Appendix 2 - Coding system for the different variables

Code	Variable	Label	Type of data	Expected Effect on the outcome
	1, DEMOGRAPHIC VARIABLES			
G0	Country	Text	Categorical	
G1	Experience (years)	Number	Numeric	
G2	Education level	No higher education	Categorical	
		Higher education (shorter or longer type)		
G3	Gender	Male	Categorical	
		Female		
		Not specified		
G4	Herd	Beef	Categorical	
		Dairy		
		Mixt		
		Other		
G5	Business stage	Starting or expanding	Categorical	
		Retired		
		Stable and settled		
		Reducing		
G6	Organic	Yes or in Conversion	Categorical	
		No		
G7	Average herd size during the previous year	Number	Numeric	
G8	Average number of mortalities during the previous year	Number	Numeric	
	1. PSYCHOLOGICAL CHARACTERISTICS:			
	1.1 Risk aversion	**= Average of P1 to P3**		
P1	I consider myself as a cautious person	Visual scale: number from 0 to 100	Numeric	Pos
P2	Anticipate risks and take specific measures to mitigate them	0= "Do not agree at all"	Numeric	Pos
P3	I always bring basic medical products with me for personal use (disinfectant, bandages and pain killers)	100 = "Fully agree"	Numeric	Pos
	1.2 Biosecurity knowledge	**= K1 + K2 + K3**		**Pos**
K1	Example biosecurity measure 1	1: Proper biosecurity measures	Numeric	Pos
K2	Example biosecurity measure 2	0.5: Indirect effect	Numeric	Pos
K3	Example biosecurity measure 3	0: Not a biosecurity measure	Numeric	Pos
	2. HEALTH RESPONSIBILITY	**= Average of HM1 to HM8**		
HM1	Infectious diseases represent an important risk for my farm	Visual scale: number from 0 to 100	Numeric	Pos
HM2	I make a lot of efforts to maintain a good general hygiene in the farm	0= "Do not agree at all" , 100 = Fully agree"	Numeric	Pos
HM3	The monitoring by the veterinarian is really important for my herd health status.		Numeric	Pos

HM4	I call the veterinarian directly if I have a problem.		Numeric	Pos
HM5	Disease prevention and control measures are important to preserve a good health status for my herd		Numeric	Pos
HM6	Disease prevention and control measures are important to preserve the environment		Numeric	Pos
HM7	Farmers have responsibilities towards animal food consumers in terms of public health		Numeric	Pos
HM8	I am responsible for the implementation of infectious disease prevention and control measures		Numeric	Pos
3. RISK				
3.1 Diseases suceptibility		**= Average of Su1 to Su3**		
Su1	In the absence of preventive measures, what is the probability of occurrence of BVD (bovine viral diarrhoea) in your herd?	Visual scale: number from 0 to 100 0= "Not any chances" , 100 = "100% of chances"	Numeric	Pos
Su2	In the absence of preventive measures, what is the probability of occurrence of BRU (brucellosis) in your herd?		Numeric	Pos
Su3	In the absence of preventive measures, what is the probability of occurrence of YCD (young calf diarrhoea) in your herd?		Numeric	Pos
3.1 Disease severity		**= Average of Se1.1 to Se3.3**		
Se1.1	If my herd is infected by BVD, there would be an important negative effect on its productivity.	Visual scale: number from 0 to 100 0: "Don't agree at all' , 100 "fully agree"	Numeric	Pos
Se1.2	If my herd is infected by BRU , there would be an important negative effect on its productivity.		Numeric	Pos
Se1.3	If my herd is infected by YCD, there would be an important negative effect on on its productivity.		Numeric	Pos
Se2.1	The economic impact of BVD on my activity over the last 10 years was very high.		Numeric	Pos
Se2.2	The economic impact of BRU on my activity over the last 10 years was very high.		Numeric	Pos
Se2.3	The economic impact of YCD on my activity over the last 10 years was very high.		Numeric	Pos
Se3.1	Many farmers I know have been affected by BVD over the last 10 years.		Numeric	Pos
Se3.2	Many farmers I know have been affected by BRU over the last 10 years.		Numeric	Pos
Se3.3	Many farmers I know have been affected by YCD over the last 10 years.		Numeric	Pos
4. BENEFITS OF THE BIOSECURITY MEASURE		**Average of Bex.1 to Bex3**		
Be1.1	According to you, what is the efficiency of the biosecurity measure 1 against BVD	Visual scale: number from 0 to 100 0: "Useless"; 100: "100% efficient"	Numeric	Pos
Be1.2	According to you, what is the efficiency of the biosecurity measure 1 against BRU		Numeric	Pos
Be1.3	According to you, what is the efficiency of the biosecurity measure 1 against YCD		Numeric	Pos
Be1	**= Average of Be1.1 to Be1.3**			
Be2.1	According to you, what is the efficiency of the biosecurity measure 2 against BVD		Numeric	Pos
Be2.2	According to you, what is the efficiency of the biosecurity measure 2 against BRU		Numeric	Pos

Be2.3	According to you, what is the efficiency of the biosecurity measure 2 against YCD		Numeric	Pos
Be2	**= Average of Be2.1 to Be2.3**			
…	…		Numeric	Pos
Be17.1	According to you, what is the efficiency of the biosecurity measure 17 against BVD		Numeric	Pos
Be17.2	According to you, what is the efficiency of the biosecurity measure 17 against BRU		Numeric	Pos
Be17.3	According to you, what is the efficiency of the biosecurity measure 17 against YCD		Numeric	Pos
Be17	**= Average of Be17.1 to Be17.3**			
	5. BARRIERS	**= Average of Ba1.1 to Ba2.3**		
Ba1.1	I am able to prevent BVD by implementing appropriate measures	Visual scale: number from 0 to 100	Numeric	Neg
Ba1.2	I am able to prevent BRU by implementing appropriate measures	0: "Don't agree at all' , 100 "fully agree"	Numeric	Neg
Ba1.3	I am able to prevent YCD by implementing appropriate measures		Numeric	Neg
Ba2.1	The prevention of BVD relies mainly on measures to be implemented by the authorities, there isn't much I can do		Numeric	Pos
Ba2.2	The prevention of BRU relies mainly on measures to be implemented by the authorities, there isn't much I can do		Numeric	Pos
Ba2.3	The prevention of YCD relies mainly on measures to be implemented by the authorities, there isn't much I can do		Numeric	Pos
	6. INTENTION OR ACTION			
M1	Do you plan or are you already implementing the biosecurity measure 1	0: No and I do not intend to 1: No but I might consider it 2: No but I will do it 2.5: Measure not applicable to farming	Numeric	Pos
…	…	system or no opinion (e.g: veal calves for closed herds, "Other" with no or irrelevant comments) 3: Yes but sometimes only 4: Yes, most of the time	Numeric	Pos
M17	Do you plan or are you already implementing the biosecurity measure 17	5: Yes, Always	Numeric	Pos

Legend: BVD: bovine viral diarrhoea; BRU: brucellosis; YCD: young calf diarrhoea