

CHAPTER XI

AN AVERAGE INVESTMENT PATTERN IN THE CULTIVATION
OF PRINCIPAL CROPS

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11.1 Introduction

This chapter has been planned to present an estimate of the average total investment pattern of the sample farm-families in sample villages during the period under study in the cultivation of principal crops produced by the aforesaid families. A further attempt has, however, been made to present an estimate of the excess of investment over self-financing of the sample farm-families in sample villages during the period under study.

11.2 Methodology

First of all, an average cost of cultivation of the principal crops produced by these families in respective villages has been calculated.

Secondly, total land cultivated (expressed in acres) for these crops during the period has been estimated in respective villages.

Thirdly, total land cultivated is multiplied by average cost of cultivation to get the total average investment in the cultivation of principal crops during 1975-76 and 1976-77 in respective villages.

Fourthly, an attempt has been made to know the gap between investment and self-financing of these farmers (the concept self-financing has been defined in chapter VIII) during 1975-76 and 1976-77 by knowing the total amount of investment incurred during the period for the cultivation of the principal crops produced by them in their respective villages and the total amount of finance spent by these farmers in these villages during the period out of their own finance in these villages. After knowing these two estimates, one has made an attempt to measure the excess of investment over self-financing in respective villages.

11.3 Limitations

1. Sufficient data and information were not always available and much accuracy of the estimate is not, however claimed ; and
2. due to lack of requisite data and information, a simple estimate avoiding quantitative techniques of

research which may be applied in this regard to enrich the study further, has been presented. This has, perhaps, reduced the richness of this analysis to a certain extent.

11.4 Investment in Village 1

Table 11.1

Investment in the Cultivation of Principal Crops in
Village 1

Crop	Average cost per acre Rs.	1975 - 76		1976 - 77	
		Land culti- vated (acre)	Total invest- ment (in Rs.)	Land culti- vated (acre)	Total invest- ment (in Rs.)
Paddy	161.14	326	52,531.64	330	53,176.20
Wheat	259.71	65	16,881.15	95	24,672.45
Jute	130.13	152	19,779.76	150	19,519.50
Total :			89,192.55		97,368.15

In 1975-76, in 480 acres of land were cultivated in village 1 for producing paddy, Wheat and jute. Most of

the land was utilised for producing any of these three main crops. Double crops were produced in only 63 acres, the percentage on the total land cultivated being 13.13. Paddy was grown in 326 acres, which is 67.92 per cent of the total land used for these three crops. The next position goes to jute, the percentage being 31.67 on the total land used for paddy, wheat and jute. In only 65 acres, wheat was grown. The total investment for paddy, wheat and jute were Rs.52,531.64, Rs.16,881.15 and Rs. 19,779.76 respectively in 1975-76, vide Table 11.1. The total investment in principal crops was Rs.89,192.55 in village 1 in 1975-76.

In 1976-77, in village 1, 498 acres of land were under cultivation of the three crops. Thus, there was an increase in the use of land by 3.75 per cent over the previous years. The percentage of land used for double crops raised from 13.13 to 15.46 in 1976-77, the increase being negligible. Land used for growing paddy was 330 acres, for wheat was 95 acres and for jute was 150 acres. Thus, there was slight increase in paddy cultivation, and a negligible decrease in jute cultivation. But there was remarkable increase in the cultivation of wheat. The percentage of increase of land under wheat cultivation was 46.15. The investments as per table 11.1 were

Rs. 53,176.20 for paddy, Rs. 24,672.45 for wheat and Rs. 19,519.50 for jute cultivation. The total investment in village 1 for these three crops in 1976-77 was Rs. 97,368.15. Thus, there was an increase in such investment by 9.17 per cent.

11.5 Investment in village 2

Table 11.2

Investment in the Cultivation of Principal Crops
in Village 2

Crops	Average cost per acre (in Rs.)	1975 - 76		1976 - 77	
		Land culti- vated (Acres)	Total investment (in Rs.)	Land culti- vated (Acres)	Total investment (in Rs.)
Paddy	161.14	150	24,171.00	147	23,687.58
Wheat	259.71	62	16,102.02	75	19,478.25
Jute	130.13	128	16,656.64	163	21,211.19
Total :			56,929.66		64,377.02

In 1975-76, in village 2, a total area of 270 acres was cultivated for the production of paddy, wheat and jute which are the principal agricultural crops of this village. Paddy was grown in 150 acres, wheat in 62 acres and jute in 128 acres. In most of this land, only one of these crops was grown. Double cropping was found in only 26 per cent of the total land. Paddy was grown in 55.6 per cent of the total land cultivated for these principal crops. Only 22.96 per cent of the total land was used for growing wheat. Jute was grown in 47.41 per cent of the land cultivated for these crops. Total investment for paddy, wheat and jute were Rs.24,171.00, Rs. 16,102.02 and Rs. 16,656.64 respectively (Table 11.2). Total investment for these three crops was Rs. 56,929.66. In 1976-77, total land used for these three crops rose to 292 acres, meaning an increase of 8.1 per cent over that of 1975-76. In 147 acres, paddy was grown ; thus there was a slight fall over the previous year's land used for paddy. But there was increase of land in the cultivation of wheat and jute. Wheat was grown in 75 acres and jute was sown in 128 acres, the increase over the previous year's use being 21 per cent and 27.3 per cent. There was decrease in investment in the cultivation of paddy, but investment increased in the field of wheat and jute in

comparison to that of 1975-76. In 1976-77, a sum of Rs. 23,687.58 was invested for cultivating paddy. Such investments for wheat and jute were Rs. 19,478.25 and Rs. 21,211.19 respectively. Total investment for these principal crops was Rs. 64,377.02 in this village in 1976-77 (Table 11.2). Thus, the investment increased by about 13 per cent in 1976-77 over that of 1975-76.

11.6 Investment in Village 3

Table 11.3

Investment in the Cultivation of Principal
Crops in Village 3

Crops	Average cost per acre (in Rs.)	1975 - 66		1976 - 77	
		Land cultiva- ted (Acres)	Total investment (in Rs.)	Land cultiva- ted (Acres)	Total investment (in Rs.)
Paddy	161.14	110	17,725.40	122	19,659.08
Wheat	259.71	31	8,051.01	51	13,245.21
Jute	130.13	72	9,369.36	108	14,054.04
Total :			35,145.77		46,958.33

Paddy, wheat and jute were cultivated in 153 acres of land in 1975-76 in village 3. Of this, paddy was sown in 110 acres, wheat in 31 acres and jute in 72 acres. 35 per cent of this land was utilised for two of these crops. Paddy cultivation occupied 69.6 per cent of the land used for these three crops. In the case of wheat and jute, these percentages were 19.6 per cent and 45.6 per cent respectively.

Investments for the cultivation of paddy, wheat and jute were Rs. 17,725.40, Rs. 8,051.01 and Rs. 9,369.36 respectively. The total investment in 1975-76 was a sum of Rs. 35,145.77 (Table 11.3).

In 1976-77, the total area under cultivation for these three crops increased to 201 acres, the percentage of increase over the previous year being 27.2. Use of land for paddy, wheat and jute increased in 1976-77 in this village. 122 acres were used for growing paddy, 51 acres were ploughed for wheat. 108 acres were utilised for the cultivation of jute, thus the percentages of increase of landuse over the previous year were 10.9 in paddy cultivation, 64.5 in wheat cultivation, and the increase of landuse for jute cultivation was 50 per cent. Investments also increased in all these cases in 1976-77. In this year, investment for the cultivation of paddy was Rs.19,659.08. For the cultivation of wheat and jute in 1976-77, investments were Rs. 13,245.21 and Rs. 14,054.04

respectively. The total investment for these three crops was Rs. 46,958.33 in 1976-77 (Table 11.3). Thus, investment in 1976-77 increased by 33.61 per cent over that of 1975-76.

11.7 Investment in Village 4

Table 11.4
Investment in the Cultivation of Principal
Crops in Village 4.

Crops	Average cost per Acre Rs.	1975 - 76		1976 - 77	
		Land cultivated (Acres)	Total investment Rs.	Land cultivated (Acres)	Total investment Rs.
Paddy	161.14	180	29,005.20	172	27,716.08
Wheat	259.71	78	20,257.38	80	20,776.80
Jute	130.13	106	13,793.78	166	21,601.58
Total :			63,056.36		70,094.46

In 1975-76, 260 acres of land were cultivated in village 4 for producing paddy, wheat and jute. Double crops

were grown in 40 per cent of this land. Paddy was grown in 180 acres, wheat in 78 acres and jute in 106 acres of land. The percentages of land used for paddy, wheat and jute on the total land used for these crops were 69.2, 30.0 and 40.8 respectively. Total investment for the cultivation of paddy, wheat and jute was Rs. 63,056.36, of which Rs.29,005.20 was the investment for paddy cultivation, Rs. 20,257.38 was the investment for wheat cultivation and Rs. 13,793.78 was invested for cultivating jute (Table 11.4).

In 1976-77, the use of land for these three crops rose to 300 acres, the percentage of increase over that of 1975-76 being 15.4. Total quantity of land used for growing paddy decreased in 1976-77, though the percentage of decrease is negligible. The use of land of jute cultivation increased remarkably in 1976-77. The rate of increase was 56.6 per cent over that of 1975-76. The total investment was Rs. 70,094.46 in 1976-77. Investment in 1976-77 rose by 11.2 per cent. Investment particularly increased in jute cultivation. Investment in jute increased by 56.6 per cent in 1976-77. In 1976-77, investments in paddy, wheat and jute were Rs. 27,716.08, Rs. 20,776.80 and Rs. 21,601.58 (Table 11.4) respectively.

11.8 Investment in Village 5

Table 11.5
Investment in the Cultivation of Principal
Crops in Village 5.

Crops	Average cost per Acre (Rs.)	1975 - 76		1976 - 77	
		Land cultivated (Acres)	Total investment (in Rs.)	Land cultivated (Acres)	Total investment (in Rs.)
Paddy	161.14	52	8,379.28	60	9,668.40
Wheat	259.71	25	6,492.75	42	10,907.82
Jute	130.13	28	3,643.64	67	8,718.71
Total :			18,515.67		29,294.93

During 1975-76, paddy, wheat and jute were cultivated in 95 acres of land in village 5. 10 per cent of the areas was used for double cropping. Paddy was cultivated in 52 acres, wheat was grown in 25 acres and 28 acres was utilised in the cultivation of jute. 54.7 per cent of the land was used for growing paddy. In the cases of wheat and jute, these percentages were 26.3 and 29.5. The total investment for these three crops was Rs. 18,515.67, of which

Rs. 8,379.28 was for paddy, Rs. 6,492.75 was for wheat, and Rs. 3,643.64 was for jute (Table 11.5).

In 1976-77, the use of land for these main crops rose to 130 acres. The percentage of increase of land use over the previous year was 36.8. Paddy was grown in 60 acres, wheat was grown in 42 acres and jute was grown in 67 acres of land. The use of land rose in the cases of all these three crops, though the rate was not uniform. In paddy cultivation the use of land rose by 15.3 per cent. In wheat and jute cultivation, such percentages were 68 and 139 respectively. The total investment for these three crops was Rs. 29,294.93, of which Rs. 9,668.40 was for paddy, Rs. 10,907.82 was for wheat and Rs. 8,718.71 was for jute cultivation (Table 11.5). The total investment in 1976-77 increased by 58.2 per cent over that of 1975-76. In paddy, wheat and jute cultivation such percentages were 15.3, 68 and 139.2 respectively. Thus it was found that investment increased in all these cases.

11.9 Investment in Village 6

Table 11.6
Investment in the Cultivation of Principal
Crops in village 6

Crops	Average cost per Acre (in Rs.)	1975 - 76		1976 - 77	
		Land cultivated (Acres)	Total investment (in Rs.)	Land cultivated (Acres)	Total investment (in Rs.)
Paddy	161.14	197	31,744.58	413	66,550.82
Wheat	259.71	65	15,063.18	32	8,310.72
Jute	130.13	87	11,321.31	139	18,088.07
Total :			58,129.07		92,949.61

In 1975-76, in the village 6, a total area of 332 acres of land was cultivated for producing paddy, wheat and jute. Paddy was grown in 197 acres, wheat was sown in 65 acres and 87 acres were used for growing jute. Only in 5 per cent of this land, double crops were grown. 59.3 per cent of the land used for the principal crops was ploughed for growing paddy, 19.6 per cent for growing wheat, and 26.2 per cent for growing jute. During this year a total sum of Rs. 92,949.61

was invested for producing paddy, wheat and jute.

Rs. 31,744.58 was invested for growing paddy, Rs. 15,063.18 for growing wheat and Rs. 11,321.31 was spent in the cultivation of jute (Table 11.6). The relevant percentages on the total investment were 54.6, 25.9 and 19.5 respectively.

In 1976-77 an area of 487 acres was utilised for growing paddy, wheat and jute. Thus, the use of land increased by 46.7 per cent over that of 1975-76. 413 acres was used for paddy growing, 32 acres was used for wheat cultivation and 139 acres was cultivated for growing jute. Thus, area cultivated for paddy increased by 109.6 per cent, area for jute cultivation increased by 59.8 per cent, while the area under wheat cultivation decreased by 50.8 per cent in 1976-77 over that of 1975-76. Wheat cultivation decreased in 1976-77 perhaps due to bad production of wheat in 1975-76 in this village. The total investment in 1976-77 for producing these crops was Rs. 92,949.61, of which Rs.66,550.82 was for paddy, Rs. 8,310.72 was for wheat, and Rs. 18,088.07 was for jute cultivation (Table 11.6). In 1976-77, total investment increased by 59.9 per cent in comparison to that of 1975-76. Such increase was found to be 59.8 per cent in jute cultivation, but investment in jute cultivation decreased by 44.8 per cent.

11.10 Gap Between Total Investment and Self-Financing

There was a wide gap between the investments made for the principal agricultural crops and own investment of the farm-families in the sample villages (Table 11.7). In 1975-76, such excess of investments over self-financing of the cultivators were Rs. 53,893.00 in village 1, Rs.35,230.00 in village 2, Rs. 21,596.00 in village 3, Rs. 35,956.00 in village 4, Rs. 13,116.00 in village 5 and Rs. 29,229.00 in village 6. In 1976-77 such investment gaps were Rs.58,368.00, Rs. 39,177.00, Rs. 35,958.00, Rs. 43,594.00, Rs. 24,495.00 and Rs. 62,950.00 in village 1, village 2, village 3, village 4, village 5 and village 6 respectively. Thus, the gap between investment and self-financing increased in 1976-77 in comparison to that of 1975-76. The reason was to be found in the increase in investment in 1976-77 though self-financing was more or less the same in both the years. The gap between investment and self-financing has been shown in Table 11.7 :

Table 11.7

Gap Between Investment and Self-Financing of
Sample Farmers.

V i l a g e s	1975-76			1976-77		
	Total Agricultural Invest- ment (Rs.)	Self- financing of the Farmers (Rs.)	Excess of Invest- ment over Self- financing (Rs.)	Total Agricultural Invest- ment (Rs.)	Self- financing of the Farmers (Rs.)	Excess of Invest- ment over Self- financing (Rs.)
V ₁	89,193.00	35,300.00	53,893.00	97,368.00	39,000.00	58,368.00
V ₂	56,930.00	21,700.00	35,230.00	64,377.00	25,200.00	39,177.00
V ₃	35,146.00	13,550.00	21,596.00	46,958.00	11,000.00	35,958.00
V ₄	63,056.00	27,100.00	35,956.00	70,094.00	26,500.00	43,594.00
V ₅	18,516.00	5,400.00	13,116.00	29,295.00	4,800.00	24,495.00
V ₆	58,129.00	28,900.00	29,229.00	92,950.00	30,000.00	62,950.00