

**Table S1.** Eleven covariates presented for *Adaptive Response 1: Cropping System model* for both survey periods, AP1 (n = 540) and AP2 (n = 389). For each variable in both survey time periods, standardized logit coefficients, standard errors (SE), *p*-values and log odds (Exp (B)) are included. Psuedo-R<sup>2</sup> and Hosmer and Lemeshow fit statistics are presented for each model.

Variables	STD logit coefficient (Ap1)	STD logit coefficient (Ap2)	SE (Ap1)	SE(Ap2)	p-value (Ap1)	p-value (Ap2)	Exp(B) (Ap1)	Exp(B) (Ap2)
Intercept			0.973	1.395	0.002	0.008	0.051	0.025
Adjust2Change	-0.264	-0.178	0.103	0.128	<.0001	0.022	0.637	0.745
Changed_Weather	0.194	0.199	0.216	0.253	0.001	0.002	2.080	2.215
Changed_HighCosts	-0.032	0.221	0.165	0.189	0.596	0.000	0.916	2.007
CC_Env_Risk	0.296	0.220	0.181	0.215	0.001	0.066	1.841	1.486
LessRelPrecip_Risk	-0.023	0.116	0.173	0.163	0.797	0.110	0.956	1.298
LongerDrought_Risk	0.028	0.059	0.139	0.174	0.737	0.459	1.048	1.138
CC_Econ_Risk	0.290	0.432	0.182	0.264	0.003	0.008	1.716	2.028
ClimChPolicies_Risk	0.112	-0.059	0.096	0.101	0.082	0.409	1.182	0.920
CostsInputs_Risk	-0.004	-0.058	0.171	0.173	0.956	0.386	0.991	0.860
Annual_Sales	-0.123	-0.044	0.082	0.101	0.033	0.550	0.840	0.942
Education	0.003	-0.074	0.077	0.096	0.961	0.281	1.004	0.902

Nagelkirke's psuedo-R<sup>2</sup> AP1: 0.27; AP2: 0.314; Hosmer and Lemeshow (p value) AP1:0.915; AP2: 0.104.

**Table S2.** Eleven covariates presented for the *Adaptive Response 2: Rotations model* for both survey periods, AP1 (n = 539) and AP2 (n = 388). For each variable in both survey time periods, standardized logit coefficients, standard errors (se), *p*-values and log odds (Exp (B)) were included. Psuedo-R<sup>2</sup> and Hosmer and Lemeshow fit statistics are presented for each model.

Variables	STD logit coefficient (Ap1)	STD logit coefficient (Ap2)	SE(Ap1)	SE(Ap2)	p-value (Ap1)	p-value (Ap2)	Exp(B) (Ap1)	Exp(B) (Ap2)
Intercept			1.023	1.231	0.001	0.116	0.028	0.144
Adjust2Change	-0.137	-0.124	0.098	0.118	0.018	0.086	0.791	0.815
Changed_Weather	0.230	0.090	0.201	0.247	<.0001	0.145	2.381	1.435
Changed_HighCosts	0.014	0.177	0.146	0.190	0.793	0.004	1.039	1.744
CC_Env_Risk	0.297	0.282	0.200	0.201	0.002	0.012	1.851	1.664
LessRelPrecip_Risk	-0.045	-0.041	0.157	0.155	0.582	0.558	0.917	0.913
LongerDrought_Risk	0.011	0.018	0.123	0.155	0.879	0.802	1.019	1.040
CC_Econ_Risk	0.211	0.409	0.178	0.206	0.028	0.001	1.481	1.952
ClimChPolicies_Risk	0.010	-0.047	0.093	0.097	0.867	0.498	1.016	0.936
CostsInputs_Risk	0.071	-0.178	0.179	0.171	0.376	0.007	1.172	0.628
Annual_Sales	-0.011	-0.102	0.077	0.090	0.847	0.119	0.985	0.869
Education	-0.036	0.047	0.075	0.091	0.524	0.464	0.953	1.069

Nagelkerke's psuedo-R<sup>2</sup> AP1: 0.209; AP2: 0.266; Hosmer and Lemeshow (*p* value) AP1:0.971; AP2: 0.180.

**Table S3.** Eleven covariates presented for the *Adaptive Response 3: Tillage model* for both survey periods, AP1 (n = 536) and AP2 (n = 387). For each variable in both survey time periods, standardized logit coefficients, standard errors (se), *p*-values and log odds (Exp (B)) were included. Psuedo-R2 and Hosmer and Lemeshow fit statistics are presented for each model.

Variables	STD logit coefficients (Ap1)	STD logit coefficients (Ap2)	SE (Ap1)	SE(Ap2)	p-value (Ap1)	p-value (Ap2)	Exp(B) (Ap1)	Exp(B) (Ap2)
Intercept			0.891	1.358	0.003	0.821	0.068	1.361
Adjust2Change	-0.174	-0.158	0.104	0.114	0.004	0.023	0.743	0.771
Changed_Weather	0.077	0.097	0.199	0.248	0.147	0.120	1.335	1.473
Changed_HighCosts	0.056	0.113	0.140	0.189	0.263	0.061	1.170	1.425
CC_Env_Risk	0.234	0.173	0.162	0.173	0.003	0.072	1.622	1.367
LessRelPrecip_Risk	-0.005	0.050	0.145	0.173	0.953	0.515	0.991	1.119
LongerDrought_Risk	-0.001	0.014	0.116	0.142	0.987	0.828	0.998	1.031
CC_Econ_Risk	0.353	0.396	0.154	0.182	<.0001	0.000	1.937	1.909
ClimChPolicies_Risk	0.000	0.021	0.085	0.096	1.000	0.761	1.000	1.030
CostsInputs_Risk	-0.030	-0.084	0.129	0.179	0.595	0.223	0.934	0.803
Annual_Sales	-0.082	-0.293	0.074	0.093	0.120	<.0001	0.891	0.668
Education	0.018	-0.151	0.069	0.086	0.735	0.014	1.024	0.809

Nagelkirke's psuedo-R<sup>2</sup> AP1: 0.231; AP2: 0.266; Hosmer and Lemeshow (*p* value) AP1:0.69; AP2: 0.949.

**Table S4.** Eleven covariates presented for the *Adaptive Response 4: Soil Conservation model* for both survey periods, AP1 (n = 540) and AP2 (n = 387). For each variable in both survey time periods, standardized logit coefficients, standard errors (se), *p*-values and log odds (Exp (B)) were included. Psuedo-R2 and Hosmer and Lemeshow fit statistics are presented for each model.

Variables	STD logit coefficients (Ap1)	STD logit coefficients (Ap2)	SE (Ap1)	SE(Ap2)	p-value (Ap1)	p-value (Ap2)	Exp(B) (Ap1)	Exp(B) (Ap2)
Intercept			0.953	1.207	0.000	0.317	0.030	0.298
Adjust2Change	-0.142	-0.070	0.109	0.109	0.025	0.286	0.784	0.891
Changed_Weather	0.122	0.056	0.207	0.247	0.027	0.369	1.581	1.249
Changed_HighCosts	0.071	0.140	0.142	0.181	0.167	0.015	1.217	1.553
CC_Env_Risk	0.373	0.250	0.210	0.184	0.000	0.015	2.157	1.570
LessRelPrecip_Risk	-0.017	0.111	0.156	0.169	0.833	0.143	0.968	1.281
LongerDrought_Risk	0.055	-0.002	0.126	0.159	0.462	0.980	1.097	0.996
CC_Econ_Risk	0.306	0.368	0.171	0.191	0.001	0.002	1.769	1.823
CostsInputs_Risk	-0.035	-0.064	0.139	0.184	0.570	0.363	0.924	0.846
ClimChPolicies_Risk	0.050	-0.013	0.092	0.100	0.417	0.854	1.078	0.982
Annual_Sales	-0.077	-0.194	0.075	0.093	0.145	0.004	0.896	0.765
Education	-0.040	-0.181	0.068	0.085	0.432	0.003	0.948	0.776

Nagelkirke's psuedo-R<sup>2</sup> AP1: 0.268; AP2: 0.256; Hosmer and Lemeshow (*p* value) AP1:0.183; AP2: 0.164.

Table S5. Eleven covariates presented for the *Adaptive Response 5: Crop Insurance model* for both survey periods, AP1 (n = 540) and AP2 (n = 385). For each variable in both survey time periods, standardized logit coefficients, standard errors (se), *p*-values and log odds (Exp (B)) were included. Psuedo-R2 and Hosmer and Lemeshow fit statistics are presented for each model.

Variables	STD logit coefficient (Ap1)	STD logit coefficient (Ap2)	SE (Ap1)	SE(Ap2)	p-value (Ap1)	p-value (Ap2)	Exp(B) (Ap1)	Exp(B) (Ap2)
Intercept			0.794	1.412	0.000	0.007	0.060	44.654
Adjust2Change	-0.100	0.166	0.096	0.129	0.077	0.035	0.843	1.314
Changed_Weather	-0.002	-0.190	0.188	0.254	0.975	0.003	0.994	0.470
Changed_HighCosts	0.092	-0.229	0.138	0.190	0.067	0.000	1.289	0.487
CC_Env_Risk	0.244	-0.231	0.158	0.219	0.002	0.058	1.653	0.659
LessRelPrecip_Risk	0.057	-0.134	0.138	0.167	0.430	0.074	1.115	0.741
LongerDrought_Risk	-0.020	-0.063	0.120	0.178	0.776	0.439	0.966	0.872
CC_Econ_Risk	0.355	-0.426	0.149	0.268	<.0001	0.010	1.937	0.499
ClimChPolicies_Risk	0.053	0.051	0.081	0.105	0.334	0.485	1.082	1.076
CostsInputs_Risk	-0.038	0.070	0.125	0.175	0.496	0.302	0.919	1.198
Annual_Sales	-0.096	0.045	0.070	0.102	0.052	0.545	0.873	1.064
Education	-0.010	0.081	0.066	0.097	0.844	0.240	0.987	1.121

Nagelkirke's psuedo-R<sup>2</sup> AP1: 0.243; AP2: 0.317; Hosmer and Lemeshow (*p* value) AP1:0.929; AP2: 0.152.