TABLE 1

DISTRIBUTION OF HOUSEHOLDS BY TENURE STATUS

Village	Years in Sample	Pure Owners	Pure Sharecroppers	Pure Tenants*	Mixed Owner/ Sharecropper	Mixed Owner/ Tenant	Mixed Owner/ Sharecropper/ Tenant	Total
A. Aurapalle	1975–82	368	1	13	4	20	0	406
B. Dokur†	1975–79	181	4	0	31	2	2	220
C. Shirapur	1975–82	302	46	0	87	2	0	437
D. Kalman†	1975–79	203	7	0	84	2	0	296
E. Kanzara	1975–82	258	8	3	27	14	10	320
F. Kinkheda†	1975–79	159	2	0	25	0	1	187
G. Boriya‡	1980–82	105	8	8	46	16	3	186
H. Rampura‡	1980–82	165	7	1	25	11	7	216
All villages		1,741	83	25	329	67	23	2,268
		(76.8)§	(3.7)	(1.1)	(14.5)	(3.0)	(1.0)	

NOTE.—Unit of observation is a household in a given season in a given year. Thus the same household could provide multiple observations.

* "Tenant" refers to fixed-rent tenants.

† Data were not collected in Dokur, Kalman, and Kinkheda after 1979.

‡ Data collection in Boriya and Rampura started in 1980.

§ Percentages are in parentheses.

TABLE 2

CHARACTERISTICS BY TENURE STATUS

	OWNED			SHARECROPPED			FIXED-RENT		
VILLAGE	Number of Plots	Average Plot Area (Acre)	Average Plot Value*	Number of Plots	Average Plot Area	Average Plot Value*	Number of Plots	Average Plot Area	Average Plot Value*
A	1,249 (96.4)†	1.91	21.20	8 (.5)	1.53	13.75	38 (3.1)	2.03	14.00
B	532 (84.1)	1.55	42.15	66 (14.9)	2.22	40.23	5 (1.0)	1.90	40.00
C	1,516 (64.5)	1.57	29.68	526 (35.5)	2.49	24.86	3 (.0)	.20	21.33
D	1,472 (77.6)	1.64	17.55	351 (22.1)	1.96	13.43	2 (.3)	4.00	10.00
E	1,133 (83.9)	2.57	22.56	114 (12.3)	3.73	18.94	37 (3.8)	3.57	11.70
F	568 (92.2)	3.51	15.05	57 (7.7)	2.93	10.60	1 (.1)	2.00	10.00
G	425 (67.1)	.71	39.30	138 (25.5)	.83	39.28	46 (7.4)	.72	35.20
H	916 (80.7)	1.04	62.79	160 (16.1)	1.19	60.70	26 (3.1)	1.42	56.15
All	7,811 (80.9)	1.81	29.20	1,420 (17.5)	2.15	27.08	158 (1.6)	1.77	27.45

NOTE.—A given plot may contribute multiple observations if it is cultivated in different seasons or years. The total number of plots in the pooled cross-section, time-series sample is 9,389.

* The average plot value is measured in 100 rupees per acre.

† The numbers in parentheses are the percentage of the total area in a given row that is cultivated under the given tenure system.

TABLE 3

DIFFERENCES ON OWNED AND SHARECROPPED LAND OF OWNER-CUM-SHARECROPPERS (N = 352): ESTIMATION OF EQUATION (7)

Variable	Family Male Labor	Family Female Labor	Hired Male Labor	Hired Female Labor	Bullock Pair Labor	Seed	Fertilizer	Other Inputs	Total Output
A	46.6	−2.3	−4.4	−6.6	3.2	51.1	13.2	−39.5	516.0
	(35.6)	(30.0)	(25.3)	(56.8)	(12.1)	(29.3)	(29.7)	(86.2)	(226.2)
B**	20.3	1.2	28.2	15.3	14.2	−.9	−22.5	−13.5	−135.5
	(12.5)	(10.6)	(8.9)	(20.0)	(4.3)	(10.3)	(10.5)	(30.4)	(79.8)
C**	25.7	40.9	2.3	29.0	6.0	6.6	−9.1	12.8	138.9
	(8.5)	(7.2)	(6.0)	(13.6)	(2.9)	(7.0)	(7.1)	(20.6)	(54.0)
D*	10.0	10.7	2.1	16.8	7.1	9.8	−3.3	−4.4	29.6
	(7.7)	(6.5)	(5.5)	(12.4)	(2.6)	(6.4)	(6.5)	(18.7)	(49.2)
E**	10.1	17.7	14.9	25.9	10.8	3.7	18.1	17.3	264.5
	(11.5)	(9.7)	(8.2)	(18.4)	(3.9)	(9.5)	(9.6)	(27.9)	(73.2)
F	17.0	8.1	3.6	23.2	9.9	4.9	−2.2	18.4	143.8
	(13.7)	(11.5)	(9.7)	(21.8)	(4.6)	(11.2)	(11.4)	(33.1)	(86.9)
G**	22.6	43.7	−3.4	−9.5	4.9	−4.5	−10.1	60.4	110.8
	(9.9)	(8.3)	(7.0)	(15.7)	(3.4)	(8.1)	(8.2)	(23.9)	(62.7)
H**	22.5	−.04	−4.3	−23.5	−1.8	28.0	15.1	141.1	83.1
	(12.6)	(10.7)	(9.0)	(20.2)	(4.3)	(10.4)	(10.6)	(30.6)	(80.4)
Irrigated area**[a]	74.7	60.0	43.4	188.0	11.5	49.0	53.0	241.1	851.4
	(13.6)	(11.5)	(9.7)	(21.8)	(4.7)	(11.2)	(11.4)	(33.0)	(86.7)
Plot value**	.81	−.02	−.50	.27	.27	.19	1.2	.56	5.9
	(.33)	(.27)	(.23)	(.52)	(.11)	(.27)	(.27)	(.80)	(2.1)

Shallow soil**[b]	−37.5	−22.0	−18.0	−17.9	−7.3	28.0	−15.1	−22.2	−79.1
	(9.6)	(8.1)	(6.8)	(15.3)	(3.3)	(7.9)	(8.0)	(23.3)	(61.1)
Poor soil*	−13.9	−52.4	−16.5	−46.6	3.4	8.4	6.0	−10.0	−75.6
	(16.1)	(13.6)	(11.5)	(25.7)	(5.5)	(13.3)	(13.5)	(39.0)	(102.4)
Other soil**	−33.2	−29.2	−61.8	−76.4	−19.5	−13.1	−63.5	50.5	−350.9
	(26.5)	(22.4)	(18.9)	(42.4)	(9.0)	(21.9)	(22.2)	(64.3)	(168.8)
F-value	12.4	11.9	4.0	10.6	7.7	4.7	7.3	10.3	18.9
R^2	.32	.31	.13	.29	.23	.15	.22	.28	.42
Mean difference[c]	29.9	25.3	7.1	29.7	9.5	10.5	6.5	50.0	192.2
$\frac{E(\Delta x_i)}{E(x_i^o)}$[d]	33.2	55.3	19.1	32.1	22.7	26.5	20.6	41.0	32.6
ξ_1[e]	22.7	21.5	55.7	57.4	11.0	42.5	73.5	43.8	40.2
ξ_2[f]	8.6	−.3	−22.6	2.9	9.2	5.8	59.4	3.5	9.7
ξ_3[g]	6.2	−5.7	1.9	−5.5	6.8	−16.0	17.9	2.7	.0
ξ_4[h]	62.5	84.5	64.9	45.1	73.0	67.7	−50.7	50.0	50.1
$\xi_4 \times \frac{E(\Delta x_i)}{E(x_i^o)}$	20.8	46.7	12.4	14.5	16.6	17.9	−10.4	20.5	16.3

NOTE.—Average difference across all households in input intensity per acre on owned minus sharecropped land. Human and bullock labor are measured in hours per acre; plot value is measured in 100 rupees per acre; other variables are measured in rupees per acre. Standard errors are in parentheses.

* Jointly significantly different from zero at the 5 percent significance level.

** Jointly significantly different from zero at the 1 percent significance level.

[a] The omitted category is "unirrigated area."

[b] The omitted category is "medium and deep soil."

[c] The mean difference of the dependent variable, $E(\Delta x_i)$.

[d] The percentage difference of input per acre on owned minus sharecropped land relative to the value of input per acre on owned land.

[e] The percentage of the mean difference that can be accounted for by irrigation (see eq. [9]); $\bar{D}_1^o - \bar{D}_1^s = .0908$.

[f] The percentage of the mean difference that can be accounted for by plot value; $\bar{D}_2^o - \bar{D}_2^s = 3.1844$.

[g] Same as n. e., but for soil; $\bar{D}_m^o - \bar{D}_m^s = -.0745$ for shallow soil, .0562 for poor soil, and .0046 for "other soil."

[h] Same as nn. e and f, but for the pure effect of tenancy (see eq. [9]).

TABLE 4

REGRESSION AND DECOMPOSITION OF INPUT AND OUTPUT DIFFERENCES ON OWNED MINUS SHARECROPPED LAND FOR MIXED SHARECROPPERS: SOLE SORGHUM PLOTS (N = 76)

Variable	Family Male Labor	Family Female Labor	Hired Male Labor	Hired Female Labor	Bullock Pair Labor	Seed	Fertilizer	Other Inputs	Total Output
Intercept*	12.4	3.9	4.0	.1	4.5	−.3	.8	2.5	74.8
	(3.1)	(1.7)	(2.0)	(2.2)	(1.4)	(.3)	(1.1)	(2.6)	(25.1)
Irrigated area*	35.8	17.1	10.5	28.0	18.1	3.8	15.8	71.8	29.2
	(11.2)	(6.1)	(7.0)	(8.0)	(4.9)	(1.2)	(3.8)	(9.2)	(89.9)
Plot value	.61	−.12	−.14	.17	.05	.09	−.15	.38	−.35
	(.41)	(.22)	(.26)	(.29)	(.18)	(.05)	(.14)	(.34)	(3.3)
Shallow soil	−6.8	−.6	.4	−6.2	−2.6	.8	−1.4	.8	−31.9
	(6.3)	(3.4)	(4.0)	(4.5)	(2.7)	(.7)	(2.2)	(5.2)	(50.5)
Poor soil	6.4	5.3	4.6	.7	6.4	1.4	−1.0	−.6	−14.3
	(8.9)	(4.8)	(5.6)	(6.3)	(3.9)	(1.0)	(3.0)	(7.3)	(71.1)
F-value	4.3	2.3	.8	4.0	4.6	4.5	4.3	18.1	1.8
R^2	.19	.11	.04	.19	.20	.20	.20	.51	.09
Mean difference	14.9	5.2	4.9	1.4	6.1	.0	1.1	4.5	80.8
$\frac{E(\Delta x_i)}{E(x_i^o)}$ [a]	38.2	43.8	20.4	6.4	22.7	...	100.0	62.6	29.8
ξ_1 [b]	6.9	9.5	6.2	57.5	8.5	...	41.5	46.2	8.2
ξ_2 [c]	.8	−.5	−.6	2.4	.2	...	2.6	1.7	−.1
ξ_3 [d]	8.9	16.2	13.7	30.9	18.1	...	7.1	−3.0	−.7
ξ_4 [e]	83.3	74.8	80.7	9.2	73.3	...	68.2	55.1	92.6
$\xi_4 \times \frac{E(\Delta x_i)}{E(x_i)}$	31.8	32.8	16.5	.5	16.6	...	68.2	34.5	27.6

NOTE.—The average difference across all households in input intensity per acre on owned minus sharecropped land. Human and bullock labor are measured in hours per acre; plot value is measured in 100 rupees per acre; other variables are measured in rupees per acre. Standard errors are in parentheses.

* Jointly significantly different from zero at the 1 percent significance level.

[a] The percentage difference of input per acre on owned minus sharecropped land relative to the value of input per acre on owned land.

[b] The percentage of the mean difference that can be accounted for by irrigation (see eq. [9]); $\bar{D}_1^o - \bar{D}_1^s = .02885$.

[c] Same as n. b., but for plot value; $\bar{D}_2^o - \bar{D}_2^s = .1945$.

[d] Same as n. b., but for soil; $\bar{D}_m^o - \bar{D}_m^s = -.0513$ for shallow soil and .152 for poor soil.

[e] Same as n. b., but for the pure effect of tenancy (see eq. [9]).

TABLE 5

REGRESSION AND DECOMPOSITION OF INPUT AND OUTPUT DIFFERENCES ON OWNED MINUS RENTED LAND FOR MIXED AND FIXED-RENT TENANTS ($N = 90$)

Variable	Family Male Labor	Family Female Labor	Hired Male Labor	Hired Female Labor	Bullock Pair Labor	Seed	Fertilizer	Other Inputs	Total Output
Intercept	1.5	4.5	−1.8	−1.7	−1.1	10.7	−5.9	18.3	29.9
	(6.9)	(5.7)	(5.1)	(4.6)	(3.2)	(3.6)	(6.0)	(17.6)	(51.5)
Irrigated area*	115.1	11.0	53.8	54.6	21.3	20.2	59.2	273.6	811.7
	(25.4)	(20.7)	(18.8)	(16.7)	(11.7)	(13.11)	(21.9)	(64.4)	(188.2)
Plot value	−.33	−.60	.33	.80	.01	.10	.45	−.29	6.2
	(.65)	(.53)	(.48)	(.43)	(.30)	(.34)	(.56)	(1.6)	(4.8)
Shallow soil	6.1	19.1	−46.8	10.4	−25.4	2.2	−23.2	68.2	29.1
	(24.9)	(20.3)	(18.4)	(16.4)	(11.5)	(12.9)	(21.5)	(63.1)	(184.8)
Poor soil*	18.9	79.3	−85.9	−14.7	−97.0	9.4	18.7	258.5	429.1
	(49.7)	(40.5)	(36.7)	(32.7)	(23.0)	(25.7)	(42.8)	(126.0)	(368.5)
Other soil	−13.8	15.7	−22.4	−5.7	−27.6	−4.2	22.0	179.1	157.4
	(26.6)	(21.6)	(19.6)	(17.4)	(12.3)	(13.7)	(22.9)	(67.2)	(196.7)
F-value	4.5	1.5	5.9	4.6	6.0	.6	4.1	7.7	6.4
R^2	.21	.08	.26	.21	.26	.03	.20	.31	.28
Mean difference	3.0	4.6	−2.8	1.5	−2.5	11.4	−4.6	29.2	64.1
$\frac{E(\Delta x_i)}{E(x_i^o)}$ [a]	4.6	13.1	−6.4	2.7	−6.5	26.1	−15.2	33.3	12.3
ξ_1 [b]	71.0	4.5	−36.2	66.2	−15.8	3.3	−24.3	17.6	23.7
ξ_2 [c]	−24.8	−30.0	−27.4	120.2	−.5	2.0	−22.6	2.3	22.3
ξ_3 [d]	5.0	28.8	99.3	24.3	73.2	.7	6.6	21.9	7.4
ξ_4 [e]	48.8	96.7	64.3	−110.7	43.1	94.0	130.3	62.8	46.6
$\xi_4 \times \frac{E(\Delta x_i)}{E(x_i)}$	2.2	12.7	−4.1	−3.0	−2.8	24.5	−19.8	20.9	5.7

NOTE.—The average difference across all households in input intensity per acre on owned minus rented land. Human and bullock labor are measured in hours per acre; plot value is measured in 100 rupees per acre; other variables are measured in rupees per acre. Standard errors are in parentheses.

* Jointly significantly different from zero at the 1 percent significance level.

[a] The percentage difference of input per acre on owned minus rented land relative to the value of input per acre on owned land.

[b] The percentage of the mean difference that can be accounted for by irrigation (see eq. [9]); $\bar{D}_1^i - \bar{D}_1^j = .0187$.

[c] Same as n. b., but for plot value; $\bar{D}_2^i - \bar{D}_2^j = 2.3125$.

[d] Same as n. b., but for soil; $\bar{D}_m^o - \bar{D}_m^t = .0476$ for shallow soil, .0027 for poor soil, and .0138 for "other soil."

[e] Same as n. b., but for the pure effect of tenancy (see eq. [9]).