CHAPTER VII

SOME CONSIDERATIONS OF EFFICIENCY

7.1 INTRODUCTION

Having obtained some idea of input response, in the previous chapter, on the basis of simple tables on costs of inputs used and output produced per acre, we devote this chapter to the consideration of some questions of efficiency. That is to say, the first question we ask mainly in this chapter is : How efficiently have the farms coped with the opportunities available in the rural economy?

Secondly, we may ask if the local level economy has been conscious enough in making use of the nationally cheap resources. That is to say, has the basically labour surplus economy been conscious enough to substitute labour for capital? To suit the needs of the present chapter what we do is to refashion the basic data some of which are used for tabulation in the previous chapter.

7.2 IRRIGATION

It is clear from tables 7.1 to 7.7 that the farmers of the area have used whatever irrigation facility is available. We have already mentioned in Chapter V that the main difficulty of irrigation facility is the irregular supply of electricity. Hence the respective figures of irrigated acres may lack in uniformity. But what is more, with more regular and prompt supply of water the figures will convey different meanings and different productivity.

The farmers of the area have now been raising crops like Winter-HYV paddy, mustard and potato mainly on the basis of the supply of irrigation water. Tables 7.2, 7.5 and 7.6 confirm this. We can thus say that left to themselves the farmers have shown remarkable efficiency by making use of irrigation facilities to raise these three important crops. This remark is almost wholly applicable for Pre-Monsoon Til Oilseed.

Table 7.1

Nature and Extent of Irrigation and Per Acre Value : Total Output (1988-89)

Farm size (in Acres)	Gross Area cultivated	Area Irrigated			Area non-irrigated	Value of output (in Rs) Per net cultivable acre
		Private Mini Deep Tube well	Govt. Deep Tubewell	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upto 1	19.47	11.07 (57)	2.16 (11)	13.23 (68)	6.24 (32)	9205
1-2	41.95	22.59 (54)	1.00 (2)	23.59 (56)	18.36 (44)	9334
2-3	41.04	20.76 (51)	1.78 (4)	22.54 (55)	18.50 (45)	9867
3-5	51.68	21.72 (42)	8.89 (17)	30.61 (59)	21.07 (41)	9338
5-10	84.59	45.32 (53)	11.67 (14)	56.99 (67)	27.60 (33)	10123
Above 10	86.09	40.84 (47)	18.92 (22)	59.76 (69)	26.33 (31)	9808
Total	324.82	162.30 (50)	44.42 (14)	206.72 (64)	118.10 (36)	9736

Note : Figures in Parenthesis indicate percentage to the area given to the crop.

Table 7.2

Nature and Extent of Irrigation and Per Acre value : Winter-HYV Paddy (Boro)

(1988-89)

Farm size (in Acres)	Area given to crop	Area Irrigated			Area Non-Irrigated	Value of Output (in Rs)
		Private Mini Deep Tubewell	Govt. Deep Tubewell	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upto 1	10.44	9.28 (89)	1.16 (11)	10.44 (100)	-	5781
1-2	20.83	19.17 (92)	1.66 (08)	20.83 (100)	-	5907
2-3	16.83	15.16 (90)	1.67 (10)	16.83 (100)	-	6216
3-5	22.48	14.82 (66)	7.66 (34)	22.48 (100)	-	6213
5-10	34.33	26.66 (78)	7.67 (22)	34.33 (100)	-	5762
Above 10	31.00	31.00 (100)	-	31.00 (100)	-	6132
Total	135.91	116.09 (85)	19.82 (15)	135.91 (100)	-	6001

Note : Figures in parenthesis indicate percentage to the area given to the crop.

Table 7.3

Nature and Extent of Irrigation and Per Acre Value : Traditional Monsoon Paddy (Aman)

(1988-89)

Farm size (in Acres)	Area given to crop	Area Irrigated			Area Non-Irrigated	Value of Output (in Rs)
		Private Mini Deep Tubewell	Govt. Deep Tubewell	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upto 1	7.43	1.73 (23)	1.00 (13)	2.73 (36)	4.70 (64)	4271
1-2	14.23	2.21 (16)	-	2.21 (16)	12.02 (84)	3703
2-3	13.93	1.16 (8)	1.80 (13)	2.96 (21)	10.97 (79)	4337
3-5	17.17	3.24 (19)	4.66 (27)	7.90 (46)	9.27 (54)	3645
5-10	27.53	7.79 (28)	-	7.79 (28)	19.74 (72)	3954
Above 10	28.00	7.00 (35)	4.00 (14)	11.00 (39)	17.00 (61)	3880
Total	108.29	23.13 (21)	11.46 (11)	34.59 (32)	73.70 (68)	3920

Note : Figures in parenthesis indicate percentage to the area given to the crop

Table 7.4

Nature and Extent of Irrigation and Per Acre Value:
Kharif-HYV Paddy
(1988-89)

Farm size (in Acres)	Area given to crop	Area Irrigated			Area Non-Irrigated	Value of Output (in Rs)
		Private Mini Deep Tubewell	Govt. Deep Tubewell	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upto 1	1.38	-	-	-	1.38 (100)	4274
1-2	6.07	1.16 (19)	-	1.16 (19)	4.91 (81)	5263
2-3	7.35	3.10 (42)	-	3.10 (42)	4.25 (58)	5693
3-5	8.06	1.51 (19)	2.50 (31)	4.01 (50)	4.05 (50)	5074
5-10	14.45	5.33 (37)	1.00 (7)	6.33 (44)	8.12 (56)	5529
Above 10	17.33	8.00 (46)	1.00 (6)	9.00 (52)	8.33 (48)	4446
Total	54.64	19.10 (35)	4.50 (8)	23.6 (43)	31.04 (57)	5079

Note : Figures in parenthesis indicate percentage to the area given to the crop.

Table 7.5

Nature and Extent of Irrigation and Per Acre Value : Potato

(1988-89)

Farm size (in Acres)	Area given to crop	Area Irrigated			Area Non-Irrigated	Value of Output (in Rs)
		Private Mini Deep Tubewell	Govt. Deep Tubewll	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upto 1	-	-	-	-	-	-
1-2	.41	.41 (100)	-	.41 (100)	-	21273
2-3	.87	.60 (69)	.27 (31)	.87 (100)	-	16221
3-5	1.35	.72 (53)	.63 (47)	1.35 (100)	-	20326
5-10	2.14	1.15 (54)	.99 (46)	2.14 (100)	-	19096
Above 10	3.00	2.00 (67)	1.00 (33)	3.00 (100)	-	22083
Total	7.77	4.88 (63)	2.89 (37)	7.77 (100)	-	20256

Note : Figures in parenthesis indicate percentage to the area given to the crop.

Table 7.6

Nature and Extent of Irrigation and Per Acre Value : Mustard

(1988-89)

Farm size (in Acres)	Area given to crop	Area Irrigated			Area Non-Irrigated	Value of Output (in Rs)
		Private Mini Deep Tubewell	Govt. Deep Tubewell	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upto 1	.22	.22 (100)	-	.22 (100)	-	2659
1-2	-	-	-	-	-	-
2-3	.95	.95 (100)	-	.95 (100)	-	2511
3-5	1.27	.61 (48)	.66 (52)	1.27 (100)	-	3173
5-10	2.66	1.33 (50)	1.33 (50)	2.66 (100)	-	3229
Above 10	3.33	1.67 (50)	1.66 (50)	3.33 (100)	-	3465
Total	8.43	4.78 (57)	3.65 (43)	8.43 (100)	-	3218

Note : Figures in parenthesis indicate percentage to the area given to the crop.

Table 7.7

Nature and Extent of Irrigation and Per Acre Value: Pre-Monsoon Til Oil Seed (1988-89)

Farm size (in Acres)	Area given to crop	Area Irrigated			Area Non-Irrigated	Value of Output (in Rs)
		Private Mini Deep Tubewell	Govt. Govt. Tubewell	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Upto 1	-	-	-	-	-	-
1-2	.41	.18 (44)	-	.18 (44)	.23 (56)	2334
2-3	1.11	.66 (59)	.16 (15)	.82 (74)	.29 (26)	2617
3-5	1.35	.52 (39)	.50 (37)	1.02 (76)	.33 (24)	1933
5-10	3.48	.99 (28)	2.33 (67)	3.32 (95)	.16 (5)	1779
Above 10	3.43	2.44 (71)	.99 (29)	3.43 (100)	-	3012
Total	9.78	4.74 (49)	3.98 (41)	8.77 (90)	1.01 (10)	2351

Note : Figures in parenthesis indicate percentage to the area given to the crop.

7.3 YIELD RATE

The farm yield rate structure assumes added importance in view of the fact that it operates as a vital factor for judging the efficiency of farm. The income concept has been a determining factor for computing the extent of farm yield rate. With the application of different concepts of income, the resultant yield rates tend to vary.

A picture of income and yield rates of farming activities are available from the tables 7.8 to 7.14. In calculating these, cost of production have been defined in the following way:

(a) Cost I : This cost includes all actual expenses - imputed value of home labour

(b) Cost II : Cost I + imputed value of home labour.

(c) Cost III: Cost II + an estimated value of interest on the whole of working capital.

Different concepts of income are measured as the difference between farm receipts and respective cost concept. Similarly yield rates are measured as the ratio of total value of farm receipts to the respective cost concept. Following the various definitions of cost it is evident that yield rate I and yield rate III will be maximum and minimum respectively.

For the tabulation of Cost III, 16% rate of interest (market lending rate) has been added with the Cost II. Adding all the imputed

values of different components of Cost, column 11 of Table 7.8 depicts that on the whole farmers managed to get more than two times of the cost they incurred. The yield rate even approaches three times to the cost of production if we exclude the imputed values of cost. Therefore, it can be said safely that the farmers of the rural economy are producing crops efficiently with the given state of facilities. Tables 7.9, 7.10 and 7.11 show little variation in yield rates of different paddy crops. However, farm receipts and costs vary sharply for different paddy crops. Possibility remains to enhance the yield rates of Winter-HYV paddy and Kharif-HYV paddy. There is no doubt that with the existing facilities farmers are producing these crops efficiently but the full potentiality has not been taped. Thus farmers can prove their full efficiency if they are given adequate facilities. The yield rate exceeds even more than three for potato but the yield rates for other non-paddy crops are not so impressive as is evident from tables 7.13 and 7.14.

Farm income co-efficient is shown in tables 7.15 to 7.21 for the consideration of efficiency. This co-efficient is calculated as the ratio of farm income II to total value of output per acre. Thus, it show the share of income in the total value of output. The table 7.15 shows that 59% of per acre value of total ouput of farms makes the farms income. This value is decisively impressive.

Table 7.8

Yield Rate : Total Output
(Per Net Acre)

(1988-89)

Farm size (in Acres)	in Rupees							Yield Rate I	Yield Rate II	Yield Rate III
	Farm Receipts	Cost I	Cost II	Cost III	Income I	Income II	Income III			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Upto 1	9205	2212	3992	4631	6993	5213	4574	4.16	2.30	1.98
1-2	9334	2809	3819	4430	6525	5515	4904	3.32	2.44	2.10
2-3	9867	3315	4098	4754	6552	5769	5113	2.97	2.40	2.07
3-5	9338	2997	3819	4430	6341	5519	4908	3.11	2.44	2.10
5-10	10123	4374	4516	5239	5749	5607	4884	2.31	2.24	1.93
Above 10	9808	3897	4023	4667	5911	5785	5142	2.51	2.43	2.10
Total	9736	3526	4074	4726	6210	5660	5010	2.76	2.38	2.06

Table 7.9

Yield Rate : Winter-HYV Paddy (Boro)
(Per Net Cultivated Acre)

(1988-89)

Farm size (in Acres)	in Rupees							Yield Rate I	Yield Rate II	Yield Rate III
	Farm Receipts	Cost I	Cost II	Cost III	Income I	Income II	Income III			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Upto 1	5781	1542	2475	2607	4239	3306	3174	3.74	2.33	2.21
1-2	5907	1895	2392	2519	4012	3515	3388	3.11	2.46	2.34
2-3	6216	2279	2655	2797	3937	3561	3419	2.72	2.34	2.22
3-5	6213	2167	2566	2703	4046	3647	3510	2.86	2.42	2.29
5-10	5762	2663	2711	2856	3099	3051	2906	2.16	2.12	1.85
Above 10	6132	2579	2643	2784	3553	3489	3348	2.37	2.32	2.32
Total	6001	2309	2596	2734	3692	3405	3267	2.59	2.31	2.19

Table 7.10

Yield Rate : Traditional Monsoon Paddy (Aman)
(Per Net Cultivated Acre)

1988-89

Farm size (in Acres)	in Rupees							Yield Rate I	Yield Rate II	Yield Rate III
	Farm Receipts	Cost I	Cost II	Cost III	Income I	Income II	Income III			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Upto 1	4271	834	1849	1997	3437	2422	2274	5.12	2.30	2.13
1-2	3703	1099	1543	1666	2604	2160	2037	3.36	2.39	2.22
2-3	4337	1372	1815	1960	2965	2522	2377	3.16	2.38	2.21
3-5	3645	1170	1590	1717	2475	2055	1928	3.11	2.29	2.12
5-10	3954	1652	1729	1867	2302	2219	2087	2.39	2.28	2.11
Above 10	3880	1602	1661	1794	2278	2237	2086	2.42	2.33	2.16
Total	3920	1396	1683	1818	2524	2237	2102	2.80	2.32	2.15

Table 7.11

Yield Rate : Kharif - HYV Paddy
(Per Net Cultivated Acre)

1988-89

Farm size (in Acres)	in Rupees							Yield Rate I	Yield Rate II	Yield Rate III
	Farm Receipts	Cost I	Cost II	Cost III	Income I	Income II	Income III			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Upto 1	4274	937	1947	2051	3337	2327	2223	4.56	2.19	2.08
1-2	5263	1302	2193	2310	3961	3070	2953	4.04	2.27	2.28
2-3	5693	1536	1964	2069	4157	3729	3624	3.70	2.89	2.75
3-5	5074	1389	2089	2200	3685	2985	2874	2.42	2.30	2.31
5-10	5529	2179	2253	2373	3350	3276	3156	2.53	2.45	2.33
Above 10	4446	1881	1936	2039	2565	2510	2407	2.36	2.29	2.18
Total	5079	1755	2077	2188	3324	3002	2891	2.89	2.44	2.32

Table 7.12

Yield Rate : Potato
(Per Net Cultivated Acre)

1988-89

Farm size (in Acres)	in Rupees							Yield Rate I	Yield Rate II	Yield Rate III
	Farm Receipts	Cost I	Cost II	Cost III	Income I	Income II	Income III			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Upto 1	-	-	-	-	-	-	-	-	-	-
1-2	21273	5473	7794	8209	15800	13479	13064	3.88	2.72	2.59
2-3	16221	5807	7058	7434	10414	9163	8787	2.79	2.29	2.18
3-5	20326	4976	5958	6276	15350	14368	14050	4.08	3.41	3.23
5-10	19096	6533	6779	7141	12563	12317	11955	2.92	2.81	2.67
Above 10	22083	6221	6425	6768	15862	15658	15315	3.54	3.43	3.26
Total	20256	5992	6572	6922	19268	13684	13334	3.38	3.08	2.92

Table 7.13

Yield Rate : Mustard
(Per Net Cultivated Acre)

1988-89

Farm size (in Acres)	in Rupees							Yield Rate I	Yield Rate II	Yield Rate III
	Farm Receipts	Cost I	Cost II	Cost III	Income I	Income II	Income III			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Upto 1	2659	759	2304	2427	1900	355	232	3.50	1.15	1.09
1-2	-	-	-	-	-	-	-	-	-	-
2-3	2511	1306	1879	1979	1205	632	532	1.92	1.33	1.26
3-5	3173	1155	1436	1513	2018	1737	1660	2.74	2.20	2.09
5-10	3229	1528	1643	1731	1701	1586	1498	2.11	1.96	1.86
Above 10	3465	1332	1424	1500	2133	2041	1965	2.60	2.43	2.31
Total	3218	1351	1571	1655	1867	1657	1574	2.38	2.06	1.95

Table 7.14

Yield Rate : Pre-Monsoon Til Oil Seed
(Per Net Cultivated Acre)

1988-89

Farm size (in Acres)	in Rupees							Yield Rate I	Yield Rate II	Yield Rate III
	Farm Receipts	Cost I	Cost II	Cost III	Income I	Income II	Income III			
Upto 1	-	-	-	-	-	-	-	-	-	-
1-2	2334	590	1751	1844	1744	583	490	3.95	1.33	1.26
2-3	2617	726	1415	1490	1891	1202	1127	3.60	1.85	1.75
3-5	1933	644	1248	1315	1289	685	618	3.00	1.55	1.46
5-10	1779	907	1044	1100	872	735	679	1.96	1.70	1.61
Above 10	3012	1133	1262	1329	1879	1750	1683	2.65	2.39	2.26
Total	2351	895	1199	1263	1456	1152	1088	2.62	1.96	1.86

Table 7.15
Farm Income Co-efficient:
Total Output
(1988-89)

Farm size (in Acres)	Farm Income Co-efficient
Upto 1	.57
1-2	.59
2-3	.59
3-5	.59
5-10	.56
Above 10	.60
Total	.59

Table 7.16
Farm Income Co-efficient:
Winter-HYV Paddy (Boro)
(1988-89)

Farm size (in Acres)	Farm Income Co-efficient
Upto 1	.58
1-2	.60
2-3	.58
3-5	.59
5-10	.54
Above 10	.58
Total	.57

Table 7.17
Farm Income Co-efficient
Traditional Monsoon Paddy
(Aman)
(1988-89)

Farm size (in Acres)	Farm Income Co-efficient
Upto 1	.57
1-2	.59
2-3	.58
3-5	.56
5-10	.57
Above 10	.57
Total	.57

Table 7.18
Farm Income Co-efficient:
Kharif-HYV Paddy
(1988-89)

Farm Size (in Acres)	Farm Income Co-efficient
Upto 1	.55
1-2	.59
2-3	.56
3-5	.59
5-10	.59
Above 10	.57
Total	.59

Note : Farm Income Co-efficient
= Farm Income II Output Ratio

Table 7.19
Farm Income Co-efficient:
Potato
(1988-89)

Farm Size (in Acres)	Farm Income Co-efficient
Upto 1	-
1-2	.64
2-3	.57
3-5	.71
5-10	.65
Above 10	.72
Total	.68

Table 7.20
Farm Income Co-efficient:
Mustard
(1988-89)

Farm Size (in Acres)	Farm Income Co-efficient
Upto 1	.14
1-2	-
2-3	.26
3-5	.55
5-10	.50
Above 10	.59
Total	.52

Table 7.21
Farm Income Co-efficient:
Pre-Monsoon Til Oil Seed
(1988-89)

Farm Size (in Acres)	Farm Income Co-efficient
Upto 1	-
1-2	.26
2-3	.47
3-5	.36
5-10	.42
Above 10	.59
Total	.50

Note : Farm Income Co-efficient
= Farm Income II Cutput Ratio

7.4 LABOUR COEFFICIENT

Although land is the basic factor in agricultural production, it is through the active participation of human labour that land can produce the crops. Labour used on the farm is mainly drawn from the working members of the family while in peak times, some amount of extra labour is hired from outside the farm. Two labour co-efficients have been tabulated in tables 7.22 to 7.28. Labour co-efficient I shows the share of value of total mandays in total cost per acre while the labour co-efficient II shows the value of total mandays in total value of output per acre. Evidently the definitions of labour co-efficient suggest that the value of labour co-efficient I will be higher than the labour co-efficient II. If one goes through the relevant tables, one can find that except potato, farmers have used abundant labour for various crops cultivation. We have seen in the earlier chapters that our studied region has undergone through the process of mechanisation howsoever modest it may be. However this process has not replaced machine for labour. With this moderate mechanisation the region is maintaining more or less full employment. Except potato, for all other crops share of labour cost in total cost of production is always more than 50%. In this region potato is grown with using lesser amount of labour. But in other parts of the State of West Bengal potato is highly labour intensive cultivation. In fact, their per acre output is also higher. By putting more labour in potato cultivation, this region can also produce potato more efficiently. Thus, it can be said that this local economy is efficiently balancing the need of the machine for cultivation and the nationally cheaper resource labour.

Table 7.22

Labour Co-efficient : Total Output
(1988-89)

Farm Size (in Acres)	Labour Co-efficient I	Labour Co-efficient II	Value of Total Mandays (in Rs)
(1)	(2)	(3)	(4)
Upto 1	.63	.27	2526
1-2	.59	.24	2253
2-3	.60	.25	2472
3-5	.61	.25	2348
5-10	.59	.26	2673
Above 10	.57	.23	2326
Total	.59	.25	2419

Table 7.23

Labour Co-efficient : Winter-HYV Paddy (Boro)
(1988-89)

Farm size (in Acres)	Labour Co-efficient I	Labour Co-efficient II	Value of Total Mandays (in Rs)
(1)	(2)	(3)	(4)
Upto 1	.56	.24	1397
1-2	.51	.21	1243
2-3	.53	.22	1415
3-5	.54	.22	1392
5-10	.52	.24	1416
Above 10	.54	.23	1451
Total	.54	.23	1392

Note : Labour Co-efficient I
= Value of Mandays Total Cost Ratio
Labour Co-efficient II
= Value of Mandays Total Value Ratio

Table 7.24

Labour Co-efficient : Traditional Monsoon Paddy (Aman)
(1988-89)

Farm Size (in Acres)	Labour Co-efficient I	Labour Co-efficient II	Value of Total Mandays (in Rs)
(1)	(2)	(3)	(4)
Upto 1	.72	.31	1328
1-2	.70	.29	1089
2-3	.76	.32	1397
3-5	.75	.32	1187
5-10	.73	.32	1275
Above 10	.70	.30	1168
Total	.73	.31	1227

Table 7.25

Labour Co-efficient : Kharif HYV Paddy
(1988-89)

Farm Size (in Acres)	Labour Co-efficient I	Labour Co-efficient II	Value of Total Mandays (in Rs)
(1)	(2)	(3)	(4)
Upto 1	.81	.37	1589
1-2	.71	.29	1569
2-3	.64	.22	1270
3-5	.75	.31	1575
5-10	.66	.27	1496
Above 10	.64	.28	1257
Total	.67	.28	1412

Note : Labour Co-efficient I
= Value of Mandays Total Cost Ratio

Labour Co-efficient II
= Value of Mandays Total Value Ratio

Table 7.26

Labour Co-efficient : Potato

(1988-89)

Farm Size (in Acres)	Labour Co-efficient I	Labour Co-efficient II	Value of Total Mandays (in Rs)
(1)	(2)	(3)	(4)
Upto 1	-	-	-
1-2	.31	.11	2487
2-3	.37	.16	2619
3-5	.34	.10	2070
5-10	.34	.12	2319
Above 10	.26	.07	1694
Total	.31	.10	2077

Table 7.27

Labour Co-efficient : Mustard

(1988-89)

Farm Size (in Acres)	Labour Co-efficient I	Labour Co-efficient II	Value of Total Mandays (in Rs)
Upto 1	.73	.63	1700
1-2	-	-	-
2-3	.55	.41	1038
3-5	.53	.24	763
5-10	.60	.30	991
Above 10	.54	.22	771
Total	.56	.27	894

Note : Labour Co-efficient I
= Value of Mandays Total Cost Ratio

Labour Co-efficient II
= Value of Mandays Total Value Ratio

Table 7.28

Labour Co-efficient : Pre-Monsoon Til Oil Seed (1988-89)

Farm Size (in Acres)	Labour Co-efficient I	Labour Co-efficient II	Value of Total Mandays (in Rs)
(1)	(2)	(3)	(4)
Upto 1	-	-	-
1-2	.66	.49	1161
2-3	.68	.36	965
3-5	.78	.50	982
5-10	.71	.41	743
Above 10	.67	.28	853
Total	.69	.35	837

Note : Labour Co-efficient I
= Value of Mandays Total Cost Ratio

Labour Co-efficient II
= Value of Mandays Total Value Ratio

On the whole, even though a great deal of inputs, which are produced outside the local economy, are used in the locality, the labour co-efficient figures are indicative of the fact that the high output performance of the locality, as brought to light in a previous chapter, was realized through the use of a lot of additional labour. The portent, obviously, is that a few times more employment is possible through scientific restructuring of agriculture, not to speak of the restructuring of the whole of local level rural economy.

The labour co-efficient is an indicator of the efficiency of the general planners, whoever they may be, of the local level rural economy. If the planners could have used all the tools available in the tool-box of development planners, the labour-coefficient might have been still higher.

7.5 CAPITAL COEFFICIENT AND CAPITAL LABOUR RATIO

The respective tables confirm that capital co-efficient and capital labour ratio are low. Thus so far machines have not substituted much labour. In other words, these co-efficients support the high labour co-efficients of farm costs.

Table 7.29

Capital Co-efficient and Capital Labour Ratio: Total Output (1988-89)

Farm Size (in Acres)	Capital Co-efficient	Fixed Current Co-efficient I	Fixed Current Co-efficient II	Capital Labour Ratio
(1)	(2)	(3)	(4)	(5)
Upto 1	.03	.37	.16	.13
1-2	.03	.41	.17	.15
2-3	.03	.40	.16	.13
3-5	.02	.39	.16	.10
5-10	.03	.41	.18	.13
Above 10	.03	.43	.17	.16
Total	.03	.41	.16	.14

Table 7.30

Capital Co-efficient and Capital Labour Ratio: Winter-HYV Paddy (Boro)

(1988-89)

Farm Size (in Acres)	Capital Co-efficient	Fixed Current Co-efficient I	Fixed Current Co-efficient II	Capital Labour Ratio
(1)	(2)	(3)	(4)	(5)
Upto 1	.03	.44	.18	.12
1-2	.03	.49	.19	.14
2-3	.02	.47	.20	.13
3-5	.02	.46	.19	.09
5-10	.02	.48	.22	.11
Above 10	.03	.46	.19	.13
Total	.02	.46	.20	.12

Note: Capital implies only fixed capital

Fixed Current Co-efficient I = $\frac{\text{Fixed Capital + Current Inputs}}{\text{Total cost}}$

Fixed Current Co-efficient II = $\frac{\text{Fixed Capital+Current Inputs}}{\text{Total value}}$

Table 7.31

Capital Co-efficient and Capital Labour Ratio: Traditional Monsoon Paddy (Aman) (1988-89)

Farm Size (in Acres)	Capital Co-efficient	Fixed Current Co-efficient I	Fixed current co-efficient II	Capital Labour Ratio
(1)	(2)	(3)	(4)	(5)
Upto 1	.05	.28	.12	.15
1-2	.05	.30	.12	.20
2-3	.04	.24	.10	.12
3-5	.04	.25	.11	.16
5-10	.05	.27	.11	.16
Above 10	.05	.30	.13	.19
Total	.05	.27	.12	.16

Table 7.32

Capital Co-efficient and Capital Labour Ratio: Kharif-HYV Paddy (1988-89)

Farm Size (in Acres)	Capital Co-efficient	Fixed Current Co-efficient I	Fixed current co-efficient II	Capital Labour Ratio
(1)	(2)	(3)	(4)	(5)
Upto 1	.03	.19	.08	.08
1-2	.03	.29	.12	.11
2-3	.03	.36	.12	.15
3-5	.01	.25	.10	.05
5-10	.03	.34	.14	.13
Above 10	.05	.36	.15	.17
Total	.03	.33	.13	.13

Note : Capital implies only fixed capital

Fixed Current Co-efficient I = $\frac{\text{Fixed Capital + Current Inputs}}{\text{Total cost}}$

Fixed Current Co-efficient II = $\frac{\text{Fixed Capital + Current Inputs}}{\text{Total value}}$

Table 7.33

Capital Co-efficient and Capital Labour Ratio: Potato (1988-89)

Farm Size (in Acres)	Capital Co-efficient	Fixed Current Co-efficient I	Fixed current co-efficient II	Capital Labour Ratio
(1)	(2)	(3)	(4)	(5)
Upto 1	-	-	-	-
1-2	.02	.69	.25	.16
2-3	.01	.63	.25	.09
3-5	.008	.66	.19	.08
5-10	.002	.66	.23	.01
Above 10	.01	.74	.21	.16
Total	.009	.69	.22	.09

Table 7.34

Capital Co-efficient and Capital Labour Ratio: Mustard (1988-89)

Farm Size (in Acres)	Capital Co-efficient	Fixed Current Co-efficient I	Fixed current co-efficient II	Capital Labour Ratio
(1)	(2)	(3)	(4)	(5)
Upto 1	.06	.27	.23	.10
1-2	-	-	-	-
2-3	.08	.45	.33	.21
3-5	.03	.47	.21	.15
5-10	.01	.40	.20	.04
Above 10	.03	.46	.19	.14
Total	.03	.44	.21	.12

Note: Capital implies only fixed capital

$$\text{Fixed Current Co-efficient I} = \frac{\text{Fixed Capital + Current Inputs}}{\text{Total cost}}$$

$$\text{Fixed Current Co-efficient II} = \frac{\text{Fixed Capital + Current Inputs}}{\text{Total value}}$$

Table 7.35

Capital Co-efficient and Capital Labour Ratio:
Pre-Monscon Til Oil Seed
(1988-89)

Farm Size (in Acres)	Capital Co-efficient	Fixed Current Co-efficient I	Fixed current co-efficient II	Capital Labour Ratio
(1)	(2)	(3)	(4)	(5)
Upto 1	-	-	-	-
1-2	.05	.34	.25	.11
2-3	.06	.32	.17	.17
3-5	.02	.22	.14	.05
5-10	.02	.29	.17	.05
Above 10	.03	.33	.13	.11
Total	.03	.31	.15	.09

Note : Capital implies only fixed capital

$$\text{Fixed Current Co-efficient I} = \frac{\text{Fixed Capital + Current Inputs}}{\text{Total cost}}$$

$$\text{Fixed Current Co-efficient II} = \frac{\text{Fixed Capital + Current Inputs}}{\text{Total value}}$$

7.6 CONCLUSION

Despite absence of on the spot training facilities of the farmers at the village level, the farmers of the area have shown sound readiness to exploit the opportunities made available to them in the forms of new breed seeds, inorganic fertilisers, irrigation, insecticides. There seems no stoppage of rise, in the foreseeable future, in this efficiency if the planners of the local level economy devote themselves to the continuous improvement of the skill and efficiency by various measures including restructuring of the use and development (not merely maintenance) of land.