Chapter 8

A SYSTEM OF MACRO ACCOUNTS

8.1 INTRODUCTION

8.1.1 There are certain difficulties in a presenting a clear picture of economic framework of a grass-root rural economy on the basis of the study of a five-village sample. At times a number of villages together form a nexus of operations which may contain maximum possible complementarity among themselves. But left to a single village or a set of villages wrested, through sampling, from villages with whom they may have complementarity it will present, many may argue, a picture of exagerated dependency or poverty. Perhaps the argument may appear that the kind of enterprises not found in sample villages are found in villages which were not caught in our sampling net. But the fact remains that the level of progress in the working of the rural economy for which we took the sample has been so meagre in the four decades of promotional efforts in the country, as we have seen already in chapter 6, that use of new reproducible capital has been scanty. Naturally, consumption, investment and income remain at a low level.

8.1.2 Another difficulty crops up if we use a particular quantity for more than two frames or models. This difficulty arises largely because this survey has been single phase single-point survey. Because of this characteristic of the survey some

cost components, for example, of some small income like income from milk, goats and arecanuts could not be gathered from the informants. Incomes in such cases were given to us as net of costs. Thus in order to keep date in a particular frame consistent the definition of a quantity used in another frame has been adjusted for a fully satisfying inner consistency.

8.2 AGRICULTURAL OUTPUT AND INVESTMENT

8.2.1 The value of total agricultural output of our sample villages consisting of 827 households of which 511 are farm amounts to Rs.39,76,048 during the reference period of 1985-86. Thus the annual agricultural output per capita is Rs.945 only. The agricultural output per month per head stands at Rs.79 only. This rural economy, therefore, fits very well to suit the needs of the cheap labour hypothesis of Arthur Lewis. The paradox is, as we have explained in chapter 6, the productive resources of land and water have not been exploited to raise the productive efficiency of agriculture.

8.2.2 The low level of use of fixed capital on the farms of our sample is demonstrated in Table 8.1. The data exhibit some

Table 8.1

Aggregate Value of Fixed Capital

Land Group (acre)	No.of farms	Amount of land	Aggregate value of fixed capital	Aggregate capital per acre	Aggregate capital per farm
Upto 2	325	324.09	47641	147	147
2-5	143	451.77	82674	183	578
Above 5	43	326.65	56347	172	1310
Total	511	1102.51	186662	169	365

variation in the amount of the value of fixed capital which may be explained. The farms of the lowest size buy the services of some fixed capital like ploughs and bullocks from others. Those of the middle size might sell some services of these kind of fixed capital. The farms of the highest size, in general, do not sell out such services and enjoy certainly some economy in the use of these kinds of fixed capital. That this is so is supported, in the table, by the increase in the value of aggregate capital per farm with the increase of the farm size.

8.2.3 The average annual investment on the farms is shown in Table 8.2. The per acre annual investment on the farms is as low as Rs.113 only. Of this investment the value of fixed capital which is renewed every year is Rs.79. This is so, because except plough, bullocks and the few non-residential sheds almost all implements are bought every year. Some picture of annually renewable fixed capital is given through Table 8.3

Table 8.2

Investment in Agriculture

Land group Acre	Annual investment per acre	Annual investment per farm
Upto 2	98	98
2 - 5	122	385
Above 5	115	873
Total	113	243

Table 8.3

Annually Renewable Fixed Capital Per Acre

Land group (Acre)	Annually renewable fixed capital per acre
Upto 2	69
2 - 5	85
Above 5	80
Total	79

8.2.4 If, however, we take into account losses in land caused by compelling circumstances, there is some thing in the figures of investment on the farms which hides an important aspects of disinvestment. We can clearly see from Table 8.4 that the lowest group of farmers lost during the preceding year Rs.68.25P worth of cultivable land per acre or 0.017 acre per acre. An unfortunate point is that three farmers of the sample had to sell land to buy bullocks. The incidence of this kind of selling of land is, however, restricted to one only in the lowest group. He sold 0.80 acre of his cultivable land to buy a pair of bullocks. Two farmers of the middle group together sold 0.51 acres to buy bullocks. Despite this, Table 8.4 shows that only the lowest group of farmers is the victim of this disinvestment in terms of a most important agent of production.

Table 8.4

Acquisition of Ownership of Land

Land Group (acres)	Per acre acquisition of land	
	in acres	in Rs.
Upto 2	- 0.017	- 68.25
2 - 5	+ 0.008	+ 31.87
Above 5	+ 0.017	+ 67.84
Total	+ 0.003	+ 13.10

8.2.5 Of all the three groups of farmers classified according to size, the lowest group had to lose in total 1.64 acres of land for sheer medical treatment of their members. The group lost 2.60 acres in a bid to save their members from starvation. Occasions like marriages of family members like daughters and sisters made them lost 6.70 acres of land. Of the total sale of 15.49 acres, an amount of 1.50acres were sold out by four households of this group to let a total of four persons earn their livelihood as farias of tobacco, jute or arecanuts. Obviously, this shows that prospects of farming are too far from the vision of these farmers. Seasonal work as farias during the post-harvesting season can hardly bring them an income which good farming on lands they sold out could bring to them in a sound setting of infrastructural facilities and an efficient network of input and output markets. Demand for capital for agricultural processes of production is too limited. In fact this also

explains why the investment as shown in Table 8.2 is so meagre.

Table 8.5

Capital-output Ratio on the Farms

Size group of farms	Capital-output ratio	
	Per Acre	Per farm
Upto 2	0.024	0.024
2 - 5	0.034	0.109
Above 5	0.041	0.314
Total	0.032	0.087

This table not only puts to light the thinness of investment on the farms but also there is an apparent trend of increase of capital-output ratio with the increase of farm size. This does not mean that we should reorganise the rural economy with as many large farms as possible. On the other hand a system of organisation is conceivable whereby both small and not small farms can have the setting of inducements to have enough capital goods.

8.2.6 In the absence of adequate saving that could have come up with a sound system of truly developing local economy, the land has become in one respect an unfortunate medium of exchange. During the one year preceding the date of survey 3 per cent of the land was transferred through sale (or purchase by others) to satisfy one or the other need of households or farms.

8.3 INCOME ACCOUNTING

8.3.1 The picture of poverty of the rural area economy which our sample represents is shown in another form in Table 8.6 that presents income accounting of 827 households in our sample. We can clearly see that agricultural activity is the only important productive activity and the bulk of household labour earns from this activity.

Table 8.6

Income Accounting of Sample Households

Households receipts		Farm Receipts	Tiny animal farms Receipts
Home Labour :	7,00094	Business Income : 24,87,659	Business Income : 38,168
Daily Labour: (Agricultural)	8,93,435		
Daily Labour: (non-agricultural)	4,84,760		
Weekly Wages :	61,399		
Salaries, Professions etc. :	5,80,161		
Total	27,19,849	24,87,659	38,168

8.4 A SYSTEM OF GRASS-ROOT RURAL AREA ACCOUNTS

8.4.1 Although we do not have much of sectors in this rather undeveloped rural area economy it would be interesting to see how a Leontief type of system looks like. We have not here

taken into account the existence of the sector of tiny animal farms. The Table 8.7 points to the grim situation of the rural economy in that the labour is the only important input in the productive process of agriculture. The reproducible capital is as good as absent. It has to be added that organic manures used on the farms are the kind of farm yard manure and so are

Table 8.7

A System of Grass-root Rural Area Accounts

From To	Farms	Outside	Households	Total
Farms	1,72,042	2,71,167	35,32,839	39,76,048
Outside	2,71,167	*	11,26,320	13,97,487
Households	10,45,180	11,26,320	**	21,71,500
Natural Units	24,87659	-	-	-
Total	39,76,048	13,97,487	46,59,159	-

* Unknowable

** Not collected .

produced on the farm. They have been taken into account both in the costs as well as in the value of total output. As a result the value of the farm sector output that is used up in the farm sector includes both seeds produced on the farms as well as the farm yard manure prepared within the farms. The seeds which are bought from outside our villages are included among the output of the outside sector disposed of in the farm sector.

8.4.2 It can be seen from Table 8.7 that households sell more labour to outside sector (including non-farming sector). But the fact remains that in the kinds of farms we have in the sample villages the distinction between the receipts of the natural units from agricultures and the receipts through the sale of labour power to agriculture cannot be regarded as absolutely distinct. Both together make up what we may call agricultural income which amounts to Rs.35, 32, 839. On the other what we regard as non-agricultural income stands at Rs.11, 26, 320. The agricultural non-agricultural income ratio is therefore 3:1. With further development of agriculture this ratio obviously might have been far higher. On the other hand, if agriculture as well as processing sectors and decentralised services sector are simultaneously promoted with determination it cannot be estimated whether the figure would rise or fall in the foreseeable future.

8.4.3 This study undoubtedly points to the need of an appropriate income accounting framework for grass-root rural area economy. Since we plead for an autonomous grass-root rural planning there is clear case for including within income hard tangible goods and services which are of immediate use for raising these hard tangible goods. We are, however, unable to make use of this definition, as at the time of field work we have not collected the information needed for this kind of income accounting.

8.4.4 We may present the income position of our rural economy in a different way. The total income may be shown as broken down among the different land groups. Table 8.9 presents such a picture. We have to divulge that some components of income of some of the households heve not been included in the returns they have made. The number of such households may not exceed four. This may mean that the total income of the households may increase by Rs.1,00,000 only.

Table 8.9

Income by Land Groups

Land Group	Total annual income	Annual income per household	Monthly income per household	Annual income per capita	Monthly income per capita
No land	9,90,503	3134	261	746	62
Upto 2	18,50,177	5693	474	1195	100
2 - 5	15,80,120	11050	921	1634	136
Above 5	8,24,876	19183	1599	2248	187
Total	52,45,676	6,343	529	1246	104

Table 8.10

Income Per Consumption Unit

Land group	Annual income per consumption unit	Monthly income per consumption unit
No land	1008	84
Upto 2	1507	126
2-5	2317	193
Above 5	3136	261
Total	1662	139

8.5 CONSUMPTION AND SAVING

8.5.1 We began analysing the consumption of the households by presenting annual consumption by land groups. This is available in Table 8.11. We also present in Tables 8.12 to 8.15 consumption functions on two kinds of figures, saving function and the marginal propensity to consume and save.

Table 8.11

Consumption by Land Groups

Land group	Total annual consumption (Rs)	Annual consumption per household (Rs)	Annual consumption per capita (Rs)	Annual consumption per consumption unit
No land	10,02,625	3173	756	1020
Upto 2	18,18,120	5594	1174	1481
2-5	13,57,875	9496	1404	1991
Above 5	6,52,680	15179	1778	2482
Total	48,31,300	5842	1148	1531

Table 8.12

Consumption Function

Income per Capita (Rs)	Consumption per Capita (Rs)
746	756
1195	1174
1634	1404
2248	1778

Table 8.13

Consumption Function II

Income per household (Rs)	Consumption per household (Rs)
3134	3173
5693	5594
11050	9496
19183	15179

Table 8.14

Saving Function

Income per household (in Rs.)	Saving per household (in Rs.)
3134	-38.36
5693	98.64
11050	1554.16
19183	4004.56

Table 8.15

Marginal Propensity to Consume and Marginal Propensity to Save

Income per household	Marginal Propensity	
	to Consume	to save
5693	0.95	0.05
11050	0.73	0.27
19183	0.70	0.30

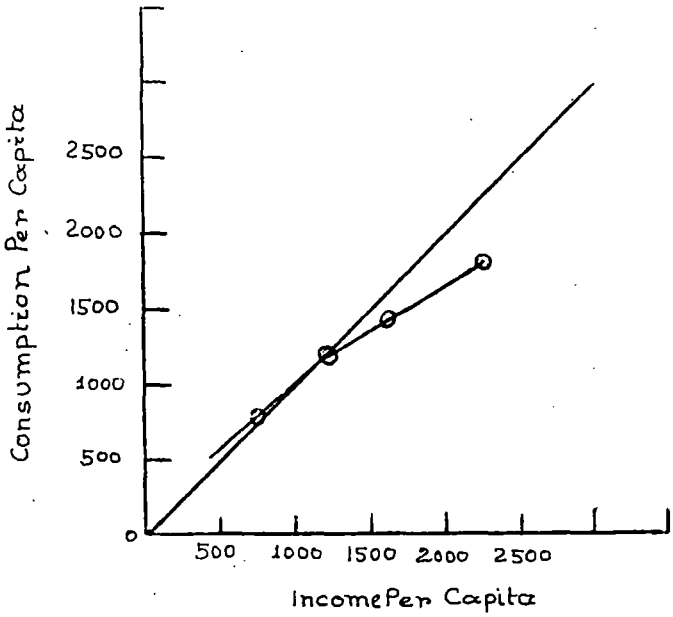
It is apparent that tables 8.12 to 8.14 have been used to calculate the figures of table 8.15. On the basis of some figures given in the earlier tables of this chapter we find that the consumption income ratio of our sample stands at 0.92. Obviously the saving ratio then is calculated at 0.08.

8.5.2 Keeping in view the undeveloped nature our grass-root rural economy the saving capacity, as measured by our crude method, cannot be taken as low. As we have taken data on various aspects of this rural economy it is beyond the power of a single investigator to collect data on every aspect for a rigorous specialist study. We are disposed to believe that this findings on the nature of saving capacity of the villagers would be upheld even if we made pains-taking survey on various aspects of saving or hoarding of the village community.

8.5.3 This study opens our view to the vistas of a state of high saving when the production potential of this grass-root rural economy is fully exploited. It is not true that the grass-root rural economies of the type of this one can be developed faster only on the basis of aid from outside the grass-root. With every phase of development the saving of the grass-root community will increase. Not only the family enterprises will be in a position to build up their own system of investible funds but also a quicker development of the grass-root rural economies will generate more funds than are available from our large network of public sector industries.

Fig- 8.1

Consumption Function



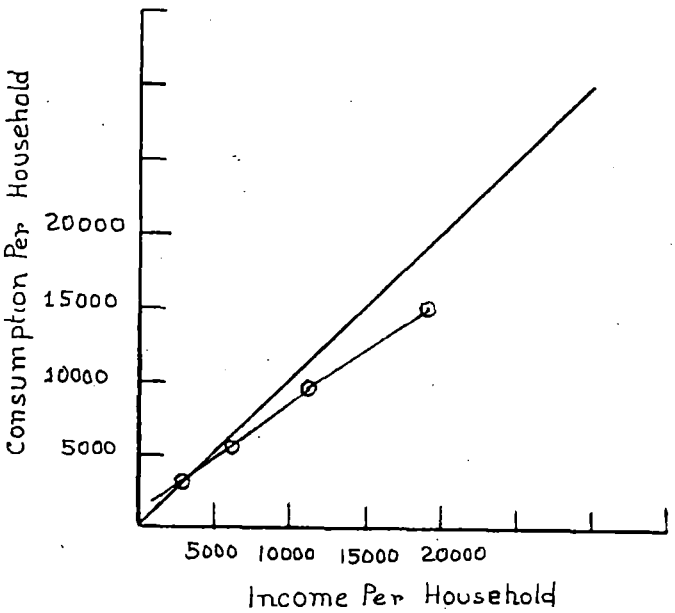
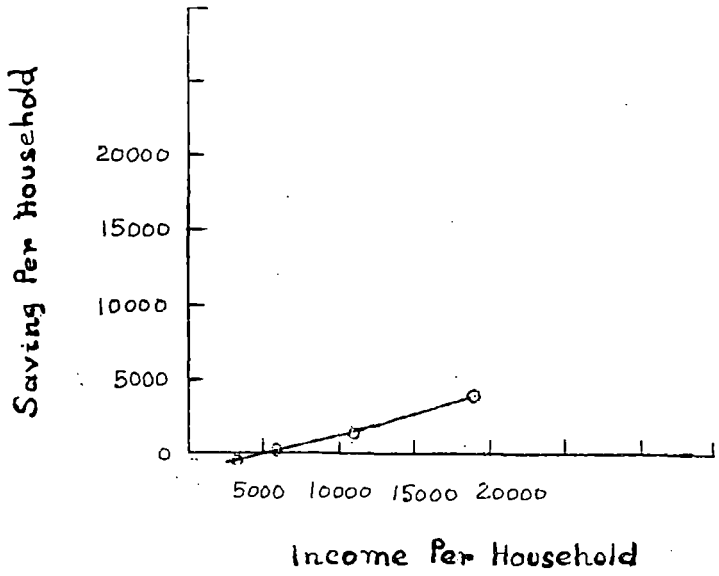
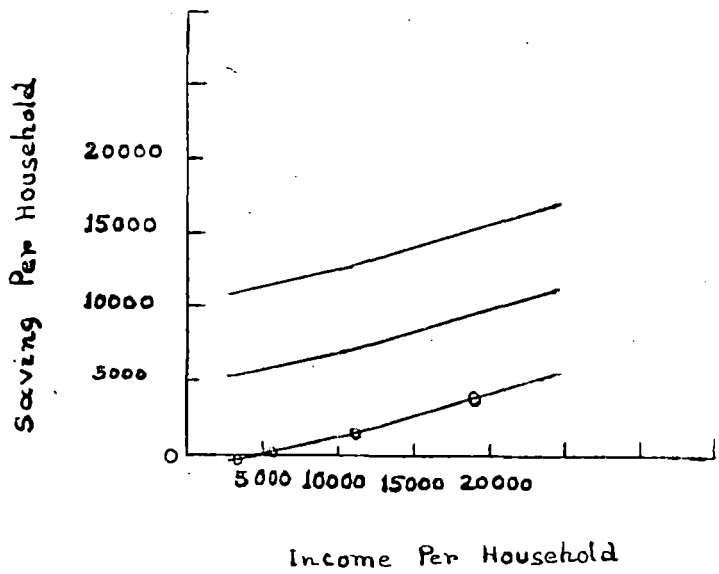


Fig - 8.2

Saving Function





Although this latter possibility may sound as yet a distant dream, what is more relevant for our purpose is that the creation of facilities like health care and cheap and useful system of education and housing can be built up in the grass-root area on the basis of a hithertofore unforeseen level of rural savings.

8.5.4 One might indeed argue that with increase in income the households may feel secure enough to spend still more. This argument has little force if we remember that with increase in the total income level the saving function goes upward. This is shown in figure 8.2. The spending on consumer durables, housing and on investment in the enterprises are all functions of savings. The more we spend on these the more we leave the need for further savings for further future spendings.

8.5.5 Despite large hopes held out by economists on the scope of full state responsibility on items mentioned in the last para, a realistic planning of the grass-root rural economy for assuming spending on these items will base itself on financing these from villagers own income. On the basis of table 8.16 we estimate that every household of this sample can buy a house with four-piece corrugated tin roof if its annual income per annum is Rs.13,688. This again means that the real income of this rural economy has to

Table 8.17

Per capita Annual Expenditure by Land Groups on Food Items

Land group (acre)	Per Capita Annual Expenditure (Rs) on									
	Rice	Wheat	Vegetable	Fish & Meat	Pulses	Sale & spices	Edible oil	Milk	Sweet	Total
	1	2	3	4	5	6	7	8	9	10
No land	466.80	78.41	15.46	24.42	9.94	10.93	18.73	-	1.71	626.70
Upto 2	570.30	112.05	55.46	88.07	23.78	20.38	43.06	6.78	16.53	936.35
2 - 5	64.06	93.80	79.85	121.75	32.10	32.74	47.73	11.76	24.43	1078.21
Above 5	714.74	88.23	93.98	165.22	40.20	41.84	63.53	15.67	32.66	1256.04
Total	564.91	95.18	51.81	82.47	22.76	22.09	38.25	6.56	15.08	899.11

Table 8.18

Per Capita Annual Expenditure by land groups (Non-Food Items)

Land Group (acre)	Per Capita annual Expenditure (Rs) on									
	Fuel	Clothing	Cosmetics	Health	Travelling	Tea	Tobacco	Education	Fire wood	Total
	1	2	3	4	5	6	7	8	9	10
No land	12.81	80.47	0.18	14.57	-	-	17.02	4.10	-	129.15
Upto 2	21.61	93.56	8.38	39.56	12.15	1.32	43.12	16.12	2.33	238.15
2-5	20.83	124.17	14.45	53.56	18.32	4.50	38.02	45.52	6.62	325.99
Above 5	23.96	198.61	20.45	74.65	30.64	15.86	53.04	89.78	15.80	522.39
Total	18.86	105.63	8.24	37.96	11.35	2.90	34.58	25.50	3.72	248.74

increase (Rs.13,688 ÷ Rs.3134) or 4.37 times. With determination

Table 8.16

Incidence of Best Type of Housing

Land group	Annual income per households	Number of four piece corrugated tin roofed house
No land	3134	0.003
Upto 2	5693	0.070
2-5	11050	0.520
Above 5	19183	2.000

and change of planning pattern in the country this need not take decades.

8.5.6 The low level of consumption of the people of the area can be seen from Table 8.17 and from Table 8.18. The object to present the per capita spendings on consumption items here is to point to potential of future demand for the commodities rather than to poverty of consumption. The measurement of people in absolute poverty is the task of the next chapter.