

Table S2. Binary logistic regression showing the relationship between independent variables and livelihood opportunities

Zonal analysis (all 15 communities combined)						
Variables	S.E	Wald	Sig.	Exp(B)	95% C.I	
					Lower	Upper
Marital status	1.292	3.733	0.053	12.141	0.965	152.798
All year fishing	0.127	60.822	<0.001**	0.372	0.290	0.477
House ownership	0.132	65.575	<0.001**	0.343	0.265	0.445
Canoe ownership	0.145	274.633	<0.001**	0.090	0.068	0.119
Age (Ref: <30)	-	57.453	<0.001**	-	-	-
30–40	1.050	6.880	0.009**	0.064	0.008	0.498
41–50	1.049	4.014	0.045**	0.122	0.016	0.955
> 50	1.064	10.599	0.001**	0.031	0.004	0.252
Household size (Ref: 3)	-	45.657	<0.001**	-	-	-
4	0.798	0.001	0.974	0.974	0.204	4.654
>5	0.797	3.575	0.059	0.222	0.046	1.057
Constant	0.348	230.107	<0.001**	196.013	-	-
N	5250					
Nagelkerke (<i>pseudo R</i> ²)	0.408					
Analysis for individual communities						
Elmina						
Marital status	8395.561	0.000	0.998	47837739.93	0.000	-
All year fishing	0.978	0.001	0.976	0.971	0.143	6.609
House ownership	0.995	2.589	0.108	0.202	0.029	1.418
Canoe ownership	3576.301	0.000	0.992	0.000	0.000	-
Age (Ref: <30)	-	0.000	1.000	-	-	-
30–40	23337.312	0.000	1.000	0.099	0.000	-
41–50	23714.979	0.000	0.999	15726989.57	0.000	-
> 50	24575.5576	0.000	1.000	4.320	0.000	-
Household size (Ref: 3)	-	0.000	1.000	-	-	-
4	23479.417	0.000	0.999	0.000	0.000	-
>5	23714.979	0.000	0.999	0.000	0.000	-
Constant	7595.757	0.000	0.998	0.000	-	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.926					
Cape Coast						
Marital status	32816.659	0.000	1.000	1.000	0.000	-
All year fishing	0.504	13.074	<0.001**	6.191	2.304	16.630
House ownership	0.384	4.081	0.043**	0.460	0.217	0.977
Canoe ownership	0.373	9.660	0.002**	0.314	0.151	0.652
Age (Ref: <30)	-	0.274	0.965	-	-	-
30–40	28419.839	0.000	0.999	0.000	0.000	-
41–50	28419839	0.000	0.999	0.000	0.000	-
> 50	28419839	0.000	0.999	0.000	0.000	-
Household size (Ref: 3)	-	5.152	0.023**	-	-	-
4	0.616	5.152	0.023**	4.045	1.210	13.518
Constant	16408.712	0.000	0.999	01615475383	-	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.260					
Moree						
Marital status	16807.886	0.000	1.000	1.398	0.000	-
All year fishing	3174.920	0.000	0.995	0.000	0.000	-
House ownership	4853.431	0.000	1.000	0.508	0.000	-
Canoe ownership	4959.887	0.000	0.994	0.000	0.000	-
Age (Ref: <30)	-	7.858	0.049**	-	-	-
30–40	19371.518	0.000	0.999	148614676.2	0.000	-
41–50	19371.517	0.000	0.999	6755212.553	0.000	-
> 50	20375.374	0.000	0.999	51317729.65	0.000	-
Household size (Ref: 3)	-	0.000	1.000	-	-	-
4	24031.544	0.000	0.999	0.000	0.000	-

>5	24174.254	0.000	1.000	0.147	0.000	-
Constant	9191.898	0.000	0.997	2.400E+16	-	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.844					
Biriwa						
Marital status	15852404	0.000	1.000	1.000	0.000	-
All year fishing	5725.877	0.000	0.997	65889112.10	0.000	-
House ownership	0.671	1.866	0.172	0.400	0.107	1.490
Canoe ownership	7351.940	0.000	0.996	0.000	0.000	-
Age (Ref: <30)	-	0.000	1.000	-	-	-
30–40	16189.163	0.000	0.999	0.000	0.000	-
41–50	14890.037	0.000	1.000	2.487	0.000	-
> 50	17807.785	0.000	0.999	0.000	0.000	-
Household size (Ref: 3)	-	0.000	1.000	-	-	-
4	21521.371	0.000	1.000	16.123	0.000	-
>5	19055.227	0.000	1.000	0.257	0.000	-
Constant	9473.577	0.000	0.998	1615474878	-	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.826					
Apam						
Marital status	8538.601	0.000	1.000	0.067	0.000	-
All year fishing	0.831	10.834	0.001**	0.065	0.013	0.331
House ownership	1.011	0.085	0.770	0.744	0.103	5.402
Canoe ownership	0.890	16.932	<0.001**	0.026	0.004	0.147
Age (Ref: <30)	-	15.106	0.002**	-	-	-
30–40	7284.714	0.000	0.999	0.000	0.000	-
41–50	7284.714	0.000	0.998	0.000	0.000	-
> 50	9835.067	0.000	0.997	0.000	0.000	-
Household size (Ref: 3)	-	1.964	0.375	-	-	-
4	4194.735	0.000	0.997	0.000	0.000	-
>5	4194.735	0.000	0.997	0.000	0.000	-
Constant	6120.591	0.000	0.995	3.788E+16	-	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.901					
Gomoa Fetteh						
Marital status	18.039	15293.961	0.000	0.999	68293477.03	0.000
All year fishing	-	-	-	-	-	-
House ownership	-18.735	2505.844	0.000	0.994	0.000	0.000
Canoe ownership	-1.857	0.824	5.080	0.024**	0.156	0.031
Age (Ref: <30)	-	-	0.000	1.000	-	-
30–40	-18.658	7937.084	0.000	0.998	0.000	0.000
41–50	1.397	8853.411	0.000	1.000	4.042	0.000
> 50	0.510	10238.197	0.000	1.000	1.665	0.000
Household size (Ref: 3)	-	-	12.791	0.002**	-	-
4	1.100	10726.299	0.000	1.000	3.005	0.000
>5	-1.859	10726.299	0.000	1.000	0.156	0.000
Constant	21.203	7882.490	0.000	0.998	1615475040	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.756					
Nyanyano						
Marital status	14431.264	0.000	1.000	4.869	0.000	-
All year fishing	-	-	-	-	0.000	-
House ownership	2303.638	0.000	0.994	0.000	0.000	-
Canoe ownership	2410.942	0.000	0.994	0.000	0.000	-
Age (Ref: <30)	-	0.000	1.000	-	-	-
30–40	8823.663	0.000	1.000	0.106	0.000	-
41–50	9782.753	0.000	1.000	1.068	0.000	-
> 50	12743.905	0.000	0.999	0.000	0.000	-
Household size (Ref: 3)	-	0.000	1.000	-	-	-
4	10606.128	0.000	0.998	1.903E+13	0.000	-

>5	10292.939	0.000	0.999	592777.750	0.000	-
Constant	7105.180	0.000	0.998	1615474829	-	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.758					
Bortianor						
Marital status	0.000	16594.135	0.000	1.000	1.000	-
All year fishing	-	-	-	-	-	-
House ownership	-17.069	2169.764	0.000	0.994	0.000	-
Canoe ownership	-19.209	1891.450	0.000	0.992	0.000	-
Age (Ref: <30)	-	-	-	0.114	-	-
30-40	33.863	14772.778	5.943	0.998	5.088E+14	-
41-50	32.764	14772.778	0.000	0.998	1.696e+14	-
> 50	31.704	14772.778	0.000	0.998	5.870E+13	-
Household size (Ref: 3)	-	-	0.000	1.000	-	-
4	0.000	20096.502	0.000	1.000	1.000	-
>5	-18.094	20294.929	0.000	0.999	0.000	-
Constant	21.203	8569.173	0.000	0.998	1615475178	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.795					
James Town						
Marital status	13054.680	0.000	0.997	7.535E+17	0.000	-
All year fishing	0.794	3.202	0.074**	0.242	0.051	1.145
House ownership	0.843	4.158	0.041**	0.179	0.034	0.935
Canoe ownership	0.446	9.500	0.002**	0.253	0.105	0.606
Age (Ref: <30)	-	9.408	0.024**	-	-	-
30-40	9228.761	0.000	0.998	0.000	-	-
41-50	9228.761	0.000	0.998	0.000	-	-
> 50	12348.339	0.000	1.000	0.468	-	-
Household size (Ref: 3)	-	18.219	<0.001**	-	-	-
4	9233.349	0.000	0.998	0.000	-	-
>5	9233.349	0.000	0.998	0.000	-	-
Constant	0.793	20.346	<0.001**	35.813	-	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.389					
Teshie						
Marital status	15851.652	0.000	1.000	3.642	0.000	-
All year fishing	4170.061	0.000	1.000	1.197	0.000	-
House ownership	0.0684	6.069	0.014**	0.185	0.048	0.708
Canoe ownership	3015.977	0.000	0.995	0.000	0.000	-
Age (Ref: <30)	-	2.901	0.407	-	-	-
30-40	10588.740	0.000	0.998	0.000	0.000	-
41-50	10588.740	0.000	0.998	0.000	0.000	-
> 50	11761.949	0.000	1.000	0.786	0.000	-
Household size (Ref: 3)	-	5.101	0.078	-	-	-
4	9227.744	0.000	1.000	1.132	0.000	-
>5	9227.744	0.000	1.000	0.176	0.000	-
Constant	7255.723	0.000	0.995	1.922E+18	-	-
N	350					
Nagelkerke (<i>pseudo R</i> ²)	0.685					
Adina						
Marital status	17352.859	0.000	1.000	1.068	0.000	-
All year fishing	20835.821	0.000	1.000	0.900	0.000	-
House ownership	0.858	0.410	0.522	0.577	0.107	3.104
Canoe ownership	0.982	0.873	0.350	2.504	0.365	17.175
Age (Ref: <30)	-	0.308	0.959	-	-	-
30-40	18272.075	0.000	1.000	0.399	0.000	-
41-50	16408.831	0.000	0.999	0.000	0.000	-
> 50	16408.831	0.000	0.999	0.000	0.000	-
Household size (Ref: 3)	-	0.000	1.000	-	-	-
4	8933.348	0.000	1.000	0.000	0.000	-

>5	-	-	-	-
Constant	5645.527	0.000	0.997	1513323227
N	350			
Nagelkerke (<i>pseudo R</i> ²)	0.233			

Note: **significant at 0.05. The communities of Azizanya, Dzita, Vodza, and Agavedzi could not be computed as the dependent variable appeared to be constant.