.15	0.33	0.16-0.69	<0.01
Vietnam	3.66	1.07	0.69-1.67	0.75
<i>Religious beliefs</i>				
China	3.06			
Thailand	3.73	0.30	0.36-0.23	<0.01
Malaysia	4.36	0.23	0.23-0.11	<0.01
Vietnam	3.23	0.69	0.69-0.45	0.08
<i>Personal beliefs</i>				
China	3.37			
Thailand	3.58	0.63	0.39-1.02	0.06
Malaysia	4.02	0.28	0.13-0.59	<0.01
Vietnam	3.25	1.42	0.92-2.19	0.10
<i>More pressing community issues</i>				
China	3.51			
Thailand	3.57	1.46	1.46-0.91	0.12
Malaysia	3.58	1.00	1.00-0.47	1.00
Vietnam	3.40	1.40	1.40-0.91	0.13
<i>Personal monetary gain</i>				
China	3.34			
Thailand	3.41	1.00	0.63-1.59	0.94
Malaysia	3.49	0.75	0.37-1.52	0.42
Vietnam	3.25	1.32	0.86-2.03	0.10
<i>Community monetary gain</i>				
China	3.38			
Thailand	3.41	1.04	0.65-1.65	0.87
Malaysia	3.55	0.75	0.37-1.53	0.42

Vietnam

3.36

1.18

0.77-1.82

0.44

¹ Likert scale from 1 (strongly disagree) to 5 (strongly agree)

² Probability of Thailand, Malaysia or Vietnam differing significantly from China.

Derived from multivariable ordinal logistic regression models

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18 **Table 4** Least square mean responses to statements about influencing factors in the
 19 respondents' ability to make improvements to animal welfare during transport and slaughter
 20 in respondents from China (n = 381, reference group), Thailand (n = 307), Malaysia (n = 124)
 21 and Vietnam (n = 210)

	Mean respons ¹	Odds ratio ²	95% Confidence Interval	P value
Slaughter: The following factors impact my ability to make improvements to welfare				
<i>Laws</i>				
China	3.79			
Thailand	3.88	0.87	0.54-1.41	0.57
Malaysia	4.15	0.73	0.35-1.50	0.39
Vietnam	3.96	0.63	0.40-0.97	0.03
<i>Personal knowledge</i>				
China	3.64			
Thailand	3.72	0.53	0.32-0.88	0.01
Malaysia	4.10	0.33	0.15-0.72	<0.01
Vietnam	3.79	0.60	0.38-0.95	0.02
<i>Company approval</i>				
China	3.70			
Thailand	3.87	0.70	0.43-1.14	0.15
Malaysia	4.01	0.40	0.19-0.85	0.01
Vietnam	3.76	0.98	0.63-1.54	0.92
<i>Importance in workplace</i>				
China	3.60			
Thailand	3.79	0.52	0.32-0.85	<0.01
Malaysia	4.01	0.44	0.21-0.93	0.32
Vietnam	3.55	0.93	0.60-1.45	0.76
<i>Tools and resource availability</i>				
China	3.74			
Thailand	3.83	0.64	0.39-1.06	0.08
Malaysia	4.09	0.72	0.34-1.53	0.38
Vietnam	3.62	1.37	0.87-2.15	0.17
<i>Importance to peers</i>				
China	3.49			
Thailand	3.86	0.41	0.25-0.67	<0.01
Malaysia	4.03	0.33	0.16-0.71	<0.01
Vietnam	3.78	0.45	0.28-0.71	<0.01
<i>Workplace approval</i>				
China	3.51			
Thailand	3.81	0.37	0.22-0.62	<0.01
Malaysia	4.00	0.24	0.11-0.52	<0.01
Vietnam	3.55	0.69	0.44-1.09	0.10
<i>More pressing community issues</i>				
China	3.46			
Thailand	3.52	0.87	0.54-1.41	0.50
Malaysia	3.66	0.75	0.36-1.56	0.40
Vietnam	3.43	1.03	0.67-1.59	0.80
<i>Personal beliefs</i>				
China	3.28			
Thailand	3.57	0.49	0.30-0.78	<0.01

Malaysia	4.02	0.29	0.14-0.59	<0.01
Vietnam	3.21	1.63	1.07-2.51	0.02
<i>Religious beliefs</i>				
China	3.31			
Thailand	3.64	0.44	0.27-0.71	<0.01
Malaysia	4.20	0.34	0.17-0.71	<0.01
Vietnam	3.02	1.11	0.73-1.70	0.60
<i>Personal monetary gain</i>				
China	3.38			
Thailand	3.53	1.00	0.63-1.60	0.98
Malaysia	3.58	0.71	0.35-1.43	0.33
Vietnam	3.25	1.03	0.67-1.58	0.90
<i>Community monetary gain</i>				
China	3.39			
Thailand	3.46	1.34	0.84-2.16	0.22
Malaysia	3.61	0.66	0.32-1.35	0.25
Vietnam	3.27	1.04	0.67-1.60	0.07
Transport: The following factors impact my ability to make improvements to welfare				
<i>Laws</i>				
China	3.80			
Thailand	3.95	0.81	0.50-1.31	0.38
Malaysia	4.00	1.38	0.67-2.81	0.38
Vietnam	3.98	0.73	0.47-1.13	0.15
<i>Personal knowledge</i>				
China	3.71			
Thailand	3.80	0.61	0.37-1.02	0.06
Malaysia	4.02	0.67	0.31-1.45	0.31
Vietnam	3.86	0.60	0.37-0.95	0.03
<i>Company approval</i>				
China	3.72			
Thailand	3.91	0.60	0.36-0.98	0.04
Malaysia	4.03	0.34	0.16-0.71	<0.01
Vietnam	3.71	0.88	0.56-1.39	0.59
<i>Importance in workplace</i>				
China	3.71			
Thailand	3.80	0.70	0.43-1.16	0.16
Malaysia	3.98	0.63	0.29-1.34	0.22
Vietnam	3.55	1.52	0.97-2.38	0.06
<i>Tools and resource availability</i>				
China	3.72			
Thailand	3.83	0.84	0.51-1.39	0.50
Malaysia	3.84	1.27	0.61-2.66	0.52
Vietnam	3.55	1.95	1.24-3.07	<0.01
<i>Importance to peers</i>				
China	3.49			
Thailand	3.86	0.41	0.25-0.67	<0.01
Malaysia	4.03	0.28	0.13-0.59	<0.01
Vietnam	3.78	0.88	0.57-1.37	0.57
<i>Workspace</i>				
China	3.42			
Thailand	3.85	0.50	0.3-0.82	<0.01

Malaysia	3.97	0.36	0.17-0.76	<0.01
Vietnam	3.55	0.75	0.48-1.18	0.20
<i>More pressing community issues</i>				
China	3.50			
Thailand	3.43	1.37	0.85-2.22	0.19
Malaysia	3.63	1.15	0.55-2.43	0.70
Vietnam	3.43	1.15	0.74-1.80	0.52
<i>Personal beliefs</i>				
China	3.38			
Thailand	3.52	0.96	0.59-1.55	0.86
Malaysia	3.93	0.54	0.26-1.11	0.09
Vietnam	2.97	2.42	1.56-3.74	<0.01
<i>Religious beliefs</i>				
China	3.21			
Thailand	3.53	0.78	0.48-1.25	0.30
Malaysia	3.95	0.63	0.31-1.28	0.20
Vietnam	2.90	1.75	1.14-2.69	0.01
<i>Personal monetary gain</i>				
China	3.45			
Thailand	3.52	0.95	0.59-1.52	0.81
Malaysia	3.55	0.94	0.46-1.90	0.85
Vietnam	3.19	1.54	1.00-2.37	0.05
<i>Community monetary gain</i>				
China	3.36			
Thailand	3.55	0.84	0.52-1.35	0.47
Malaysia	3.61	0.79	0.39-1.63	0.52
Vietnam	3.20	1.40	0.91-2.16	0.12
<i>Vehicle design</i>				
China	3.45			
Thailand	3.52	1.35	0.83-2.17	0.22
Malaysia	3.25	2.47	1.23-4.95	0.01
Vietnam	3.31	1.49	1.23-4.95	0.07

22 ¹Likert scale from 1 (strongly disagree) to 5 (strongly agree)

23 ² Derived from multivariable ordinal logistic regression models

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25 **Table 5** Least square means of responses to sources of encouragement to improve animal
 26 welfare and likelihood of eliciting favourable responses in respondents from China (n = 381,
 27 reference group), Thailand (n = 307), Malaysia (n = 124) and Vietnam (n = 210).

	Mean response ¹	Odds ratio ²	95% Confidence interval	P value
I am most likely to make improvements to animal welfare if changes are prescribed by...				
<i>Law</i>				
China	3.85			
Thailand	3.81	0.88	0.53-1.44	0.60
Malaysia	4.15	0.64	0.30-1.36	0.24
Vietnam	4.17	0.54	0.34-0.86	<0.01
<i>Local government</i>				
China	3.62			
Thailand	3.69	1.00	0.62-1.64	0.98
Malaysia	4.05	0.96	0.46-2.00	0.91
Vietnam	3.76	0.72	0.46-1.14	0.16
<i>My workplace</i>				
China	3.52			
Thailand	3.77	0.40	0.25-0.66	<0.01
Malaysia	3.98	0.25	0.12-0.52	<0.01
Vietnam	3.67	1.33	0.86-2.07	0.2
<i>A local organization</i>				
China	3.46			
Thailand	3.74	0.78	0.48-1.26	0.30
Malaysia	3.95	0.81	0.39-1.67	0.56
Vietnam	3.57	0.72	0.47-1.13	0.52
<i>Local law enforcement (police)</i>				
China	3.59			
Thailand	3.57	0.94	0.59-1.51	0.81
Malaysia	3.78	1.62	0.80-3.29	0.18
Vietnam	3.77	0.65	0.42-1.00	0.05
<i>My supervisor</i>				
China	3.32			
Thailand	3.62	0.40	0.25-0.65	<0.01
Malaysia	3.84	0.37	0.18-0.76	<0.01
Vietnam	3.42	0.87	0.57-1.35	0.53
<i>My community elder or community leader</i>				
China	3.28			
Thailand	3.55	0.40	0.25-0.65	<0.01
Malaysia	3.64	0.44	0.21-0.94	0.03
Vietnam	2.04	1.74	1.13-2.69	0.01
<i>A western organization</i>				
China	3.08			
Thailand	3.49	0.36	0.22-0.57	<0.01
Malaysia	3.51	0.37	0.18-0.74	<0.01
Vietnam	3.34	0.58	0.38-0.89	0.1
I am most likely to make improvements to animal welfare if I see...				
<i>Personal monetary gain from changing practices</i>				
China	3.36			
Thailand	3.71	0.41	0.26-0.67	<0.01

Malaysia	3.65	0.50	0.25-1.01	0.05
Vietnam	3.24	1.10	0.72-1.69	0.66
<i>Moral value in changing practices</i>				
China	3.78			
Thailand	3.90	0.50	0.31-0.83	<0.01
Malaysia	4.12	0.37	0.17-0.78	<0.01
Vietnam	4.04	0.47	0.29-0.75	<0.01
<i>Others making the changes</i>				
China	3.41			
Thailand	3.53	0.86	0.53-1.39	0.53
Malaysia	3.64	0.74	0.35-1.54	0.42
Vietnam	3.30	1.04	0.67-1.61	0.85

28 ¹The Likert scale was measured from 1 (strongly disagree) to 5 (strongly agree)

29 ² Derived from multivariable ordinal logistic regression models

30 **Table 6** Rankings of importance of factors influencing attitudes to animal welfare from most
 31 important (top) to least important (bottom) by Chinese (n = 381), Thai (n = 307), Malaysian
 32 (n = 124) and Vietnamese (n = 210) respondents.

	China	Thailand	Malaysia	Viet Nam
‘The following factors influence my personal evaluation of animal welfare during slaughter and transport’	Laws ^a Knowledge ^{ab} Workplace ^{ab} More pressing concerns ^{bc} Co-workers ^{cd} Comm. monetary gain ^{de} Personal beliefs ^{de} Pers. monetary gain ^e Religious beliefs ^f	Co-workers ^a Laws ^a Religious beliefs ^{ab} Knowledge ^{abc} Workplace ^{bc} Personal beliefs ^c Pers. monetary gain ^d Comm. monetary gain ^d More pressing concerns ^d	Religious beliefs ^a Workplace ^b Knowledge ^b Laws ^b Co-workers ^b Personal beliefs ^b More pressing concerns ^c Comm. monetary gain ^c Pers. monetary gain ^c	Laws ^a Knowledge ^a Workplace ^b Co-workers ^b More pressing concerns ^c Comm. monetary gain ^c Pers. monetary gain ^c Personal beliefs ^c Religious beliefs ^c
‘The following factors impact my ability to make improvements to welfare during slaughter’	Laws ^a Tools and resources ^{ab} Company approval ^{abc} Knowledge ^{bcd} Work ^{cde} Workspace ^{def} Co-workers ^{efg} More pressing concerns ^{efg} Comm. monetary gain ^{fgh} Pers. monetary gain ^{gh} Religious beliefs ^h Personal beliefs ^h	Laws ^a Company approval ^{ab} Co-workers ^{ab} Tools and resources ^{ab} Workspace ^{ab} Work ^{a b} Knowledge ^{bc} Religious beliefs ^{cd} Personal beliefs ^{de} Pers. monetary gain ^{de} More pressing concerns ^{de} Comm. monetary gain ^e	Religious beliefs ^a Laws ^{ab} Knowledge ^{ab} Tools and resources ^{ab} Co-workers ^{ab} Personal beliefs ^{ab} Company approval ^{ab} Work ^{ab} Workspace ^b More pressing concerns ^c Comm. monetary gain ^c Pers. monetary gain ^c	Laws ^a Knowledge ^{ab} Co-workers ^{ab} Company approval ^{abc} Tools and resources ^{bcd} Workspace ^{cd} Work ^{c d} More pressing concerns ^{de} Comm. monetary gain ^{ef} Pers. monetary gain ^{ef} Personal beliefs ^{fg} Religious beliefs ^g
The following factors impact my ability to make improvements to welfare during transport...’	Laws ^a Tools and resources ^a Company approval ^a Company priority ^a Knowledge ^a Co-workers ^b More pressing concerns ^b	Laws ^a Company approval ^{ab} Workspace ^{a b} Co-workers ^{ab} Tools and resources ^{ab} Personal beliefs ^{ab} Company priority ^b	Company approval ^a Knowledge ^{ab} Laws ^{ab} Company priority ^{ab} Workspace ^{ab} Religious beliefs ^{ab}	Laws ^a Knowledge ^{ab} Company approval ^{bc} Tools and resources ^{cd} Workspace ^{cd} Company priority ^{cd} Co-workers ^d

	Vehicle design ^{bc} Pers. monetary gain ^{bc} Workspace ^{bc} Personal beliefs ^c Comm. monetary gain ^c Religious beliefs ^d	Knowledge ^b Comm. monetary gain ^c Religious beliefs ^c Vehicle design ^c Pers. monetary gain ^c More pressing concerns ^c	Co-workers ^{ab} Personal beliefs ^{ab} Tools and resources ^{bc} More pressing concerns ^{cd} Comm. monetary gain ^d Pers. monetary gain ^d Vehicle design ^e	More pressing concerns ^{de} Vehicle design ^{ef} Comm. monetary gain ^f Pers. monetary gain ^f Personal beliefs ^g Religious beliefs ^g
Sources of encouragement to make improvements to animal welfare	Law ^a Personal value ^a Local government ^b Police ^{bc} Workplace ^{bcd} Local organisation ^{cde} Peers ^{def} Pers. monetary gain ^{ef} Supervisor ^{ef} Community leader ^f International organisation ^g	Personal value ^a Law ^{ab} Workplace ^{ab} Local organisation ^{bc} Pers. monetary gain ^{bcd} Local government ^{bcd} Supervisor ^{cdef} Police ^{def} Community leader ^{ef} Peers ^f International organisation ^f	Law ^a Personal value ^{ab} Local government ^{ab} Workplace ^{abc} Local organisation ^{bc} Supervisor ^{cd} Police ^{cde} Pers. monetary gain ^{def} Peers ^{ef} Community leader ^{ef} International organisation ^f	Law ^a Personal value ^a Police ^b Local government ^b Workplace ^b Local organisation ^{bc} Supervisor ^{cd} International organisation ^d Peers ^d Pers. monetary gain ^{de} Community leader ^e

Means that do not share a letter are significantly ($P < 0.05$) different by Fisher LSD test

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