

Supplementary Table S1. Input and output data collected from farmer's field in rice-rice system.

Farm ers	Labour (man hr)	Machine ry (hr)	Diese l (l)	FYM (kg)	Seeds (kg)	Nitroge n (kg)	Phosphor us (kg)	Potassiu m (kg)	Kharif Grain yield (kg)	Kharif straw yield (kg)	Rabi Grain yield (kg)	Rabi straw yield (kg)	Total Grain yield (kg)	Total straw yield (kg)
1	720	41	99.2	5000	111	177	78	126	3300.0	4455	3960	5346	7260	9801
2	672	40.4	97.3	5200	110	192	87	113	2850.0	3848	3420	4617	6270	8465
3	736	40	96.0	5100	110	168	72	105	3789.0	5115	4546.8	6138	8336	11253
4	800	39	92.8	4925	116	130	48	119	4200.0	5670	5040	6804	9240	12474
5	880	37.4	87.7	4975	120	156	65	117	5450.0	7358	6540	8829	11990	16187
6	768	38.8	92.2	4943	125	145	58	114	5000.0	6750	6000	8100	11000	14850
7	736	37.6	88.3	5700	117	153	63	112	5240.0	7074	6288	8489	11528	15563
8	752	39.2	93.4	4878	110	156	65	116	4250.0	5738	5100	6885	9350	12623
9	784	38.6	91.5	4845	112	149	60	113	3895.0	5258	4674	6310	8569	11568
10	816	38.2	90.2	4813	115	156	65	105	4750.0	6413	5700	7695	10450	14108
11	800	38.4	90.9	4780	116	168	72	112	3900.0	5265	4680	6318	8580	11583
12	672	41	99.2	4748	117	170	73	122	4000.0	5400	4800	6480	8800	11880
13	624	41.4	100.5	3800	118	176	77	116	4200.0	5670	5040	6804	9240	12474
14	560	42.8	105.0	4683	118	189	85	110	4700.0	6345	5640	7614	10340	13959
15	608	41.6	101.1	4650	119	198	91	93	3800.0	5130	4560	6156	8360	11286
16	624	41.4	100.5	4618	120	227	109	108	4300.0	5805	5160	6966	9460	12771
17	528	43	105.6	4585	121	198	91	80	3980.0	5373	4776	6448	8756	11821
18	576	42.6	104.3	4553	122	205	95	107	4500.0	6075	5400	7290	9900	13365
19	592	42.8	105.0	4520	123	218	103	112	4570.0	6170	5484	7403	10054	13573
20	512	43.6	107.5	4488	124	189	85	106	4250.0	5738	5100	6885	9350	12623
21	480	44	108.8	6500	124	176	77	95	4000.0	5400	4800	6480	8800	11880
22	560	42.2	103.0	4423	125	182	81	104	4100.0	5535	4920	6642	9020	12177
23	592	43.4	106.9	4800	126	186	83	101	4200.0	5670	5040	6804	9240	12474
24	624	43.8	108.2	4358	127	198	91	108	4400.0	5940	5280	7128	9680	13068
25	672	41	99.2	4325	128	205	95	102	3950.0	5333	4740	6399	8690	11732
26	720	38	89.6	4293	129	154	63	112	3800.0	5130	4560	6156	8360	11286
27	768	39	92.8	5900	129	157	65	120	4000.0	5400	4800	6480	8800	11880
28	672	41	99.2	4228	130	176	77	100	4200.0	5670	5040	6804	9240	12474
29	688	41.2	99.8	5780	131	189	85	112	3890.0	5252	4668	6302	8558	11553
30	704	40.4	97.3	4163	132	186	83	99	4800.0	6480	5760	7776	10560	14256

Supplementary Table S2. Input and output data collected from farmer's field in rice-cowpea system.

Farmers	Labor (man hr)	Machinery (hr)	Diesel (l)	FYM (kg)	Rice seeds (kg)	Cowpea Seeds (kg)	N (kg)	P (kg)	K (kg)	Rice Grain yield (kg)	Rice straw yield (kg)	Cowpea yield (kg)	Cowpea residue yield (kg)
1	72.9	29.6	45.656028	6120	59	17	90	64	80	3795	5123	990	1584
2	68.04	28.26	44.881848	6365	58	17	95	72	71	3278	4425	855	1368
3	74.52	27.46	44.365728	6242	58	17	87	59	66	4357	5882	1136.7	1819
4	81	25.46	43.075428	6028	61	17	76	40	75	4830	6521	1260	2016
5	89.1	23.46	41.098464	6089	63	18	84	54	74	6268	8461	1635	2616
6	77.76	25.06	42.817368	6050	66	19	80	48	72	5750	7763	1500	2400
7	74.52	26.66	41.560728	6977	61	18	83	52	71	6026	8135	1572	2515
8	76.14	25.86	43.333488	5970	58	17	84	53	73	4888	6598	1275	2040
9	79.38	24.66	42.559308	5930	59	17	82	50	71	4479	6047	1168.5	1870
10	82.62	23.86	42.043188	5891	61	17	84	53	66	5463	7374	1425	2280
11	81	24.26	42.301248	5851	61	18	87	59	70	4485	6055	1170	1872
12	68.04	29.46	45.656028	5811	61	18	88	60	77	4600	6210	1200	1920
13	63.18	30.26	46.172148	4651	62	18	90	64	73	4830	6521	1260	2016
14	56.7	31.46	48.2176464	5731	62	18	94	70	69	5405	7297	1410	2256
15	61.56	30.66	46.430208	5692	63	18	97	75	59	4370	5900	1140	1824
16	63.18	30.26	46.172148	5652	63	18	106	90	68	4945	6676	1290	2064
17	53.46	33.94	48.236628	5612	63	18	97	75	50	4577	6179	1194	1910
18	58.32	33.14	47.720508	5572	64	18	99	79	68	5175	6986	1350	2160
19	59.94	33.54	47.978568	5532	64	18	103	85	71	5256	7095	1371	2194
20	51.84	35.14	49.010808	5493	65	18	94	70	67	4888	6598	1275	2040
21	48.6	35.94	49.526928	7956	65	19	90	64	60	4600	6210	1200	1920
22	56.7	36.34	47.496108	5413	66	19	92	67	66	4715	6365	1230	1968
23	59.94	34.74	48.752748	5875	66	19	93	69	64	4830	6521	1260	2016
24	63.18	35.18	49.268868	5334	66	19	97	75	68	5060	6831	1320	2112
25	68.04	30.78	45.656028	5294	67	19	99	79	65	4543	6132	1185	1896
26	72.9	28.78	42.076848	5254	67	19	83	52	71	4370	5900	1140	1824
27	77.76	26.78	43.075428	7222	68	19	84	54	76	4600	6210	1200	1920
28	68.04	30.78	45.656028	5174	68	19	90	64	63	4830	6521	1260	2016
29	69.66	31.18	45.914088	7075	69	19	94	70	71	4474	6039	1167	1867
30	71.28	29.58	44.881848	5095	69	19	93	69	63	5520	7452	1440	2304