

## APPENDICES

### Appendix 1. TE, AE, and EE scores of sample households

Household id	TE	AE	EE
001	.6883065	.9746708	.6708722
002	.7385959	.8429579	.6226053
003	.8359825	.9256175	.7738001
004	.6687075	.9598914	.6418866
005	.845145	.8957836	.7570671
006	.7761588	.9103518	.7065776
007	.6817831	.9276171	.6324337
008	.7394997	.9555591	.7066357
009	.7725736	.8623856	.6662564
010	.8184678	.9456605	.7739927
011	.7040799	.9377185	.6602288
012	.4745264	.7418355	.3520205
013	.7584447	.9519151	.721975
014	.573634	.9377932	.53795
015	.7719818	.8467485	.6536744
016	.6897093	.9242986	.6374973
017	.7884615	.8468096	.6676767
018	.8542178	.8075574	.6898299
019	.7301366	.8432992	.6157237
020	.758045	.9355695	.7092038
021	.7288553	.951578	.6935627
022	.8295997	.9293529	.770991
023	.80329	.9535245	.7659567
024	.6597534	.9452531	.623634
025	.7110254	.9337482	.6639187
026	.7883369	.9622325	.7585634
027	.6839334	.8643923	.5911868
028	.7748629	.7869097	.6097472
029	.7694573	.9100828	.7002699
030	.803508	.8392326	.6743301
031	.6578519	.8561913	.5632471
032	.7651897	.9735565	.7449554
033	.558814	.9316	.5205911
034	.7427787	.8109214	.6023352
035	.64832	.9529732	.6178316
036	.5601412	.9251299	.5182034
037	.8282783	.9348111	.7742837
038	.8864107	.8992949	.7971446
039	.6304549	.9453018	.5959702

040	.2183903	.8175558	.1785462
041	.7700738	.9008821	.6937457
042	.8910661	.9214737	.821094
043	.5788313	.9361852	.5418933
044	.7806735	.8195221	.6397792
045	.823954	.9298842	.7661818
046	.8336975	.9349984	.7795058
047	.840059	.8894181	.7471637
048	.8445507	.754181	.6369441
049	.8403802	.7847846	.6595174
050	.7941363	.9500697	.7544849
051	.8561668	.9596664	.8216345
052	.917338	.8978388	.8236216
053	.847203	.7048746	.5971719
054	.7391573	.922384	.6817868
055	.860103	.8640584	.7431791
056	.8029849	.9571914	.7686102
057	.7529429	.8152374	.6138272
058	.8042973	.957013	.7697229
059	.7671293	.8715417	.6685852
060	.6603726	.8291085	.5475205
061	.5520627	.8723199	.4815753
062	.6561596	.9247364	.6067747
063	.7119026	.8215286	.5848483
064	.8877987	.9015729	.8004153
065	.8879867	.8016168	.711825
066	.1062142	.7262061	.0771334
067	.8888322	.6866701	.6103345
068	.463447	.876629	.4062711
069	.7005485	.8623116	.604091
070	.9185472	.6984312	.641542
071	.7942786	.7353028	.5840353
072	.8859305	.9420495	.8345904
073	.7628288	.9383498	.7158002
074	.6505213	.8235055	.5357079
075	.8077437	.8248824	.6662936
076	.822778	.9494491	.7811859
077	.6402569	.8276052	.5298799
078	.8128327	.9047657	.7354231
079	.86133	.8525532	.7343296
080	.8120723	.8186076	.6647686
081	.7494888	.9895165	.7416315
082	.9053022	.8089901	.7323805
083	.7263946	.9590312	.6966351
084	.6899581	.7009827	.4836487

085	.7796098	.7814219	.6092042
086	.8351418	.9285551	.7754751
087	.7297813	.8388267	.61216
088	.3789201	.9396309	.356045
089	.6158559	.7951152	.4896764
090	.7939801	.9262167	.7353976
091	.7638371	.9534341	.7282683
092	.0907115	.7614173	.0690693
093	.7564134	.9409056	.7117136
094	.5943986	.9181083	.5457223
095	.8427109	.9511636	.8015559
096	.6459994	.9605145	.6204919
097	.1299408	.9637155	.125226
098	.7948148	.7930366	.6303173
099	.6894611	.9157808	.6313952
100	.7705449	.9549239	.7358118
101	.8075962	.975485	.787798
102	.5870453	.8901775	.5225745
103	.7293241	.91395	.6665658
104	.6747329	.9303644	.6277475
105	.8168839	.9129675	.7457884
106	.6784804	.7641831	.5184832
107	.2274592	.9547119	.217158
108	.8484648	.796299	.6756317
109	.8014579	.6286975	.5038745
110	.8169924	.8958276	.7318844
111	.8221511	.9599937	.7892599
112	.7774637	.9504189	.7389162
113	.8196033	.9038811	.7408239
114	.6977789	.9589909	.6691636
115	.7575771	.8080273	.6121429
116	.8461808	.838146	.7092231
117	.8656448	.8183539	.7084038
118	.4760817	.7623513	.3629415
119	.7337444	.9668122	.7093931
120	.5134749	.9638258	.4949004
121	.4659909	.697706	.3251247
122	.2509369	.9183142	.2304389
123	.8077822	.9523065	.7692563
124	.6892056	.9389749	.6471468
125	.7927931	.6746396	.5348496
126	.5936257	.9192541	.5456929
127	.2714809	.8305091	.2254673
128	.742861	.9672489	.7185315
129	.657543	.7243689	.4763037

130	.8281868	.9430119	.7809901
131	.8719363	.9299098	.8108221
132	.2834423	.8859531	.2511165
133	.7461786	.8186615	.6108677
134	.7768539	.7843373	.6093155
135	.8028823	.9680926	.7772644
136	.7685681	.9821129	.7548206
137	.7759281	.9727176	.754759
138	.6468246	.9488826	.6137607
139	.7787893	.9373403	.7299905
140	.7347754	.9469967	.6958299
141	.5921628	.9357811	.5541348
142	.747897	.9675312	.7236137
143	.6499937	.9596542	.6237692
144	.5953497	.9327948	.5553392
145	.7282346	.6873658	.5005636
146	.6821893	.9164	.6251583
147	.7024484	.9678779	.6798843

## Appendix 2. Conversion factors for man equivalent and adult equivalent

Age group (years)	Man Equivalent		Adult Equivalent	
	Male	Female	Male	Female
<10	0	0	0.6	0.6
10-13	0.2	0.2	0.9	0.8
14-16	0.5	0.4	1.0	0.75
17-50	1.00	0.8	1.0	0.75
>50	0.7	0.5	1.0	0.75

Source: Storck *et al.* (1991)

### Appendix 3. Instrumental variables (2SLS) regression

Inyield	Coef.	St.Err.	t-value
<b>Infertiliser</b>	1.219**	.613	1.99
<b>Inseed</b>	.028	.306	0.09
<b>Inland</b>	.062	.115	0.54
<b>Inlabour</b>	-.123	.093	-1.32
<b>Inoxen_hr</b>	-.026	.065	-0.40
<b>Plot fertility</b>			
<b>Medium</b>	.380	.474	0.80
<b>Infertile</b>	.864	.969	0.89
<b>Constant</b>	1.605	1.115	1.44
<b>Mean dependent var</b>	4.656	SD dependent var.	0.904
<b>R-squared</b>	0.052	Number of obs.	147
<b>Chi-square</b>	81.829	Prob > chi2	0.000

Note: \*\* represents  $p < .05$

### Appendix 4. Tests of endogeneity

Ho: variables are exogenous

Durbin (score)  $\chi^2(1) = 4.74682$  (p = 0.0294)

Wu-Hausman  $F(1,140) = 4.67163$  (p = 0.0324)

### Appendix 5. Weak instrument test summary statistics

Critical Values # of endogenous regressors: 1  
 Ho: Instruments are weak # of excluded instruments: 2

Variable	R-sq.	Adjusted R-sq.	Partial R-sq.	F(2,140)	Prob>F
<b>Infertiliser</b>	0.351	0.328	0.024	3.449	0.065