

Impact of Small-Scale Irrigation on Smallholder Farmers' Income in Ethiopia

Systematic Review and Meta-Analysis

ID	Author	Outcome	Year	Region	Treat Sample	Control Sample	Total Sample	Treat Mean	Control Mean	Mean diff	SE
1	Kinfe	Farm Income	2012	Tigray	65	65	130	12285.92	5878.73	6407.19	1057.29
2	Mihret	Farm Income	2024	SE	141	228	369	15,799.83	10,968.06	4831.77	3069.20
3	Abdulsemed Abanega	Annual Net Income	2020	OR	91	95	186	39,010.04	32,311.13	6,698.91	3,603.91
4	Temesgen Hirko	Annual Income	2018	OR	80	87	167	34,834.22	27,092.88	7,741.33	4157.89
5	Gadisa Muleta	Gross Income	2021	OR	99	121	220	41,274.69	19,113.44	22,161.26	6359.35
6	Kebede	Income	2021	SWE	128	136	264	22845.43	20250	2595.43	969.43
7	Tamrat Tsegaye	Income	2025	OR	164	204	368	49,833.01	30,215.04	19,617.97	3650
8	Mifta Abdi	Farm Income	2021	OR	114	132	246	14,495.68	9,291.83	5203.9	778.20
9	Molla Geses	Farm Income	2025	AM	34	54	88	39,701.42	15,658.57	24,042.85	4279.55
10	Reyad Abdella	Farm Income	2015	OR	90	90	180	13,644.14	6137.69	7506.45	778.20
11	Jibril	Farm Income	2021	OR	120	74	194	2474.71	860.11	1614.59	173.05
12	Elias	Annual Income	2023	HA	98	104	202	39831.45	24426.02	15405.44	3214.11
13	Melese Alemu	Farm Income	2022	AM	100	100	200	72701.49	12533	60168.49	8820.48

14	Zemach	Farm Income	2024	OR	95	113	208	22989.16	16969.88	6019.88	4641.02
15	Endris	Annual Income	2024	AM	92	106	198	60273.27	4954.065	10728.21	3590.07
16	Kindineh Sisay	Farm Income	2024	SWE	200	219	419	15,504.73	7,851.61	7,653.12	1029.78
17	Bacha	Annual Income	2026	OR	89	113	202	26,167	19,918	6249	2055.59
18	Tsegazeab	HH Income	2016	BGZ	117	246	363	27148	24981.17	2166.83	156
19	Leta Legese	Farm Income	2018	SE	93	103	196	31,618.49	12,143.64	19,474.85	2,522.65
20	Moti	Farm Income	2026	Or	90	105	195	23713.09	17304.62	6408.47	1482.62

Authors explain impact in terms of Treated and Controlled mean and Standard deviation

ID	Author	Outcome	Year	Region	Treat Sample	Control Sample	Total Sample	Treat Mean	Treat SD	Control Mean	Control SD
21	Getasew	Gross Income	2023	AM	82	102	184	43890	15054	33376	15813
22	Filmon	Gross Income	2021	SWE	111	39	150	10996	9157.0	5037	4924.45
23	Tahit Sultan	Crop income	2024	OR	176	175	351	34,609.09	27,916.42	19,015.19	2952.47
24	Beyan	Annual Income	2014	OR	100	100	200	87,290	28098	67984	23358
25	Agerie	Total Income	2013	AM	128	112	240	56166.59	6829.15	26102.44	2918.8
26	Abraham	Income	2015	Tigray	100	100	200	18602.16	1501.76	3975.46	400.17