

Chapter 2

THE BASIC RESOURCES

2.1 INTRODUCTION

2.1.1 We have elaborated in the preceding chapter the agro-climatic resources of land of the grass-root rural economy we study here. Water resource has not been viewed as a resource divested from land. One reason is a good part, if not the whole of it at places, of water resource can be tapped directly by the operator. Another part certainly may be tapped by an irrigation enterprise that can be run under different forms of management with its jurisdiction over a number of grass-root rural economies. Similarly heat, humidity, rainfall, wind-power etc. are as much as a resource of land as topography itself. In this chapter we view land only as a quantity. The other important nationally inexpensive resource being used here as a quantity is labour power.

2.1.2 We know now much better than we knew earlier in this century that land itself is not a cause of variation of output among different systems of agriculture. The increase in productivity of land is caused, by common consensus, by new reproducible capital and new technology used in agricultural processes of production with the help of a coherent system of promotion. In fact, the development of the resources of land is synonymous with development planning for production. Yet in the beginning

of the process of development the mere quantity of available land is an important factor of production.

2.1.3 Similarly, the labour power of an economy is for us a quantity which must be used from the first phase as another important factor of production. As in the case of land so in the case of labour the development of labour resource is synonymous with the planning for the increase in productivity of this resource. This means, through stages in planning, employment of labour may go on with an increasing amount of capital. But what is important is that at the very first stage we are under obligation to use fully the whole of the labour power with the minimum of capital. It will be in order if we give in the following two sections a quantitative estimate of these two basic resources in this grass-root economy.

2.2 LAND

2.2.1 A picture of the net cultivable area of the rural economy of the Dinhat Sub-Division as well as of the district of Koch Behar is available from table 2.1 and 2.2¹. The tables describe the States not of the rural economies but of the whole of the sub-division or of the district. But the net cultivable area and the current fallow area relate to the rural economy. The intensive planning of the grass-root rural economy may need some diversion of land for new roads including link roads, construction of buildings and offices. Although a large net work of unmetalled

Table 2.1

Broad Land-use in Dinhata Sub division

Categories	Dinhata Block-I		Dinhata Block-II		Sital Block		Sub division total	
	Area in hectare	% to total	Area in hectare	% to total	Area in hectare	% to total	Area in hectare	% to total
1. Net cultivable area	23777	82.87	18626	70.43	8152	52.63	50555	71.58
2. Current fallow	97	0.34	640	2.41	-	-	737	1.04
3. Area under forest	20	0.07	-	-	-	-	20	0.03
4. Area not available for cultivation	4979	16.16	7179	27.15	7336	47.37	19313	27.35
Total	28692	100.00	26445	100.00	15488	100.00	70625	100.00

Table 2.2

Broad Land-use in the Sub-division, the district and the State

Categories	Dinhata Sub-division		Koch Behar District		West Bengal	
	Area in hectare	% to total	Area in hectare	% to total	Area in '000 hectares	% to total
1. Net cultivable area	50555	71.58	230396	69.87	5262	59.50
2. Current fallow	737	1.04	3332	1.00	65	0.70
3. Area under forest	20	0.03	5286	1.58	1186	13.40
4. Area not available for cultivation	19313	27.35	95522	28.55	2336	26.40
Total	70625	100.00	334536	100.00	8849	100.00

Note : Area for the State is measured in '000 hectares.

roads has already been constructed throughout the sub-division, they have been built up mainly with the help of voluntary contributions raised persuasively. The main underlying motivation has been linking the settlements and cluster of households to urban market areas of different formation. Although a task in the coming two decades of intensive planning will be metalling the existing unmetalled roads, we hardly deny that some new linking of unlinked cluster of households may be made through new road connections. Secondly, the area covered by forests in the whole of the sub-division is only 20 hectares. It is possible that even this area of forests under the ownership of the State Government has nearly been cleared by the local poor. Apart from the need of planting all over the banks of rivers and roads which has remained empty of trees at the time of the survey, there is a case for increasing the forest cover to increase the supply of rural fuels and rural building materials and furniture and supply of fruits for local consumer.

Table 2.3

Break-down of Area Not Available for
Cultivation in Dinhata Sub Division

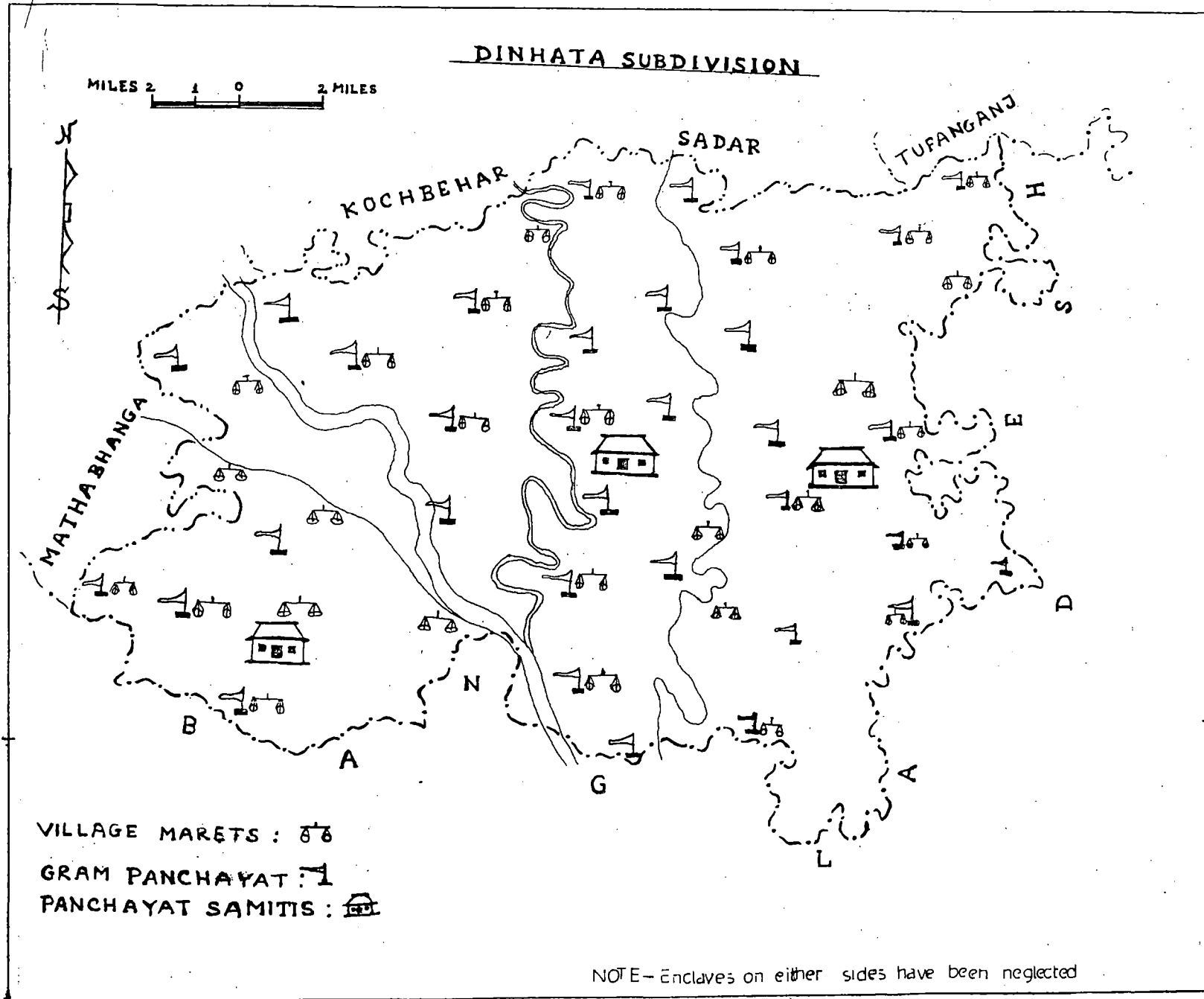
Categories	Area in hectares	Per cent to total
Area under non-agricultural use	15780	81.71
Barren and unculturable land	2000	10.36
Area under plantation and misc. trees	1493	7.73
Fallow other than current fallow	40	0.20
Total	19313	100.00

2.2.2 In table 2.3 we can see that of the areas not available for cultivation 2040 hectares are lying fallow. These areas can nevertheless be reclaimed for some horticultural enterprises run by small farmers. Areas recorded as being under miscellaneous plantation are areas belonging to farmers. These plantation areas are used especially for arecanuts and bamboos. The total area for this amounts to nearly 1.5 thousand hectares. Homestead areas of households, roads, rivers are all included as areas covered by non-agricultural areas.

2.2.3 We ~~shall argue in the concluding chapter~~ that forest cover has to be laid in this grass-root rural area economy mainly along the banks of the rivers, roads, market areas and on the homestead areas outside the residential houses. Outside Dinhat town the sub-division has 303 villages. Of these 299 villages are inhabited. Apart from the net work of market areas, the gram panchayats and panchayat samities have also their buildings and infrastructural network well-laid out. (The map No. 5 shows the market areas and the panchayats). Here and there some encroachments on crop fields may be made through construction of houses and establishments on the road sides. But any great migration to the market areas are ruled out if we conceive and implement right kind of plans for the grass-root economy.

2.2.4 These market areas are in effect the markets almost at the doorsteps of the villages. The only town in this grass-root

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rural area economy which may attract some rural households is the Dinhata town. But this possibility of inflow of relatively better-off households to the sub-divisional town can be plugged if the planners achieve in the course of a decade or two a reasonable success in respect of four essential services, namely, health care, transport, housing and law and order. If these four essential services are guaranteed through a reasonable network, then any villager of this grass-root rural economy may reach sub-divisional town of Dinhata in half an hour and the district town in one hour.

2.2.5 So it would not be a small amount if take 500 hectares as the amount of net cultivable area that we may have the need to transfer to market or road uses during the next decade. At the same time, as we have indicated earlier, an area of 2040 hectares will be added to the net cultivable area during the coming decade. On balance, an amount of 1540 hectares are being added to the net cultivable area.

2.2.6 Thus, 52,095 hectares remain available for cultivation in the grass-root economy during the next ten years. We have indicated in the first chapter the vast potential agro-climatic resources of this amount of net cultivable area. On the basis of our knowledge and on the basis of best managed ^{ed} farms in the middle range of West Bengal we are in a position to say that 22.25 ^e metric tons per hectare of paddy can be raised from three seasons

of a crop year if reasonable amounts of reproducible capital and available technology^{are} is used. This target is not only within the reach of planners but can be subsequently improved upon with the finding of further sources of growth. The big implication is that the use of labour on the fields will increase nearly six times.

2.2.7 But a diversification of crops will be a big advantage in many respects ~~which we discuss in the concluding chapter.~~ These areas and their prospects make it obligatory for the planners to make use of the spread effects of increased productivity of farms in the shortest span of time. The potential of Bengal fields is so vast that if we use effectively just 5 million hectares of net cultivable area out of a total of 8.9 million hectares of total net cultivable area in the State (Sarkar 1990) the State alone can produce more than half of the paddy required by the country (133 million tons of paddy). The new agricultural strategy of the planning holidays of the late sixties was thus formulated ignoring the basic possibilities of the country.

2.3 LABOUR SUPPLY

2.3.1 For the purpose of counting labour force we leave out children but do not leave out the old. The number of the incurably sick or the like is very small in the rural economy of the sub-division. Some of the sick are found to suffer from their

last sickness. We define children as those who are just 15 years or less. Accordingly adults are those who have lived at least a

Table 2.4

Total Labour Force

Category	Number of the members in the labour force	P.C.
Male	1282	53.73
Female	1104	46.27
Total	2386	100.00

day more than 15 years. They are the numbers of the labour force, and this definition is used in table 2.4.

2.3.2 On applying the age and sex composition of the sample population we get the distribution of the rural population of Dinhate in table 2.5. We get an analogue of table 2.4 in table 2.6 for the rural economy as a whole rather than for the sample.

Table 2.5

Estimated Distribution of Rural Population
of the Sub-division by Age and Sex

Age group	Male	Female	Total
Upto 5	37901	39195	77096
5-10	31471	34045	65516
10-15	26748	26429	53177
15-35	89245	77212	166457
Above 35	48445	41356	89801
Total	233810	218237	452047

Table 2.6

Estimated Total Labour Force in the
Rural Population of the Sub-division

Category	Number of members in the labour force
Male	137690
Female	118568
Total	256258

The amount of labour-year available per village becomes 857. If we exclude the women folk the amount of male labour-year per village stands at 460. The amount of female labour-year per village is 397. In economic systems outside the centrally planned economies the percentage of female labour-years constituting the active labour force varies among countries. In the system of planning we have indicated in the first chapter there is scope for developing countries of the Indian type, of increasing output and income by maximising the employment of female labour years. Systems and traditions may be allowed to develop so that maternity leave may be extended, may be without pay, till the child is a year old. As most of the cases will be self-employment the period of working may be well-determined by workers themselves.

2.3.3 The target of planning of the concerned grass-root rural area economy will be to maximise the employment of these labour

years and the use of the whole of the net cultivable area of the economy for maximum possible income in stages. We shall argue later that although we shall diversify the cropping pattern to maximise not merely the agricultural output but also the output of other sectors in the grass-root economy based on this agricultural output of which HYV paddy and HYV sugarcane may be the two main crops. The values and amounts of output per hectare of both of these crops are high. The values of sugarcane and other commercial crops a little higher. But assuming that the whole of the output consist only of rice and hence of lower value than if half of the output consisted of non-paddy crops, we are in a position to estimate that the value of agricultural output per labour year would be 11,500 approximately at the current price. We leave out from this amount the non-agricultural incomes to be generated from use of agricultural produces. However, we have to deduct the payments for inputs brought from outside sources. According to a rough calculation these deductions may reach Rs.1,500 per labour year. The net agricultural income per labour year may be Rs.10,000 at the current price.

2.3.4 This prospect of earning of labour year may certainly be heightened by the expansion of education of producers and productive workers. The present state of education of the labour force is available from tables 2.7 to 2.11.

Table 2.7

Distribution of Sample Labour Force by Education

Number of year spent in edu- cation	Male		Female		Total	
	Number	P.C.	Number	P.C.	Number	P.C.
1 or more	576	44.93	177	16.03	753	31.56
2 or more	512	39.94	163	14.76	675	28.29
3 or more	463	36.11	144	13.04	607	25.44
4 or more	380	29.64	112	10.14	492	20.62
5 or more	346	26.99	95	8.61	441	18.48
6 or more	286	22.31	70	6.34	356	14.92
7 or more	249	19.42	60	5.43	309	12.95
8 or more	203	15.83	52	4.71	255	10.69
9 or more	146	11.39	32	2.90	178	7.46
10 or more	84	6.55	18	1.63	102	4.27

Table 2.8

Estimated Distribution of Sub-Division's
Labour Force by Education

Number of year spent in edu- cation	Male	Female	Total
1 or more	61864	19006	80870
2 or more	54993	17501	72494
3 or more	49720	15461	65181
4 or more	40811	12023	52834
5 or more	37163	10209	47372
6 or more	30718	7517	38235
7 or more	26739	6438	33177
8 or more	21803	5584	27380
9 or more	15683	3438	19121
10 or more	9019	1933	10952

Table 2.9

Skilled Labour Force by Definition A

Category	Sample		Sub-Division
	Number	P.C.	
Male	285	22.31	30718
Female	70	6.34	7517
Total	356	14.92	38235

Definition A : Education 6 years or more²

Table 2.10

Skilled Labour Force by Definition B

Category	Sample		Sub-Division
	Number	P.C.	
Male	203	15.83	21803
Female	52	4.71	5584
Total	255	10.69	27387

Definition B : Education 8 years or more .

Table 2.11

Skilled Labour Force by Definition C

Category	Sample		Sub-Division
	Number	P.C.	
Male	84	6.55	9091
Female	18	1.63	1933
Total	102	4.27	10942

Definition C : education 10 years or more.

2.3.5 There is little doubt that our plans for a decade or two of the grass-root economy will have to ^{be} conceived and implemented with the existing kind of resource of our labour power. It will be seen in Chapter V that with 10 schools in or near the five sample villages and with at least 30 teachers of these schools are paid at Government scale with a hierarchy of officers at the higher echelons, no real advancement of primary education is noticed.