

C H A P T E R - IV

CAPITAL STRUCTURE OF VINEYARDS

- 4.1 Introduction
- 4.2 Average Composition of Finance
- 4.3 Classwise Composition of Finance

C H A P T E R - IV

CAPITAL STRUCTURE OF VINEYARDS

4.1 INTRODUCTION :

In this chapter we discuss various aspects of fixed investment and financing of vineyards. For the purpose of comparability we have converted each sample farmer's data into per are data. Similarly with a view to arriving at certain meaningful conclusions we have classified sample farmers by the size of area under grape cultivation into five classes.

Class 1 : Upto 20 ares.

Class 2 : More than 20 ares upto 40 ares.

Class 3 : More than 40 ares upto 60 ares.

Class 4 : More than 60 ares upto 90 ares.

Class 5 : More than 100 ares upto 170 ares.

4.2 AVERAGE COMPOSITION OF FINANCE :

TABLE NO.4.1

AVERAGE COMPOSITION OF FINANCE

Source	Per Are Amount (Rs.)	Percentage Share
Self	412.40	41.00
Bank Loans	589.69	52.62
Money Lenders	3.78	00.38
Total	1005.87	100.00

Table No. 4.1 gives overall average composition of finance per acre of grape cultivation of the 33 sample cultivators. It is seen that there are three sources of finance.

1. Self Finance.
2. Bank Finance.
3. Finance from Money Lenders.

It is clearly seen that the role of money lenders in financing grape cultivation is insignificantly small (0.38%). It is also good to notice that a little more than 40% of grape financing is self financing. However, almost 58.62 of the finance for grape cultivation comes from bank loans. From this table we can also state that the overall average of per acre financing for grape cultivation comes to Rs. 1005.87.

TABLE NO.4.2
COMPOSITION OF CAPITAL INVESTMENT

No.of Farmers	SOURCES		
	Self (Rs.)	Bank Loans (Rs.)	Money Lenders (Rs.)
1. C2	8000	10000	-
2. C1	-	10000	5000
3. C1	2000	7000	-
4. C1	2500	7000	-
5. C2	10000	10000	-
6. C2	2000	20000	-
7. C2	-	28000	-
8. C2	10000	20000	-
9. C1	4000	18000	-
10. C1	4000	20000	-
11. C1	5000	17000	-
12. C1	4000	18000	-
13. C1	23000	-	-
14. C2	3000	20000	-

(Contd....Table No.4.2)

15	C2	4000	20000	-
16	C2	6000	24000	-
17	C2	30000	-	-
18	C2	5000	25000	-
19	C2	15000	20000	-
20	C2	8000	32000	-
21	C3	10000	30000	-
22	C3	6000	35000	-
23	C2	29000	-	-
24	C3	15000	24000	-
25	C3	5000	60000	-
26	C4	20000	40000	-
27	C4	20000	45000	-
28	C4	20000	50000	-
29	C4	45000	-	-
30	C3	10000	50000	-
31	C5	50000	100000	-
32	C5	100000	-	-
33	C5	70000	20000	-

NOTE : C1:Class1,C2: Class 2, C3:Class 3, C4: Class 4, C5 : Class 5,
category.

In Table No. 4.2 information in respect of finance for each sample grape cultivator is given. Table 4.1 was derived on the basis of this table. From this table also, it is very clearly seen that only one grape cultivator borrowed money lender, to the extent of 1/3 of the total requirement.

4.3 CLASSWISE COMPOSITION OF FINANCE :

TABLE NO.4.3
COMPOSITION OF CAPITAL INVESTMENT (Upto 20 years) C-1 Class

No. of Farmers	Self (Rs.)	Bank Loans (Rs.)	Money Lenders (Rs.)
1	-	10000	5000
2.	2000	7000	-
3	2500	7000	-
4	4000	18000	-
5	4000	20000	-
6	5000	17000	-
7	4000	18000	-
8	23000	-	-

Total Area 116.37 Ares

Table No. 4.3 gives sample farmers classwise composition of financing of grape cultivation. On the basis of this we get per are composition of finance of Class 1 grape cultivators. It is as under.

Source	Amount (Rs.)	Percentage
Self	382.40	30.37
Bank Loans	833.54	66.21
Money Lenders	42.96	3.41
Total	1258.90	100.00

TABLE NO. 4.4 C.2 CLASS
COMPOSITION OF CAPITAL INVESTMENT (More than 20 Ares upto 40 Ares)

No.of Farmers	<u>SOURCE</u>		
	Self (Rs.)	Bank Loans (Rs.)	Money Lenders (Rs.)
1.	8000	10000	-
2.	10000	10000	-
3	20000	20000	-
4	-	28000	-
5	10000	20000	-
6	3000	20000	-
7	4000	20000	-
8	6000	24000	-
9	30000	-	-
10	5000	25000	-
11	15000	20000	-
12	8000	32000	-
13	29000	-	-

Total Area 330.92 Ares.

Table No. 4.4 gives farmerwise composition of finance for grape cultivators for class 2 cultivators. On the basis of this table we calculate per are composition of finance for class 2 which is given below.

Sources	Amount (Rs.)	Percentage
Self	392.84	37.14
Bank Loans	664.80	62.86
Money Lenders	-	-
Total	1057.64	100.00

TABLE NO.4.5

C 3 Class

COMPOSITION OF CAPITAL INVESTMENT(More than 40 Ares upto 60 Ares)

No.of Farmers	SOURCE		
	Self (Rs.)	Bank Loans (Rs.)	Money Lenders (Rs.)
1.	10000	30000	-
2	6000	35000	-
3	15000	24000	-
4	5000	60000	-
5	10000	50000	-

Total Area 225.68

In Table No. 4.5 we have given composition of finance for each farmer for the Class 3 grape cultivators. On the basis of this table we calculate the per are composition of class 3 grape cultivators.

Source	Amount(Rs)	Percentage
Self	203.82	18.77
Bank Loans	881.77	81.23
Money Lenders	-	-
Total	1085.69	100.00

TABLE NO.4.6

C 4 Class

COMPOSITION OF CAPITAL INVESTMENT(More Than 60 Ares Upto 90 Ares)

No. of Farmers	<u>SOURCE</u>		
	Self (Rs.)	Bank Loans (Rs.)	Money Lenders (Rs.,)
1	20000	40000	-
2	20000	45000	-
3	20000	50000	-
4	45000	-	-

Total Area 275.28 Ares.

Table No. 4.6 gives composition of finance for each farmer in the class 4 category cultivators. On the basis of this data we calculate per are composition of finance for the class 4 cultivators which is given below.

Source	Amount (Rs.)	Percentage
Self	381.42	43.74
Bank Loans	490.40	56.26
Money lenders	-	-
Total	871.82	100.00

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TABLE NO.4.7

COMPOSITION OF CAPITAL INVESTMENT
(More than 100 Ares upto 170 Ares)

No. of Farmers	SOURCE		
	Self (Rs.)	Bank Loans (Rs.)	Money Lenders (Rs.)
1	50000	100000	-
2	100000	-	-
3	70000	20000	-

Total Area 374.48 Ares.

In Table No. 4.7 we give data regarding composition of finance for each farmer in Class 5 category. On the basis of this data we given below per are composition of finance for Class 5 grape cultivators.

Source	Amount(Rs)	Percentage
Self	587.48	64.71
Bank Loans	320.44	35.29
Money Lenders	-	-
Total	907.92	100.00

On the basis of figures calculated above we can present composition of per are finance for different classes of grape cultivators.

TABLE NO. 4.8

PER ARE COMPOSITION OF FINANCE

Class of Grape Cultivators by ares	SOURCES OF FINANCE						Total (Rs.)	%
	Self (Rs.)	%	Bank Loans (Rs)	%	Money Lenders (Rs)	%		
C1 upto 20 Ares	382.40	30.37	833.54	66.21	42.96	3.41	1258.90	100%
C2 21 to 40 Ares	392.84	37.14	664.80	62.86	-	-	1057.64	100%
C3 41 to 60 Ares	203.82	18.77	881.77	81.23	-	-	1085.69	100%
C4 61 to 90 Ares	381.42	43.74	490.40	56.26	-	-	871.82	100%
C5 100 & More Ares	587.48	64.71	320.44	35.29	-	-	907.92	100%

On the basis of this table we can make following observations.

1. Per acre finance required in case of class 4 grape cultivators is the minimum.
 2. Per acre finance required by class 2 cultivators is the highest.
 3. Class 5 cultivators are in a position to raise a major proportion of finance from their own funds.
 4. Class 3 cultivators have to depend on bank finance to the extent of more than 80%.

In Table No. 4.9 we have given per acre capital expenditure for each grape cultivator included in the sample (33 farmers). The main components of capital expenditure of the grape

cultivation are :

1. EXPENDITURE ON LAND LEVELLING .
2. DIGGING OF FURROWS AND FILLING THEM UP.

Normally the land in Kumathe is light or medium black, both of which are convenient for natural drainage, however, if the soil is heavy black, furrows become stores of water because drainage is not easy in such soil. Therefore, furrows need to be filled in with light soil particularly of gvanular type. 3 and 4 : Organic manure and inorganic fertilizers are to be mixed with the soil in the furrows before planting.

4. COST OF NURSURY :

Generally, the local cultivators shows a preference for purchasing the seed plants from the nurseries maintained by others. However, about 40% sample cultivators reported that they develop their own nurseries. In other words by cost of nursery we mean both as an item of capital expenditure.

TABLE NO. 4.9

CLASSIFICATION OF RESPONDENTS BY PER ARE CAPITAL EXPENDITURE

C4	27	-	43.59	-	72.65	50.82	46.49	726.53	47.51	987.59
C4	28	-	43.22	-	61.75	37.05	45.69	679.26	39.17	906.14
C4	29	-	46.31	-	69.47	61.75	11.57	385.98	44.18	699.26
C3	30	-	29.43	47.43	83.99	69.16	90.90	721.34	91.28	1133.53
C5	31	6.17	15.43	-	61.75	49.40	69.92	617.51	50.67	870.85
C5	32	-	31.61	-	98.80	40.42	67.81	494.02	57.11	789.71
C5	33	-	19.64	-	49.40	39.32	42.54	444.66	47.87	665.50

6. ERCTION OF TRELLIS :

This includes expenditure on bamboo sticks, iron poles, steel wires, sand, cement etc.

7. IMPLEMENT AND ACCESSORIES :

This includes knap sack pump, Gutter Pump, Power spray pump, cutting and girdling scissors, inter culturing implements, balance and weights, clamps, baskets, chemical mixture tank, glasses and steel stools.

We have regrouped this data by five classes of grape cultivators.

TABLE NO.4.10 C-1 Class 6

PER ARE CAPITAL EXPENDITURE

(Upto 20 Are)

Sr.No.	Items	1	2	3	4	5	6	7	8
1.	Lande Levelling	-	-	-	156.00	219.65	-	-	104.00
2.	A. Digging of gorrows	83.99	141.24	141.24	41.61	68.64	62.11	67.75	52.00
	B. Furrows	-	-	-	-	-	-	-	-
3.	Organic manure	69.16	84.74	84.74	93.63	98.84	112.93	112.93	93.60
4.	Inorganic Fertilizer	49.40	42.37	42.37	52.00	54.91	56.46	50.87	52.00
5.	Cost of Nursury	79.15	94.04	94.04	46.80	46.67	52.39	52.39	58.17
6.	Crection of Trellis	988.14	919.49	919.49	624.02	768.80	564.65	564.65	676.02
7	Implements Accessories	190.01	193.64	195.05	110.08	166.72	129.64	128.64	131.82
	Total	1459.85	1475.52	1476.93	1124.14	1424.23	978.18	977.23	1167.61

A : 1983 - 1984; B : 1986 - 1987.

Table No. 4.10 gives information regarding per are capital expenditure of the class 1 cultivators (upto 20 ares). On the basis of table No. 4.10 we can give the class average for various items of capital expenditure per are. This is given below.

Items	Per Are Capital Expenditure (Rs.)
1. Land Levelling	59.95
2 a. Digging of Furrows	82.32
b. Filling of Furrows	-
3 Organic Manuers	93.82
4 Inorganic Fertilizer	49.99
5 Cost of Nursury	65.45
6 Errection of Trellis	631.39
7 Implements and Accossories	155.63
Total	1138.55

TABLE NO.4.11

PER ARE CAPITAL EXPENDITURE MORE THAN 20 AREAS UPTO 40 AREAS C-2 CLASS

Sr. No.	Items	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Land Levelling	-	-	49.40	-	-	-	167.62	-	-	-	-	-	-
2	Digging of Furrows	29.64	29.64	32.11	74.11	51.78	34.58	44.46	17.78	11.52	19.76	79.58	37.05	19.76
3	Furrows	-	-	98.81	-	-	274.20	-	-	-	172.92	82.34	-	15.44
4	Organic Manure	61.75	74.11	61.75	148.22	261.75	88.93	74.11	49.40	65.78	65.87	49.40	38.60	84.69
5.	Inorganic Manure	34.58	39.52	59.28	98.81	48.66	74.11	49.40	47.43	32.93	32.93	42.34	37.05	70.58
6	Cost of Nursury	69.16	69.16	52.49	69.16	58.05	69.16	91.40	46.04	27.50	57.22	46.44	90.79	45.87
7	Erection of Trellis	817.68	691.69	642.29	790.91	494.07	691.69	592.88	553.35	494.07	592.88	649.35	518.33	649.35
8	Implement Accessori es.	110.07	138.33	125.16	134.33	124.85	93.20	125.83	194.22	163.01	110.54	74.47	82.39	100.83
Total		1122.88	1141.26	1022.48	1315.54	1313.45	1175.70	908.22	967.73	961.54	932.58	819.65	971.08	.

TABLE NO.4.12

PER ARE CAPITAL EXPENDITURE MORE THAN 40 ARE UPTO 60 ARES.

Sr.No.	Items	Amount in <u>C3</u> & <u>Class 3</u> (Rs.)				
		1	2	3	4	5
1.	Land Levelling	-	-	-	-	-
2.a.	Digging of	24.74	49.40	45.94	49.40	29.43
	b.Burrows	-	-	-	-	47.43
3	Organic					
	Manure	49.40	49.40	45.94	59.28	83.99
4.	Inorganic Fertilizer	49.40	49.40	32.16	59.28	69.16
5	Cost of Nursury	57.55	45.70	45.94	68.67	90.90
6	Erection of Trellis	642.29	741.10	574.31	691.69	721.34
7	Implements Accessories	76.21	97.35	41.53	85.90	91.28
Total		899.59	1032.35	785.82	1014.22	1133.53

TABLE NO.4.13

PER ARE CAPITAL EXPENDITURE MORE THAN 60 ARE UPTO 90 ARES

C4 Class (Rs.)

Sr.No.	Items	1	2	3	4
1	Land Levelling	41.17	-	-	-
2 a.	Digging of furrows	41.17	43.59	43.22	46.31
	b. Furrows	-	-	-	-
3	Organic Manure	66.69	72.65	61.75	69.47
4	Inorganic Fertilizer	46.11	50.82	37.05	61.75
5	Cost of Nursery	68.34	46.49	45.69	11.57
6	Erection of Trellis	749.34	726.53	619.26	385.98
7	Implements Accessories	60.85	47.51	39.17	44.18
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	Total	1073.67	987.59	906.14	619.26
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TABLE NO.4.14

PER ARE CAPITAL EXPENDITURE MORE THAN 100 ARES UPTO 170 ARES

Sr.No.	Items	C.5 Clss (Rs.)		
		1	2	3
1	Land Levelling	6.17	-	-
2	a. Digging of Forrows	15.43	31.61	29.64
	b. Furrows	-	-	-
3	Organic Manure	61.75	98.80	49.40
4	Inorganic Fertiliser	49.40	40.42	39.52
5	Cost of Nursery	69.92	67.81	42.45
6	Erection of Trellis	617.51	494.02	444.62
7	Implements			
	Accessories	50.67	57.11	47.87
	Total	870.85	789.77	656.50

TABLE NO. 4.15
PER ARE CAPITAL EXPENDITURE

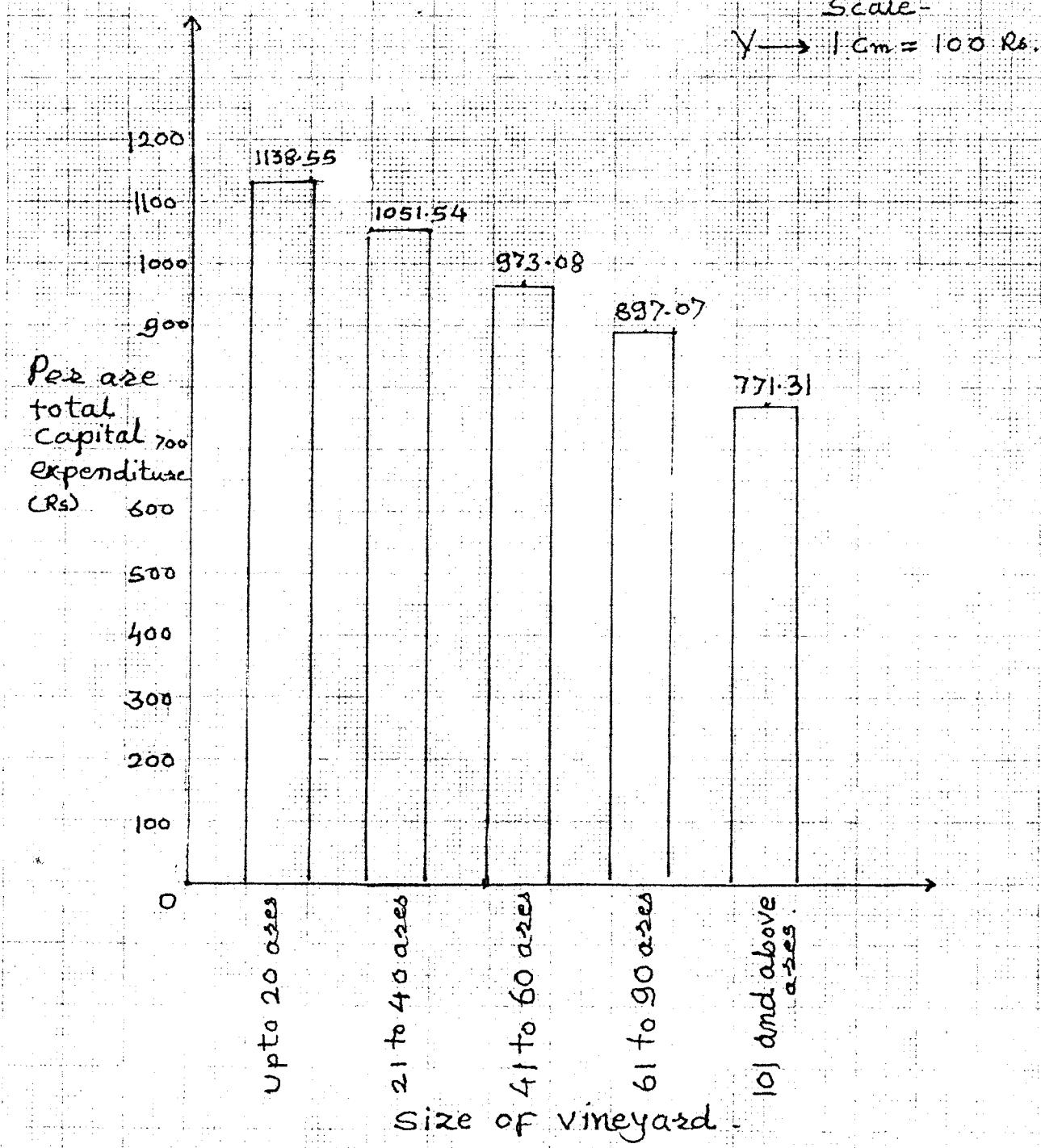
(Amount in Rs.)

Class of Farmers	Land	ITEM OF CAPITAL EXPENDITURE					
		Digging of Furrows	Levelling	Digging	Filling up	Organic Manures	Inorganic Fertilizers
C1 Upto 20 Ares	59.95	82.32	—	93.82	49.99	65.45	631.39
C2 21 to 40 Ares	16.69	36.36	49.51	86.48	51.12	60.95	629.11
C3 41 to 60 Ares	—	39.78	9.48	57.60	51.88	61.75	674.41
C4 61 to 90 Ares	10.29	43.57	—	67.64	48.93	43.02	635.70
C5 100 Ares and above	2.05	25.56	—	69.98	43.11	60.06	518.71

PER ARE Total Capital Expenditure.

Scale-

Y → 1 cm = 100 Rs.



On the basis of data given in Table No. 4.15 we can make following observations. :

1. The per are capital expenditure on land levelling shows a rapid decrease with increasing size of area under grape cultivation.
- 2 Per are capital expenditure on implements and accessories shows also a similar decreasing tendency with increasing ares under grape cultivation.
- 3 In case of erection of Trellis per are cost varies between Rs. 518.71 to Rs. 674.14. We however, can say that excepting in case of class 5 and class 3 grape cultivators, the per are capital expenditure on erection of trellis seems to be almost the same. We therefore, can conclude that per are capital cost of trellis is not dependent on the size of area under grape cultivation.
- 4 In the case of digging of furrows and filling of furrows also ther is a decreasing tendency in the per are capital expenditure with increasing size of area under grape cultivation.
- 5 If we take together cost of organic manuers and inorganic fertilizers there also we can say that there is a decreasing tendency in the per are capital expenditure on total fertilizers.