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SOME ASPECTS OF RURAL ECONOMIC AND SOCIAL
TRANSFORMATION IN JALPAIGURI AND BARDHAMAN: *
An Explanatory Study

Ashok Rudra
Viswabharati University,
Shantinikethan.

Note:

* This study was conceived as part of a larger collaborative project between Professor Rudra and some of us at CDS to explore the possibilities of comparative analysis of agricultural growth and social transformation during the 20th century in selected districts of Tamil Nadu and West Bengal. The purpose of the study was to see whether any significant differences in pattern of organisation, employment, wages etc. (or changes therein) can be discerned between regions with different land tenures and experiencing different rates and pattern of growth. The districts covered by Professor Rudra's paper were chosen partly because the system of land tenure (permanent settlement) was very different from that of Tamil Nadu, and also because they did not seem to have experienced any significant expansion or technical change in agriculture. We at the CDS were to take up a similar study of some Districts in Tamil Nadu which have a ryot-wari system and which seem to have experienced remarkable changes during this century. This part of the study is however not yet ready.

A. Vaidyanathan.

Centre for Development Studies
Ulloor, Trivandrum 695 011

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Some Aspects of Rural Economic and Social Transformation
in Jalpaiguri and Bardhaman: An Explanatory Study

1. Introduction

1.1 The present study will be concerned with a comparison between the processes of development in two districts of West Bengal, namely Bardhaman and Jalpaiguri during the present century. We have chosen the districts such as to offer a contrast. Bardhaman is generally treated as one of the most economically advanced districts of West Bengal and Jalpaiguri is supposed to be an example of the opposite. Table 1.1 presents a few figures which highlight this distinction between the two districts.

Table 1.1

Comparison of some Indicators: 1969-70

Item	Bardhaman	Jalpaiguri
1	2	3
1. Proportion of net irrigated area to sown area (percentages).	59.2	19.7
2. Yield per acre (in Kgs.)		
a. Paddy	642.4	397.6
b. Wheat	935.4	312.5
c. Potato	5134.5	1656.2
3. Proportion to net sown area of (Percentages)		
a. Summer Paddy	2.42	0.10
b. Wheat	7.76	9.77
c. Potato	4.56	1.90
4. Consumption of fertilizer per hectare (in Kgs.)*	49.72	3.18

* Data relates to 1976-77

Source: Statistical Abstract, West Bengal, 1969-70

1.2 The figures in the table mostly relate to agriculture. That is not only because data relating to industrial and other non-agricultural activities are mostly not to be found for districts. Another reason is that there is really not much of industries in Jalpaiguri or for that matter in most of the districts of West Bengal. Bardhaman happens to include the industrial belt of the state containing such important centres as Durgapur and Chittaranjan. These centres and most others in the belt are however, the creations or by-products of planning at the central level. As such, they do not indicate anything whatsoever about the dynamics or the absence of it of the regional economy of the two districts. As such, the present study will deliberately ignore comparison of industries.

1.3 District Bardhaman is not much bigger than district Jalpaiguri in geographical area - 2716 Sq. miles against 2374 Sq. miles. However, the former district provides habitation to about double the population of the latter. (Tables 1.2(a) & 1.2(b)). The villages in Bardhaman are about 2.5 times more in number than those in Jalpaiguri - 2609 against 744 in 1971. The population of Bardhaman is not only more densely settled than in Jalpaiguri, it has also grown at a faster rate. The composition of the population in terms of rural and urban shows a higher degree of urbanisation of Bardhaman and this has increased in course of the decades. Urban population constituted 23% of the total in Bardhaman in 1971 as against 10% of Jalpaiguri. The proportion of working population in the total population is higher in Jalpaiguri than in Bardhaman which may be due to the higher birth and death rates in Jalpaiguri (19.2/as against 12.7/for males in 1961) and 8.5 respectively and 6.2. In both the districts this proportion has marked a decline over the decades. This might signify nothing more than a fall in the death rate (Table 1.3). Ethnically, the population of Bardhaman contains more of upper caste people

Table 1.2 (a)

JalpaiguriGrowth of Population with break downs

Year	Total Population (in Lakhs)	Index of Growth (with base at 1901)	Proportions of		
			Rural Population	Male Population	Working Population
1	2	3	4	5	6
1901	7.8	100.00	99.0	53.7	42.2
1911	9.0	115.64	..	54.3	45.5
1921	9.3	120.00			45.6
1931	9.8	126.02	98.0	54.3	55.3
1951	9.1	117.17	92.7	54.8	46.5
1961	13.6	174.23	90.8	53.9	38.4
1971	17.5	224.36	90.3	53.0	31.1

Source: Census Volumes

Table 1.2 (b)

BardhamanGrowth of Population with breakdowns

Year	Total Population (in lakhs)	Index of Growth (with base at 1901)	Proportions of		
			Rural Population	Male Population	Working Population
1	2	3	4	5	6
1901	15.3	100.00	95.0	49.9	37.8
1911	15.4	100.36	..	50.0	40.8
1921	14.3	93.60			43.0
1931	15.7	102.80	91.7	51.7	30.0
1951	21.9	142.99	85.2	52.9	35.2
1961	30.8	201.14	81.8	53.8	33.7
1971	39.1	255.54	77.2	40.2	27.9

Source: Census Volumes.

Table 1.3
Birth Rates and Death Rates

Year	Crude Birth Rates (per 1000)				Crude Death Rates (per 1000)			
	Barddhaman		Jalpaiguri		Barddhaman		Jalpaiguri	
	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9
1921		27.4		32.2		36.5		30.8
1930		25.2		33.0		23.5		27.1
1941	13.7	13.0	15.7	15.0	19.1	19.4	22.6	" 26.0
1950	9.5	8.8	16.4	15.0	15.4	16.0	22.7	25.1
1960	12.7	11.6	19.2	18.6	6.2	6.1	8.5	9.3

Source: Census Volumes and Bengal District Gazetteers.

Table 1.4
Proportions of Population Belonging To Different Groups

Year	Upper Castes		Scheduled Castes		Scheduled Tribes		Others	
	Barddhaman	Jalpaiguri	Barddhaman	Jalpaiguri	Barddhaman	Jalpaiguri	Barddhaman	Jalpaiguri
	1	2	3	4	5	6	7	8
1901	9.48	0.84	70.19*	67.06*	-	-	20.33	32.10
1911	9.53	1.07	69.80	59.55*	-	-	20.66	39.38
1921	9.77	1.37	-	-	-	-	-	-
1931	9.56	1.72	69.05	65.80	-	-	21.39	32.48
1951	50.90	39.96	26.68	23.69	6.13	20.52	16.29	15.86
1961	54.24	28.73	24.45	30.80	5.60	25.38	16.71	14.59
1971	-	-	24.51	34.02	5.84	24.49	-	-

* represent figures for both Sch. Castes and Sch. Tribes

- Not Available.

Source: Census Volumes.

than people of lower castes, tribes and others. Tribal population constitutes an important part of the population of Jalpaiguri but not so in the case of Bardhaman. The scheduled caste section of the population is about the same in the two districts. All these demographic features may be seen in Table 1.4 which incidentally shows a sharp rise in 1951 in the proportion of the upper castes at the cost of those of lower ones. This might be due to the influx of refugees from East Bengal at the time of the partition.

1.4 The data that we shall use are very uneven in their time references. There are items of information which were collected annually and for which we have data, with some gaps here and there, more or less continuously from 1905 onwards. There are other data which were not collected before certain dates and we have been obliged to work with data only for the latter periods. There are also cases of data being available in principle but which we failed to collect. Our entire study therefore is subject to the serious defect arising out of this data deficiency.

1.5 But the really serious defect of our study does not lie with the data used by us. It lies in our failure in most cases to interpret the data. The original purpose which we had in mind was to try to understand the process in which economic development takes place in some regions and does not in some others. It was thought that if one undertakes to analyse sufficiently long time-series of data relating to economic development of a region one might be able to obtain some insights about the sources of development. In this task we have not succeeded a great deal. The data that could be collected by us reveal certain extreme changes that have taken place in the two districts during the period. It has,

however, not been possible for us to collect information which could provide explanations for those developments. It has been beyond our means to carry out such historical investigations which could possibly account for those developments. It is not even clear to us if there are available enough of such district-wise information with the help of which such historical research could be carried out ^{are available} / We have, therefore, been in a position only to raise questions to many of which we can give no answers. The only value of the study to the reader could therefore lie in the idea that it provides about the difficulties involved in a project of this kind.

1.6 One pattern common to the two districts is that the years around 1966-67 which are usually taken to represent a point of revolutionary changes in Indian Agriculture, does not hold any significance for them. In some cases there is a change occurring around the year 1970 and in some cases there is no such change at all. There is, however, for most items a clear demarcation occurring in the 1940's or 1950's which is the time of independence and the beginning of planning. As such we shall carry out much of our discussion in two parts, one referring to the pre-independence period and the other to the post-independence period.

2. Forces of Production

Decline in the Pre-independence period

2.1 It is a remarkable fact that agriculture, taken as a whole, recorded a serious decline during most of the first half of the century. Net sown area decreased to about three quarters of the level it had at the beginning of the century, in the course of the first four decades in the case of Bardhaman and by 1950 in the case of Jalpaiguri. Incidentally the actual amounts of net sown area in the two districts have been very nearly equal and their fluctuations very similar till 1930 (Diagram 2.1).

2.2 A similar decline marks net irrigated area in the two districts. The trend of decrease, however, is different from that for net sown area in that almost all the decrease takes place during the first three decades after which the conditions remain stagnant till 1950. The decrease till 1930 is quite drastic. The area of irrigation in Jalpaiguri gets almost halved, whereas that in Bardhaman reduces to two-thirds (Diagram 2.1). The decline in the net sown area and that in irrigated area are not too well synchronised in the case of Bardhaman where the proportion of net irrigated area to net sown area reveals severe fluctuations. Such fluctuations are much less marked in the case of Jalpaiguri (Diagram 2.2).

2.3 The fact of net sown area increasing cannot but suggest the existence of important amounts of fallow land. In the case of Bardhaman the proportion of current fallow to net sown area was extra-ordinarily high (sometimes reaching beyond 50 percent) over the entire period till 1950. In Jalpaiguri the proportion was normal till 1910, then it became abnormally high and remained so till 1950. However, the incidence of fallow in Jalpaiguri never reached the extent of that in Bardhaman. This

is contradictory to the understanding of Bardhaman as the more advanced district. (Table 2.1).

Table - 2.1

Current fallow as percentage to net sown area

Year	Bardhaman	Jalpaiguri
1	2	3
1904-05	21.30	2.81
1914-15	46.52	7.95
1924-25	38.43	30.16
1934-35	110.33	24.62
1944-45	14.12	30.42
1954-55	-	-
1964-65	3.38	1.35
1974-75	1.76	1.28
1976-77	3.25	0.80

- Not Available.

The data for Tables 2.1, 2.4 and 2.5 and Diagrams 2.1 to 2.16 have been taken from the following sources:

1. Agricultural Statistics of India (British India)
2. Indian Agricultural Statistics
3. Estimates of Area and Production of Principal crops in India
4. West Bengal State Statistical Abstract

2.4 The same contradiction gets revealed in the figures relating to intensity of cropping. Even though the incidence of irrigation has been all along much higher in Bardhaman than in Jalpaiguri, it is interesting to note that the intensity of cropping in the two districts have been more or less the same, at least till recent years, and the common trend traced a downward path during the first half of the century. Actually, the fall took place from a level above 1.20 to about 1.05 during 1905 to 1930, after which it remained stagnant. (Diagram 2.3).

2.5 We shall now look at changes in the absolute dimension and composition of the working force. As is well known, the definitions of workers as well as their different parts have changed from Census to Census so much that it is very difficult to make any meaningful time comparisons. This is a subject on which much has been written and we shall not try to make any comparisons by introducing adjustments. We shall try to draw some broad conclusions which can perhaps be made despite the difficulties mentioned. We shall, however, totally omit two census years, namely 1931 and 1941. The latter year was in any case left uncovered by census operations. 1931 has to be eliminated as figures relating to working population of this census seem to produce discontinuities both with the preceding and following census years of a kind that defies any explanation.

2.6 The first important thing to note about Bardhaman is that the overall growth of the working population in the 20 years 1901 to 1921 was very little, indeed less than even 10 percent (Table 2.2h). Secondly, there seems to be an increase in the proportion of agricultural workers to non-agricultural workers which indicates, if anything, a process of de-industrialization. Thirdly, the proportion of agricultural labourers

Table 2.2 (a)
Changes in Working Population
Jalpaiguri

Year	Cultivators		Agricultural Laborers		Total Agricultural Population		Total Non-Agricultural population		Working Population		
	1	2+	3**	4	5	6*	7	8	9	10	11
1901	89.50	100.00	10.50	100.00	65.96	100.00	34.04	100.00	100.00	100.00	100.00
1911	89.86	99.49	10.14	95.65	52.80	99.04	47.20	171.68	100.00	123.79	
1921	93.33	107.14	6.67	65.22	52.59	102.96	47.31	178.76	100.00	128.61	
1951	96.61	58.16	3.39	17.39	27.76	53.88	72.24	271.68	100.00	128.01	
1961	93.75	114.80	6.25	65.21	45.98	109.59	54.02	249.56	100.00	157.23	
1971	79.77	108.67	20.22	234.78	48.99	121.92	51.01	246.02	100.00	164.16	

Source: Census volumes

Note: + percentage to total working population in agriculture

* percentage to total working population

** Index of growth with base at 1901.

Table - 2.2 (b)

Changes in Working Population

- Bardhaman -

Year	Cultivators	Agricultural Labourers	Total Agricultural Population	Total Non-Agricultural Population	Working Population					
1	2+	3**	4	5	6*	7	8	9	10	11
1901	89.32	100.00	10.68	100.00	48.45	100.00	51.55	100.00	100.00	100.00
1911	67.46	90.04	32.54	363.33	53.26	119.32	46.74	98.33	100.00	108.45
1921	62.50	83.67	37.50	420.00	54.37	119.57	45.63	94.32	100.00	106.55
1951	63.36	99.20	36.64	480.00	50.90	139.86	49.10	126.76	100.00	133.10
1961	61.76	117.13	38.23	606.67	45.77	169.39	54.23	188.63	100.00	179.31
1971	44.58	103.19	55.42	1073.33	53.10	206.76	46.80	171.24	100.00	188.62

Note: + percentage to total working population in agriculture

* percentage to total working population

** Index of growth with base at 1901

Source: Census Volumes.

to cultivators increased very drastically becoming more than half by 1971. The picture is very different for Jalpaiguri. Total working population grew in the first 20 years by about 30 percent. The proportion of workers in agriculture to total workers actually decreased. The proportion of agricultural labourers to workers in agriculture also decreased till 1961. From these contradictory indicators one can hardly infer anything more than stagnation in agriculture as well as in the rest of the economy with probably some differentiation taking place in the peasantry of Bardhaman.

2.7 The figures for animals - cattle and buffaloes - are more difficult to interpret. That is because, as is well known, in the country as a whole the livestock population is in excess of the number required. The general picture is a surplus in number and deficiency in the health standards. As such increase in the numbers alone does not indicate anything whatsoever about the development or otherwise of the economy. Given, however, the taboo against slaughtering of such animals, a drastic decrease in numbers raises questions. Such a drastic decrease took place in the case of all cattle between 1930 and 1945 in Jalpaiguri, in the case of bullocks between 1930 and 1940 in Bardhaman and in the case of the buffalo population of Jalpaiguri over the entire period of 1920 to 1972 (Table 2.3).

2.8 One does not have much data relating to agricultural machinery and equipment for most of the period under consideration. It may, however, be safely assumed that there was not much of machinery in use before independence. One does have figures for wooden and iron ploughs but they are not such as to suggest any interesting conclusions. The only exception seems to be sugarcane crushers (probably of a primitive

Table - 2.3 (a)

Cattle Population- Jalpaiguri -

(Number in Lakhs)

Year	Cattle				Buffalo			
	1	2	3	4	1	2	3	4
1920	3.03	3.12	2.02	8.17	0.46	0.20	0.08	0.74
1925	2.93	3.05	2.06	8.07	0.42	0.15	0.07	0.66
1930	2.98	2.95	1.96	7.89	0.49	0.15	0.07	0.72
1940	1.94	2.29	2.20	6.44	0.31	0.08	0.05	0.44
1945	1.31	0.96	1.25	3.53	0.33	0.16	0.08	0.59
1951	1.91	1.68	2.39	5.99	0.33	0.09	0.16	0.59
1956	2.04	1.88	1.89	5.81	0.37	0.09	0.08	0.54
1961	1.74	1.81	1.81	5.36	0.34	0.27	0.16	0.77
1966	1.51	1.58	1.55	4.65	0.28	0.04	0.15	0.48
1972	2.67	2.04	2.23	6.94	0.27	0.07	0.06	0.40

Source: Five Yearly Livestock census

Table - 2.3 (b)

Cattle Population- Bardhaman -

(Number in Lakhs)

Year	Cattle				Buffalo			
	1	2	3	4	1	2	3	4
1920	3.00	3.39	2.67	9.07	0.27	0.08	0.04	0.41
1925	3.13	3.85	3.05	10.03	0.34	0.08	0.04	0.46
1930	2.85	3.52	2.88	9.25	0.43	0.08	0.04	0.55
1940	2.15	3.45	2.22	7.83	0.53	0.10	0.07	0.70
1945	2.72	3.95	2.40	9.08	0.60	0.11	0.06	0.78
1951	2.89	3.56	4.28	10.73	0.53	0.12	0.06	0.81
1956	3.22	4.00	3.20	10.43	0.61	0.12	0.08	0.81
1961	2.57	4.58	3.59	10.74	0.67	0.17	0.06	0.90
1966	2.61	4.74	3.61	10.96	0.69	0.18	0.07	0.94
1972	2.94	4.27	3.72	10.92	0.78	0.17	0.08	1.03

1. Bullocks or male buffalos

2. Cows

3. Calves

4. Total

Source: Five Yearly Livestock census.

kind) which seem to have played some important part, and which incidentally has almost disappeared in the post-independence period.

2.9 Along with net area sown and irrigated area, the principal crop, paddy, also suffered a shrinkage in area. In Jalpaiguri the trend persisted till 1950 and the decrease in the fifty years amounted to a little more than 35 percent of the original level. In the case of Bardhaman, there was a much sharper decrease - more than 60 percent. But the trend halts in 1935, after which it records a sharp rise during the next 15 years and by 1950, it surpasses the level at the beginning of the century. In the case of paddy, therefore, the story of decline in Bardhaman is only partially true. This recovery in paddy acreage is accompanied by a parallel movement of irrigated acreage under paddy. There is no similar increase of irrigated paddy acreage in Jalpaiguri (Diagram - 2.4).

2.10 Data relating to yield per acre (and therefore also data relating to production) are scanty for years before 1945. Judging by the indices involving the concept of normal yield per acre, there was no secular trend at all in the case of Jalpaiguri. In the case of Bardhaman, however, while there was no trend, there was a drop in the general level occurring around 1925. Taking the movements in acreage and yield per acre one can infer that for paddy production too the period was one of decline or at best of stagnation.

2.11 In the case of Jalpaiguri, the pre-Independence decline in agriculture is marked by a drastic reduction in the importance of the two commercial crops, Tobacco and Jute, which played an important part in its economy in the earlier part of the century. (Tables 2.4a and 2.4b) Tobacco acreage which accounted for 13 percent of the net sown area in 1904-05 decreased to a mere 1.6 percent by 1944-45. Likewise, Jute acreage which

Table - 2.4 (a)

Cropping Pattern

- Jalraiguri -

Year	Rice				Wheat	Oil seeds	Sugar-cane	Tobacco	Potato	Jute	Tea
	Autumn	Winter	Summer								
1	2	3	4	5	6	7	8	9	10	11	
1904-05		70.10		1.07	3.03	0.52	13.07	-	11.67	8.51	
1914-15		62.80		0.10	5.77	0.47	9.37	-	6.72	11.07	
1924-25		74.10		2.08	5.29	0.65	2.86	-	5.44	15.22	
1934-35		67.90		0.05	4.93	0.64	2.59	-	3.95	16.27	
1944-45		68.10		0.30	5.40	0.52	1.62	-	4.03	20.62	
1954-55	7.08	61.66	-	0.41	4.47	0.03	0.96	-	6.80	20.57	
1964-65	10.30	62.24	-	0.23	1.94	0.07	0.83	0.56	12.84	18.73	
1974-75	26.47	63.94	-	2.19	2.01	0.06	0.44	0.38	8.87	18.77	
1976-77	28.03	62.69	-	9.77	1.40	0.06	0.67	1.19	10.50	.	

Note: .. Not Available.



Table - 2.4 (b)

Crooping Pattern

- Bardhaman -

Year	Rice				wheat	Oil-seeds	Sugar-cane	Tobacco	Potato	Jute
	Autumn	Winter	Summer							
1	2	3	4	5	6	7	8	9	10	
1904-05	-	99.20	-	0.18	4.43	2.62	0.04	-	1.36	
1914-15	-	106.30	-	0.24	4.10	2.91	0.05	-	1.45	
1924-25	-	91.90	-	0.19	1.62	1.55	0.02	-	0.23	
1934-35	-	91.80	-	0.29	2.13	1.78	0.06	-	0.31	
1944-45	-	94.60	-	0.64	0.27	0.81	0.02	-	0.49	
1954-55	5.38	85.76	0.17	0.58	0.60	0.66	0.01	1.61	1.18	
1964-65	4.84	86.90	0.32	0.75	0.99	0.92	0.02	2.71	3.39	
1974-75	9.08	88.12	17.07	6.21	0.75	0.35	..	4.22	2.53	
1976-77	4.17	91.83	8.34	7.76	0.55	0.50	..	4.65	2.77	

Note: .. Not Available.



accounted for 13 percent of the net sown area in 1904-05 decreased to a mere 1.6 percent by 1944-45. Likewise, Jute acreage which accounted for about 12 percent of net sown area in 1904-05 reduced to a mere 4 percent in 1944-45. The only crop which gained ground during this period was Tea. There are no such shifts in the case of Bardhaman which, incidentally, did not have any important commercial crops. Jute, Sugarcane and oilseeds occupied minor positions at the beginning of the century and their importance declined to insignificance in the next fifty years. The only non-paddy crop to gain in importance was Wheat.

2.12 These reductions in acreages caused parallel decreases in production as in no case did outturn per acre increases so much as to compensate for the loss. Either there was systematic decrease of yield per acre, as in the case of Jute in Jalpaiguri, which further aggravated the reduction due to acreage. Or it remained more or less steady as in the case of Tobacco in Jalpaiguri. Even when it increased as in the cases of Oilseeds and Sugarcane in Bardhaman from 1915 onwards, the increase was not such as to counteract the reduction in acreage. (Diagrams 2.5a and 2.5b to 2.10).

Growth in the Post-independence Period

2.13 The post-independence recovery of agriculture is very much more important in the case of Bardhaman than in the case of Jalpaiguri. For some reasons which require to be investigated increase in net sown area in Bardhaman took place in one jump between 1940 and 1945 by which date the loss during the previous 40 years was more than compensated. The year 1943 was the year of the Great Bengal Famine. It is paradoxical that the largest increase in net sown area in one stroke should take place

in Bardhaman between the years 1940 to 1945. 1945 onwards the tempo of increase slowed down and, as a matter of fact, led to a decline from 1965 onwards. In Jalpaiguri, however, the recovery started only from 1950 and continued steadily at a very slow rate so that even in 1977 the net sown area remained lower than the amount it had at the beginning of the century. (Diagram 2.1).

2.14 Irrigation stops its decline in Bardhaman in 1950 and increases steadily so that by 1970 the net irrigated area in the district is nearly double that it was at the beginning of the century. No such recovery takes place in Jalpaiguri. The level reached in 1970 is about a quarter more than the rock bottom reached in 1950 and is still considerably lower than the level at the beginning of the century. (Diagram 2.1).

2.15 This lagging behind of irrigation in Jalpaiguri gets reflected in the yawning gap between the proportions of irrigated area to net sown area (Diagram 2.2). It is, however, paradoxical that this increased incidence of irrigation in Bardhaman does not get reflected in the figures relating to Intensity of Cropping. As may be seen Diagram 2.3 in Intensity of Cropping in Jalpaiguri starts to surpass that of Bardhaman in the course of the sixty's. It is remarkable that while Jalpaiguri recovers the Intensity that prevailed at the beginning of the century, that of Bardhaman prevails at a much lower level. Surely by this token, Bardhaman can hardly be regarded as the more progressive district.

2.16 The expansion of cultivated area naturally reduces the importance of current fallow. From 1961 onwards, the proportion of fallow land to net sown area in both the districts remains mostly at a level lower than 3 percent as it may be expected with full utilization of land.

2.17 The dynamism introduced in the economy of Bardhaman in the post independence period gets reflected in the rapid growth of Working population in the 20 years 1951 to 1971. The growth of nearly 50 percent which is so much higher than what took place in the first two decades of the century is nonetheless smaller than the growth of population so that the percentage of workers to the total population records a decrease (Table 1.2b). The composition of workers in terms of agricultural and non-agricultural activities remains more or less unchanged and the picture in 1971 is not very different from that in 1921. The trend of agricultural labourers becoming more important in relation to cultivators continues unabated (Table 2.2b.)

2.18 Jalpaiguri presents a contrast. It shows a continuity in the tempo of increase of the total working population as well as in the matter of the relative insignificance of agricultural labourers. There is however a sharp increase of these labourers in 1971 which is in consonance with the general increase of agricultural labourers, partly real and partly definitional, which has been recorded by the 1971 Census for the country as a whole. As to the proportion of workers in agriculture to total working population, the position in 1971 is in line with the trend observed between 1901 and 1921. That is to say, it is below the proportion in 1921. However, the low percentages in 1951 and 1961 raises doubts as to their reliability (Table 2.2a).

2.19 There has been a remarkable growth of mechanization of agriculture in Bardhaman ever since 1965, whereas no such tendency is exhibited by Jalpaiguri. Incidentally this latter district seems to have had a certain number of tractors (a little more than 100) already in 1961, probably for purposes of forests clearance at a time when Bardhaman had

practically none. But that tractorization of Jalpaiguri has not shown any increase, whereas it has shot up a strikingly in Bardhaman. Along with tractors such things as electric pumps and oil pumps have also shown an increase in number in Bardhaman, but not so in Jalpaiguri. As to sugarcane crushers, their use in Bardhaman seems to have practically disappeared following a trend of steep decline. It goes without saying that the mechanization in Bardhaman that we are talking about is insignificant when compared with the phenomenon taking place in certain other parts of the country (Tables 2.5a and 2.5b).

Table - 2.5 (a)
Growth of Mechanization
- Jalpaiguri -

Item	Year					
	1945	1951	1956	1961	1966	1972
1	2	3	4	5	6	7
Electric Pumpsets	3	3	-	2	-	-
Oil engines with Pumpsets	1	14	18	14	30	-
Tractors	-	15	107	109	47	53
Sugarcane Crushers	75	67	65	187	153	13

Table - 2.5 (b)
Growth of Mechanization
- Bardhaman -

Item	Year					
	1945	1951	1956	1961	1966	1972
1	2	3	4	5	6	7
Electric Pumpsets	-	42	3	50	53	-
Oil engines with Pumpsets	4	40	114	75	139	-
Tractors	-	22	27	25	47	135
Sugarcane Crushers	1561	1740	815	739	933	101

Note: - Not Available.

2.20 The expansion of area under paddy in Bardhaman follows a pattern every similar to that of net sown area (Diagram 2.4). That is to say, the decline stopped in 1935 and there was a sharp recovery during the next ten years, compensating for the entire loss during the previous half a century. After 1945 expansion of paddy area has continued to take place but at a moderate pace. (Increase of 132 percent between 1935-45 and of only 16 percent between 1945-77). In Jalpaiguri, however, the reversal of the declining trend commenced only around 1950 and the pace has been faster than that in Bardhaman. (Increase of about 60 percent between 1960 and 1977).

2.21 Expansion of Paddy area in Bardhaman has been, just like net sown area, accompanied by a parallel movement of irrigated area (under paddy). This, however, is not so in the case of Jalpaiguri where irrigated acreage did not rise during this period and, therefore, cannot be credited for the expansion of paddy area (Diagram 2.4).

2.22 Just as with acreage, yield per acre of Paddy has also grown in Bardhaman following an upward trend which has its beginning before independence. Not only that there is no spurt with the introduction of planning or during the so called green-revolution years around 1966, the trend actually flattens out after 1960 (Diagram 2.11). In the case of Jalpaiguri, there is a gentle upward trend between 1945 and 1960 but after that it turns downwards. Thus, in both the districts one has to note the peculiar fact that there was some kind of a dynamism from the mid 1940's till the late 1950's which seems to get exhausted in the course of the 1960's and the 1970's. One can therefore say that this dynamism can not be accounted for by the promotional efforts of planning. The combined effect of increase in acreage under paddy and the changes in yield per acre as noted above gives rise to an upward trend in paddy production in both the

districts which also has a beginning in 1945 (Diagram 2.12).

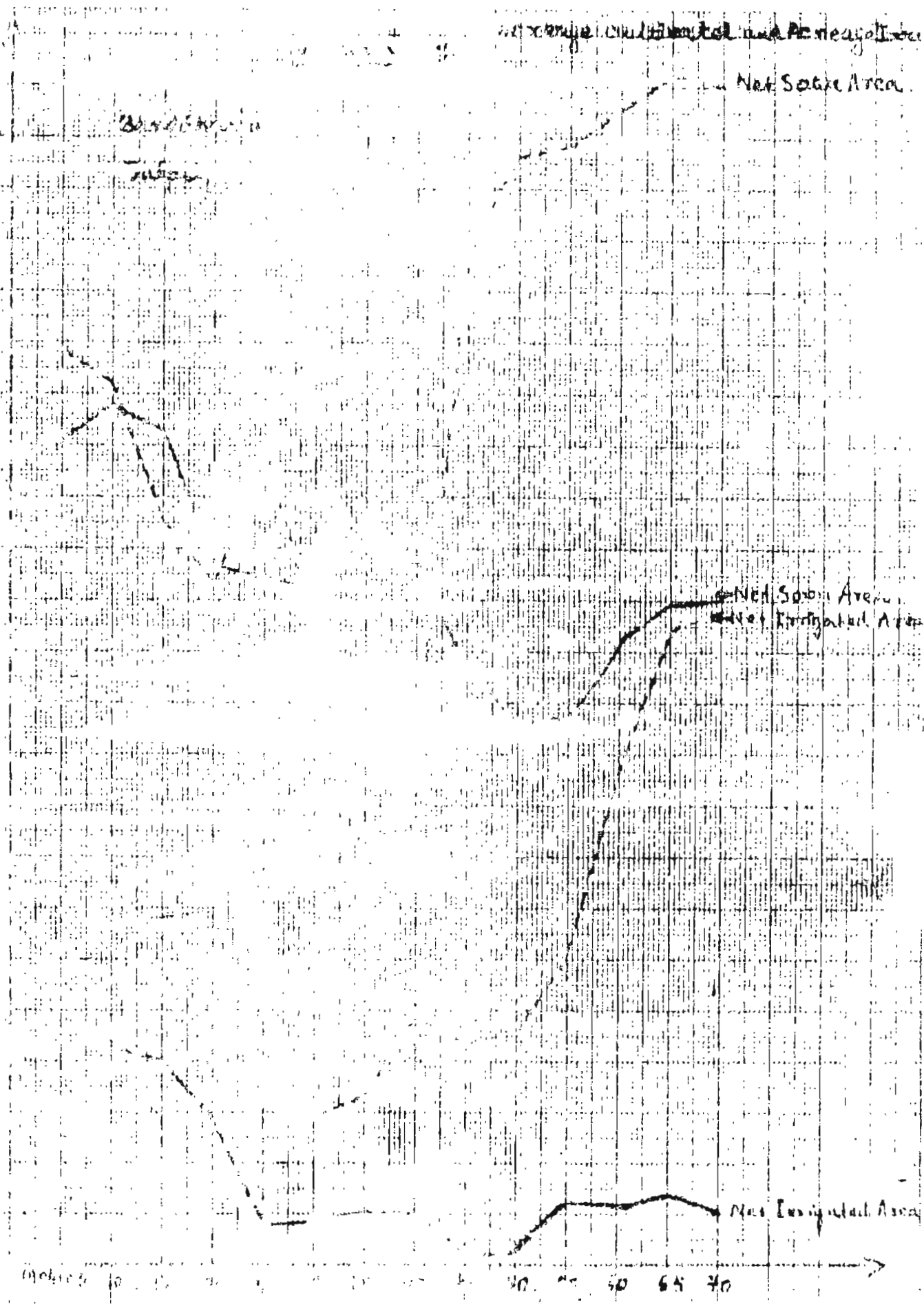
2.23 As to other crops, sugarcane and oilseeds in Bardhaman and tobacco and oilseeds in Jalpaiguri, continued the pre-independence trend of losing importance in terms of acreage occupied by them. Wheat however, becomes important in both the districts. In Bardhaman, there are two other crops that start to figure prominently in the cropping pattern, namely potato and summer paddy. These crops, however, do not gain ground in Jalpaiguri. (Tables 2.4a and 2.4b).

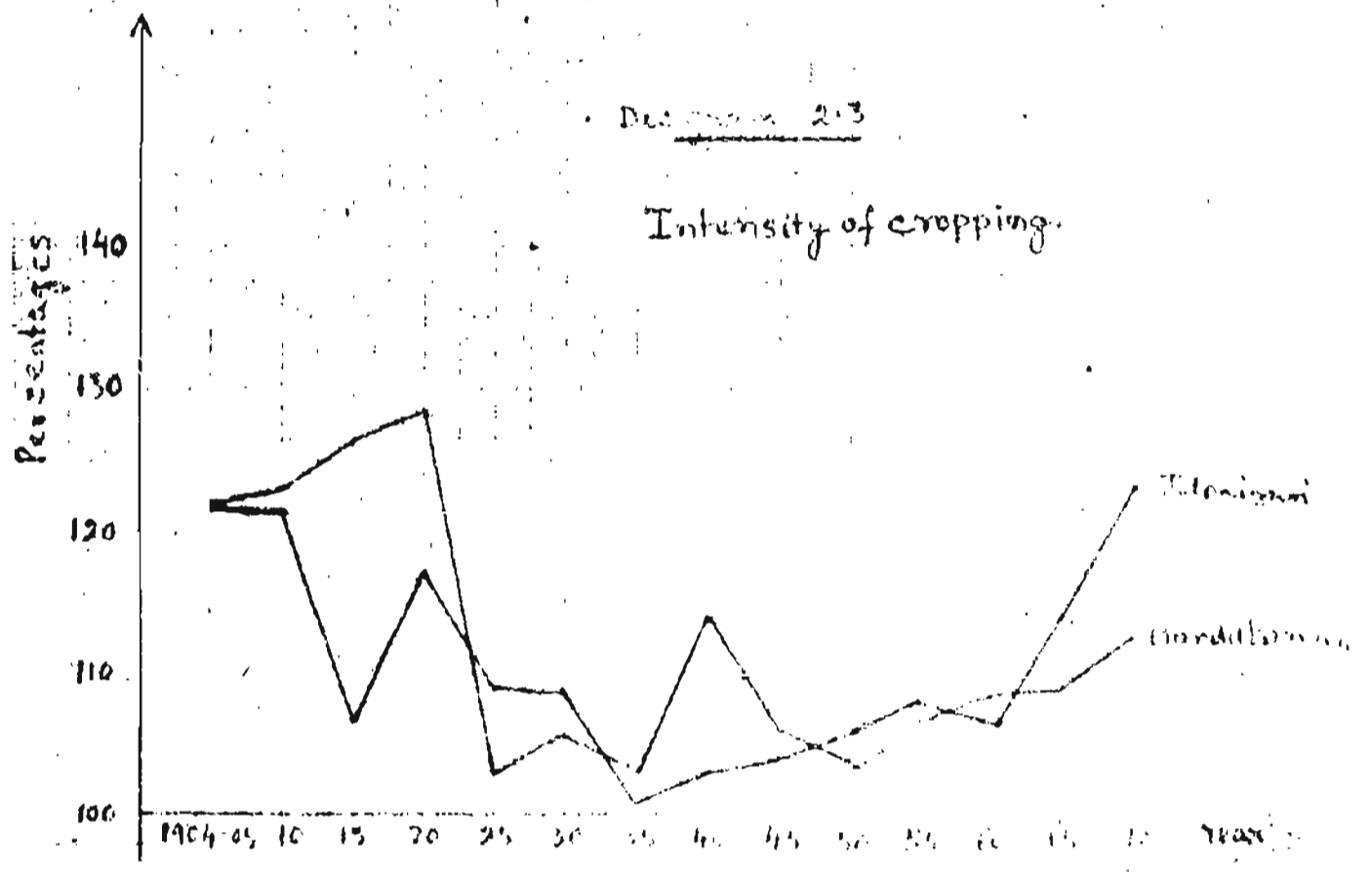
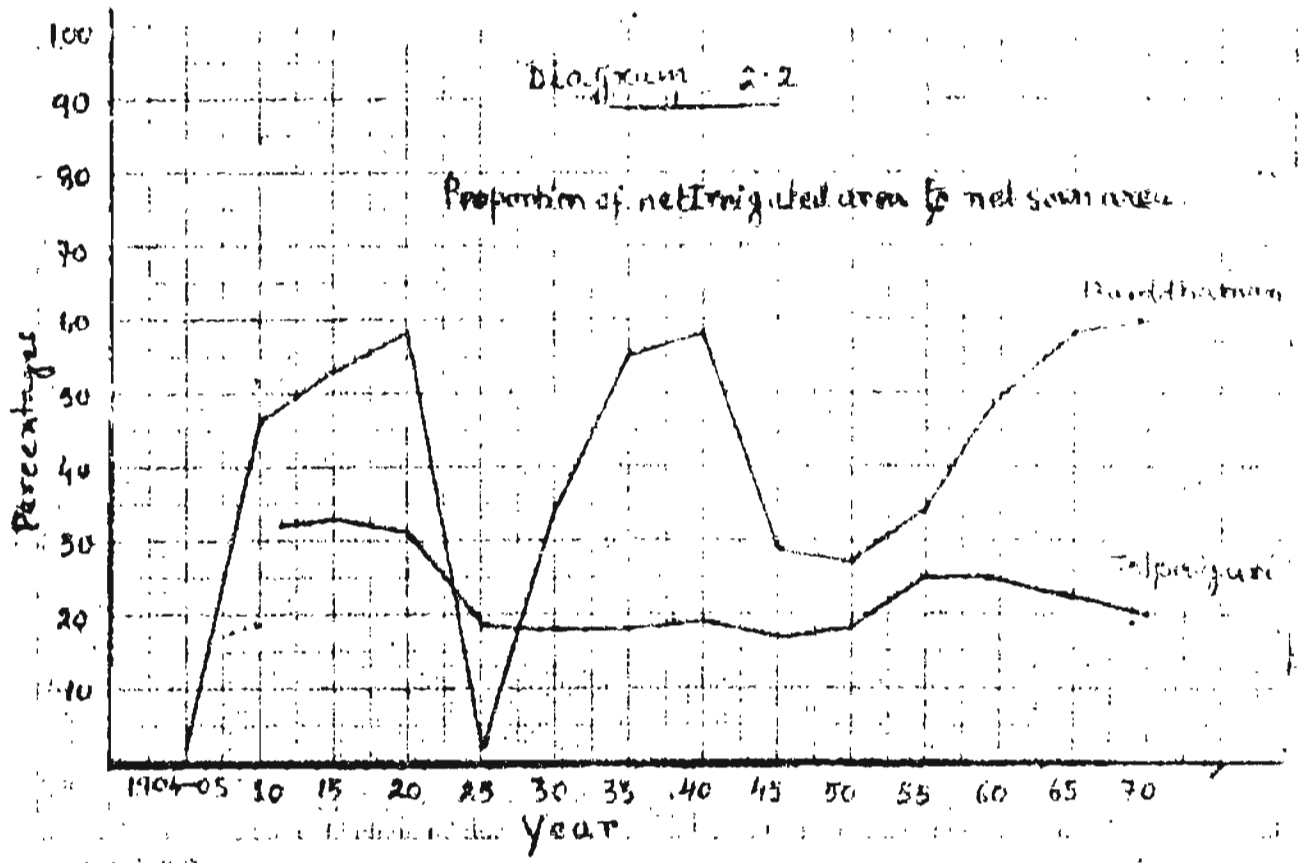
2.24 Yield per acre of wheat however, remains stable at a low level from 1945 till about 1966-67 after which there is a sudden increase taking place in Bardhaman in 1968 and in Jalpaiguri in 1970. In the case of Bardhaman the momentum gets lost soon after (Diagram 2.13). One can infer that this might have been due to the introduction of H.Y.V. seeds which did not amount to a continuing process. In Jalpaiguri, however, the momentum seems to have kept up more persistently. As to acreage under Tea which remained stagnant between 1930 and 1955 it started to expand again after that and kept up an upward course more or less at the same pace as net sown area. The result is a constancy of the proportion of area under Tea, which it may be recalled showed an increasing trend in the period before 1930.

2.25 As to the two crops, tobacco and oilseeds, which lost importance in terms of acreage in these two districts, the behaviour pattern of yield per acre is somewhat different. Thus, both tobacco and oilseeds, the former only in Jalpaiguri and the latter in both the districts, recorded declines in yield per acre between 1945 and 1960. After that tobacco in Jalpaiguri remained at the same level till 1970 and then showed

a consistent upwards movement (Diagram 2.14). In the case of oilseeds, the movements after 1960 do not reveal any upwards or downwards trend (Table 2.13). As to Tea in Jalpaiguri production has increased since 1955 along with acreage expansion. Yield per acre of jute has remained stable (Diagram 2.14) while its acreage declined.

2.26 In the case of potato, data are available only from 1962 onwards. There does not seem to be much of a trend till 1970 and there is a sharp movement upwards after that. It may perhaps be said that if there has been at all any green revolution effects in these two districts, they have affected only wheat and potato and have started to be visible only from 1970. (Diagram 2.16).





River Abundances: Total and the included

big 8 year 2014

Balabolhannan - - - - -

Trampolines

River Area

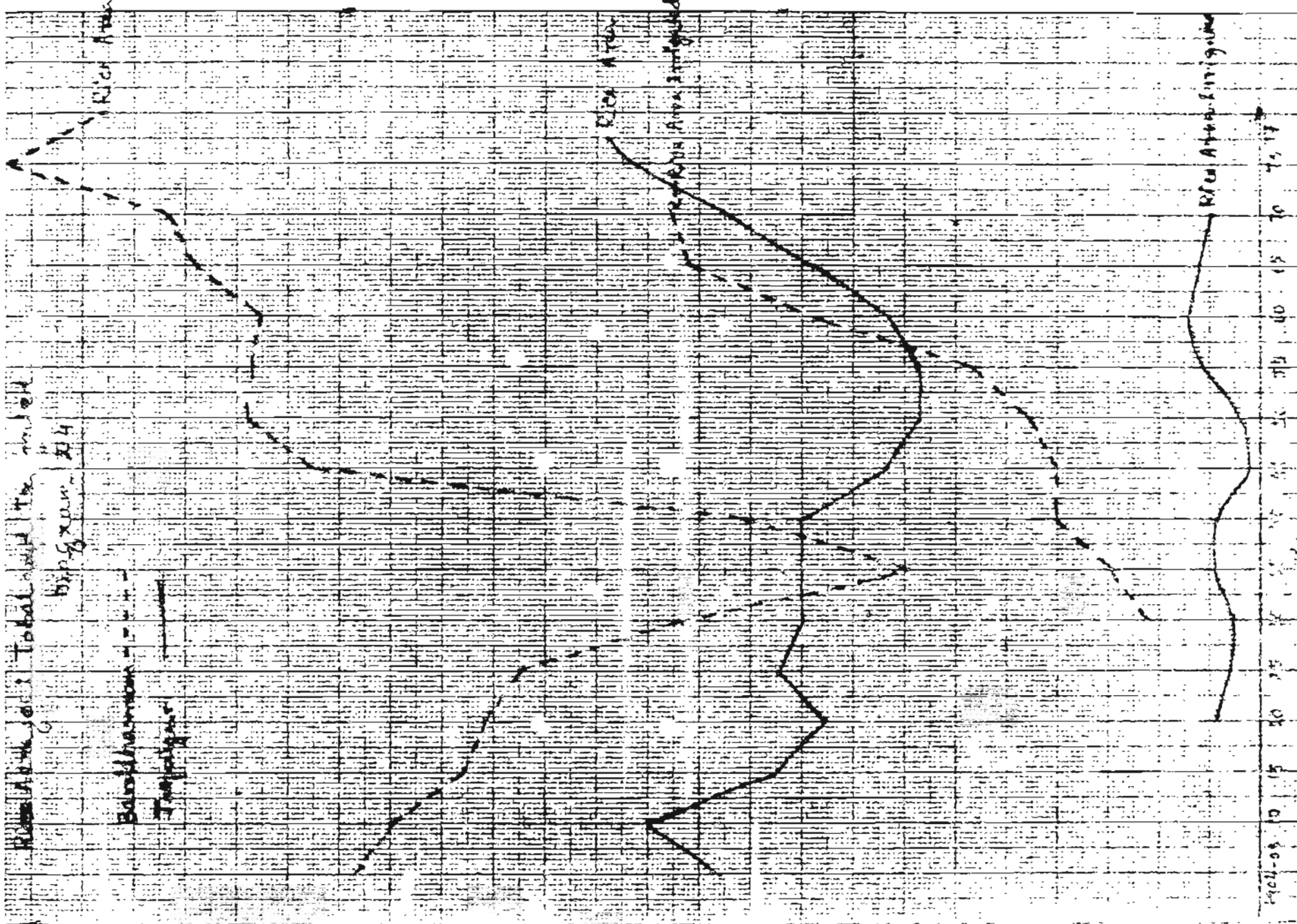
River Area

River Area

River Area

1944-08 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

Year



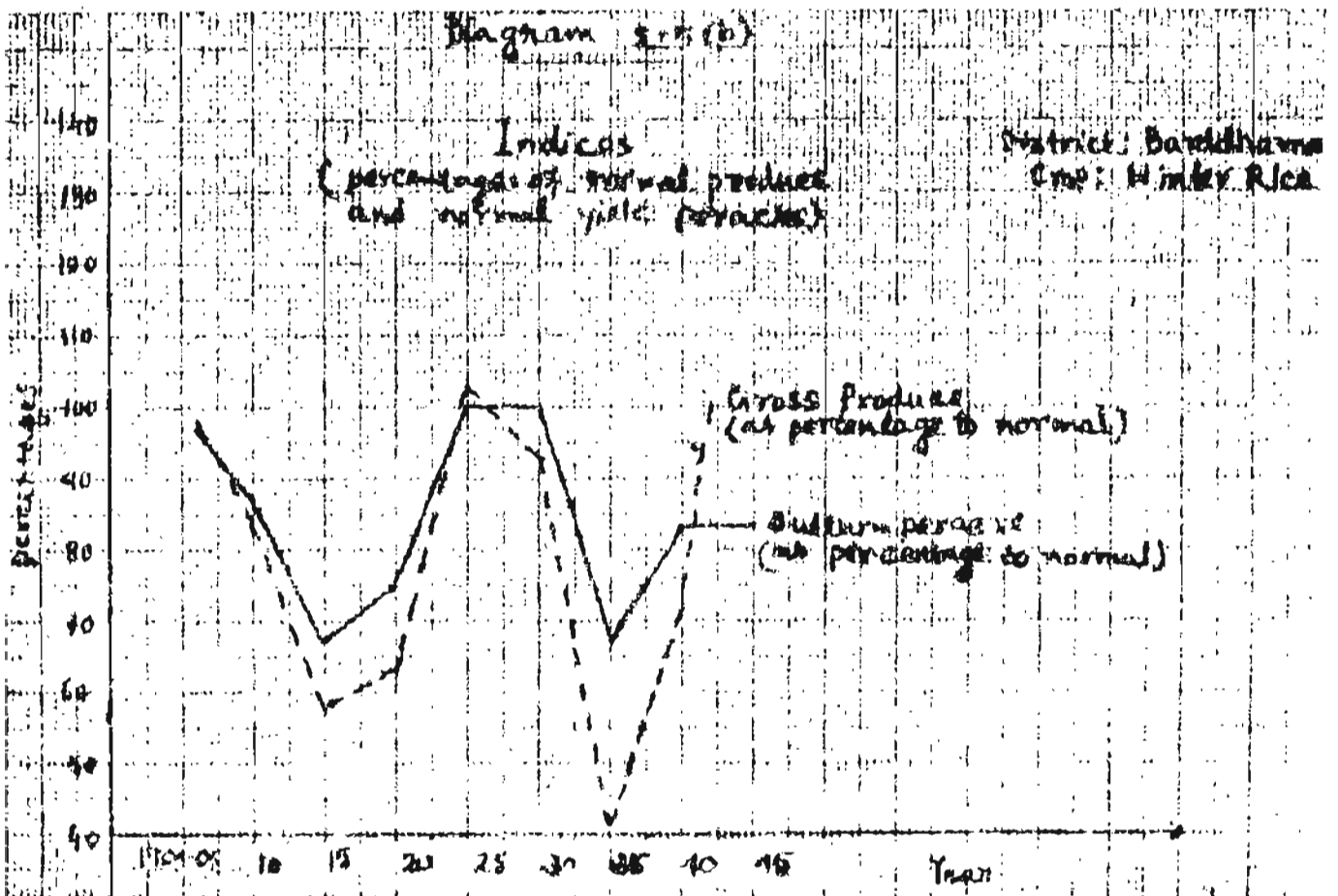
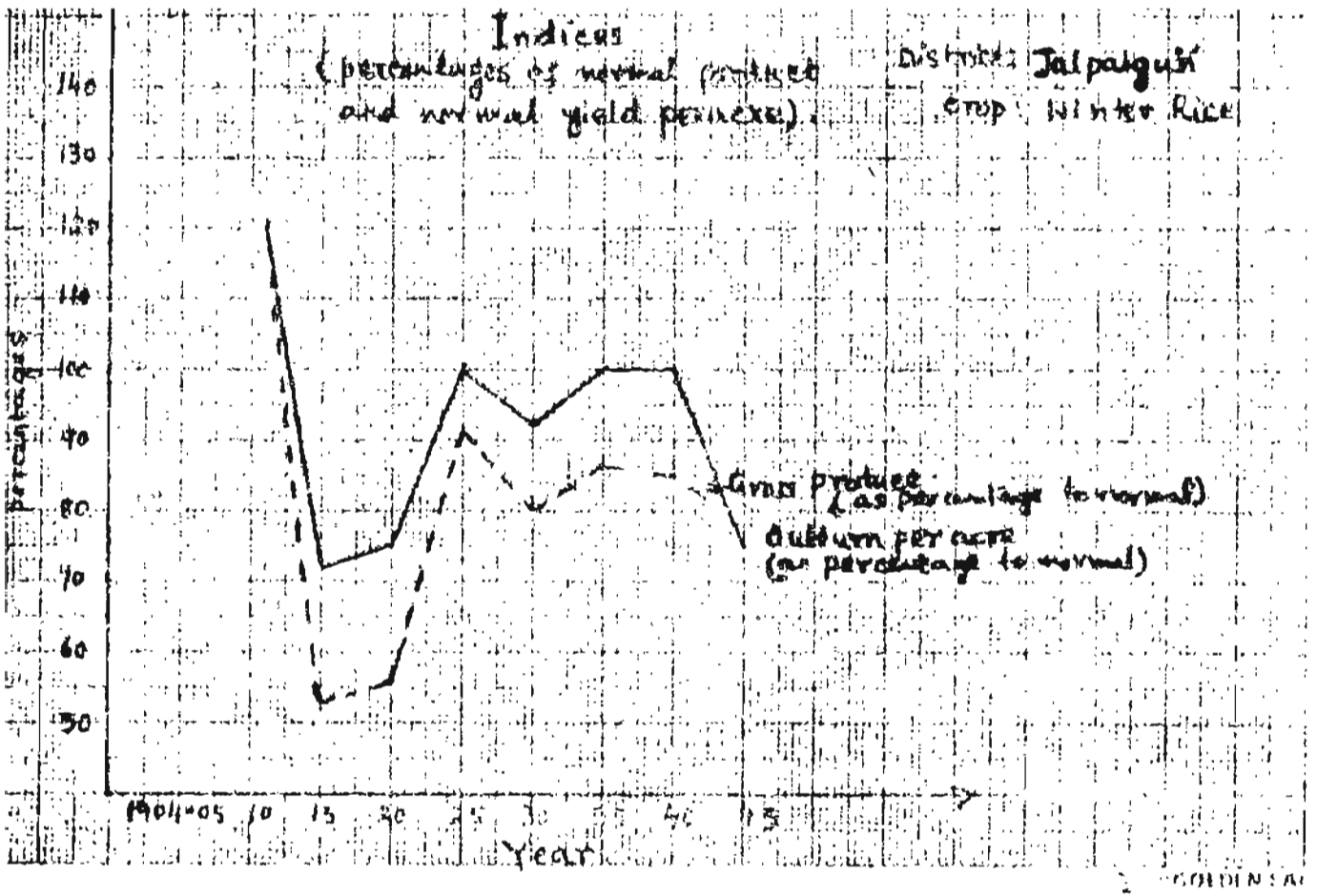
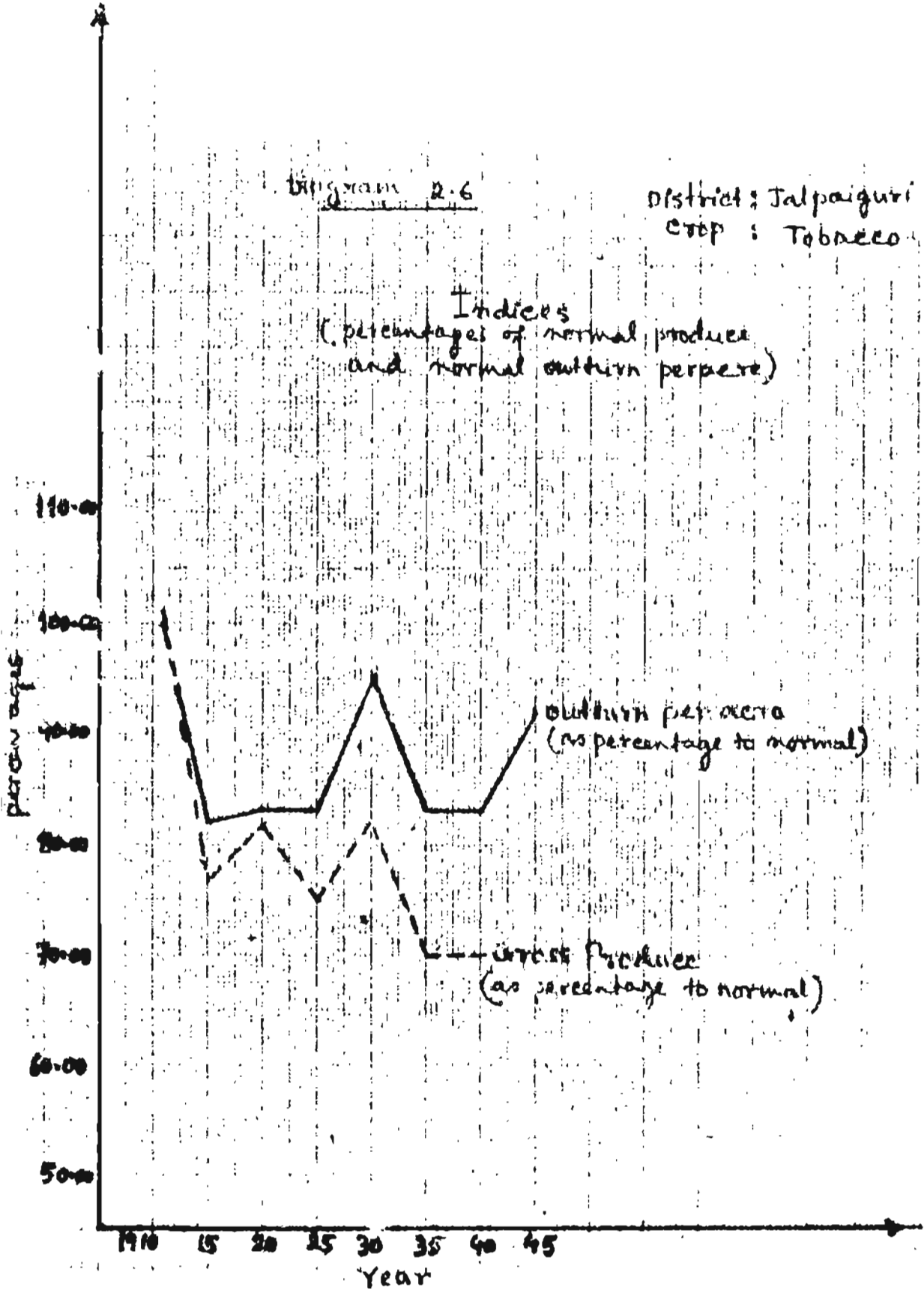


Diagram 2.6

District: Jalpaiguri
Crop: Tobacco

Indices
(percentages of normal produce
and normal output per acre)



Map No. 2-7

District: Jalpaiguri
crop: Jute

Indices
(percentages of normal produce
and normal outturn per acre)

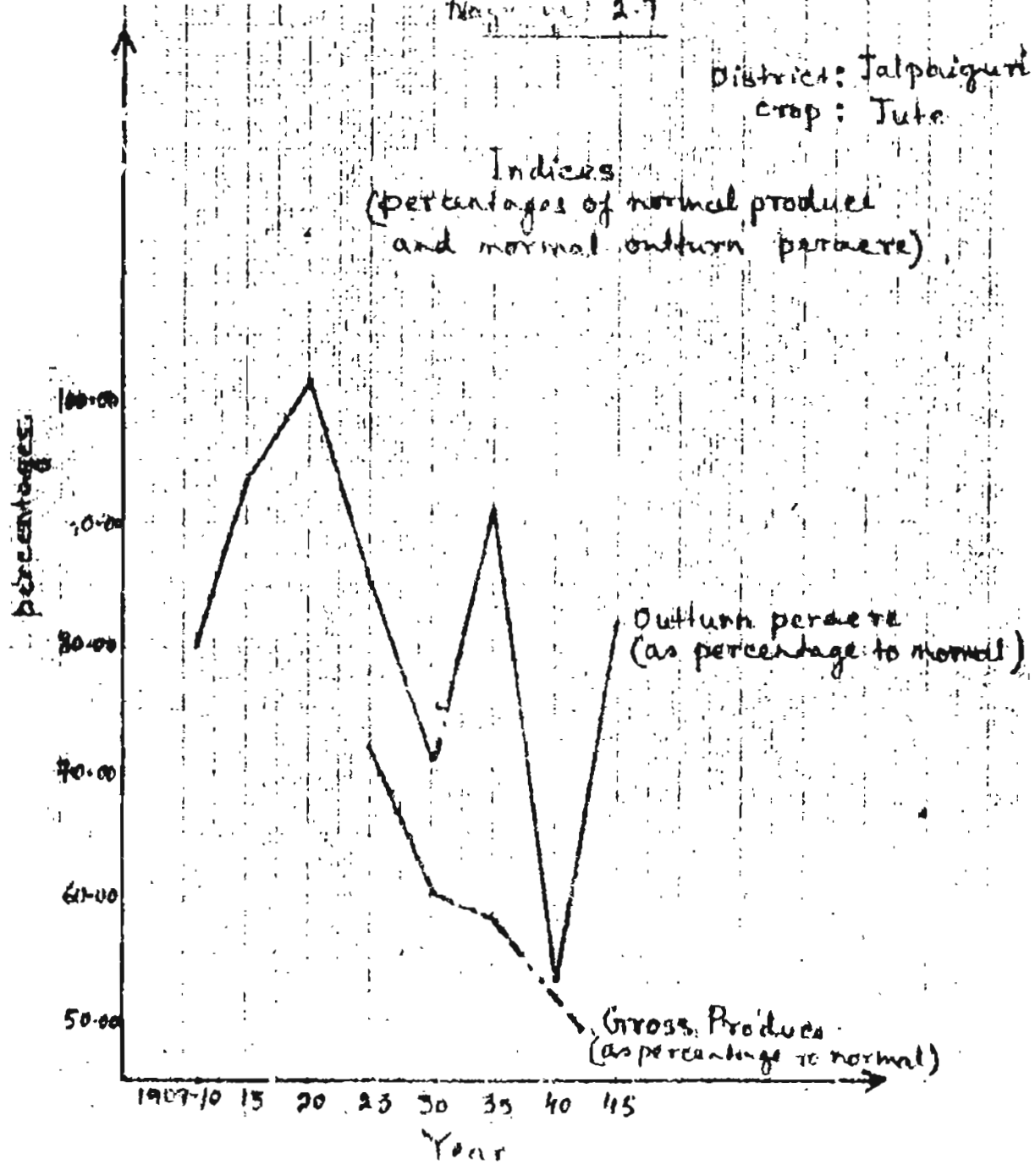
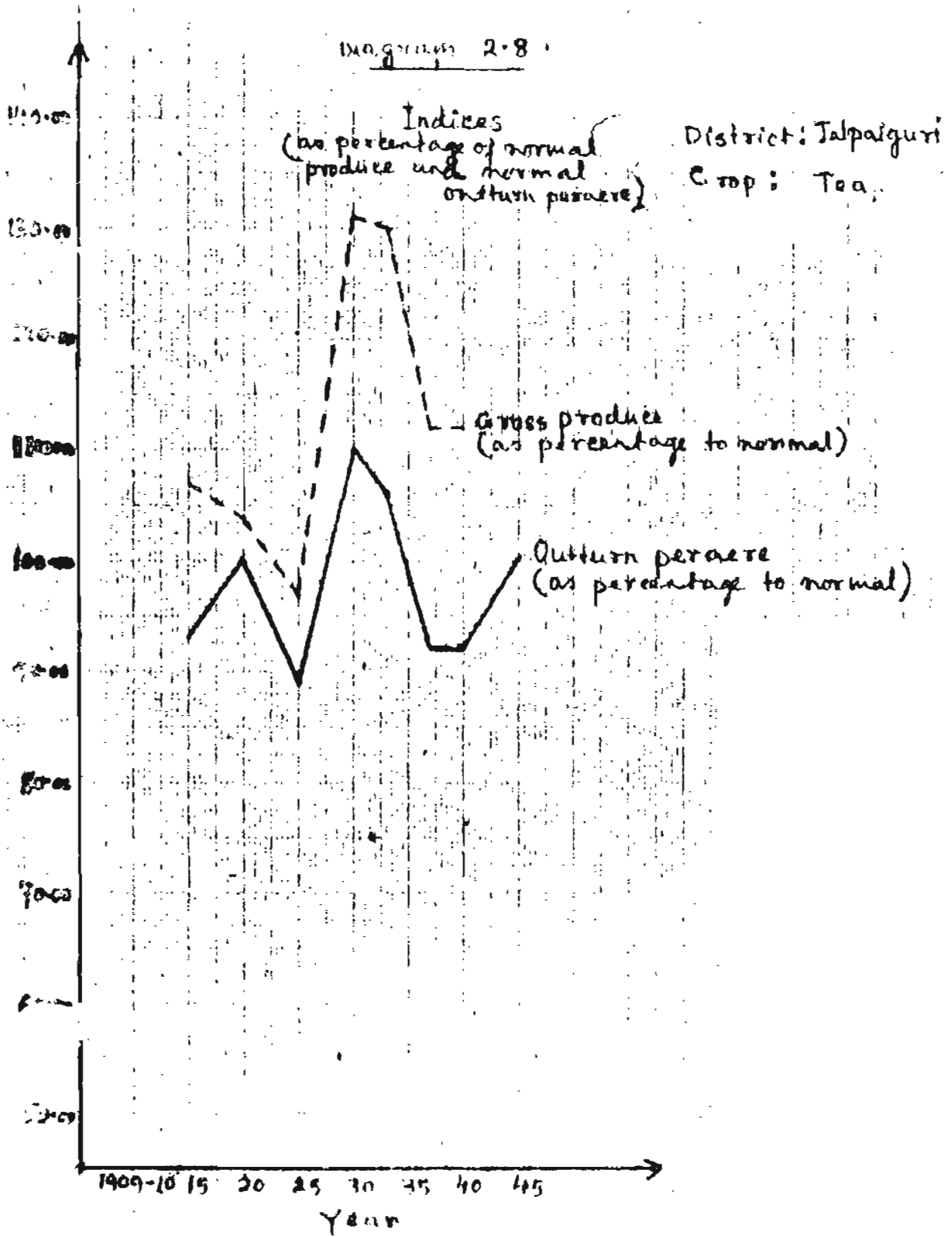


Diagram 2.8



May 21 1947

District: Bardhaman
crop: Rape and Mustard.

Indices
(as percentage of normal produce
and normal culture practice)

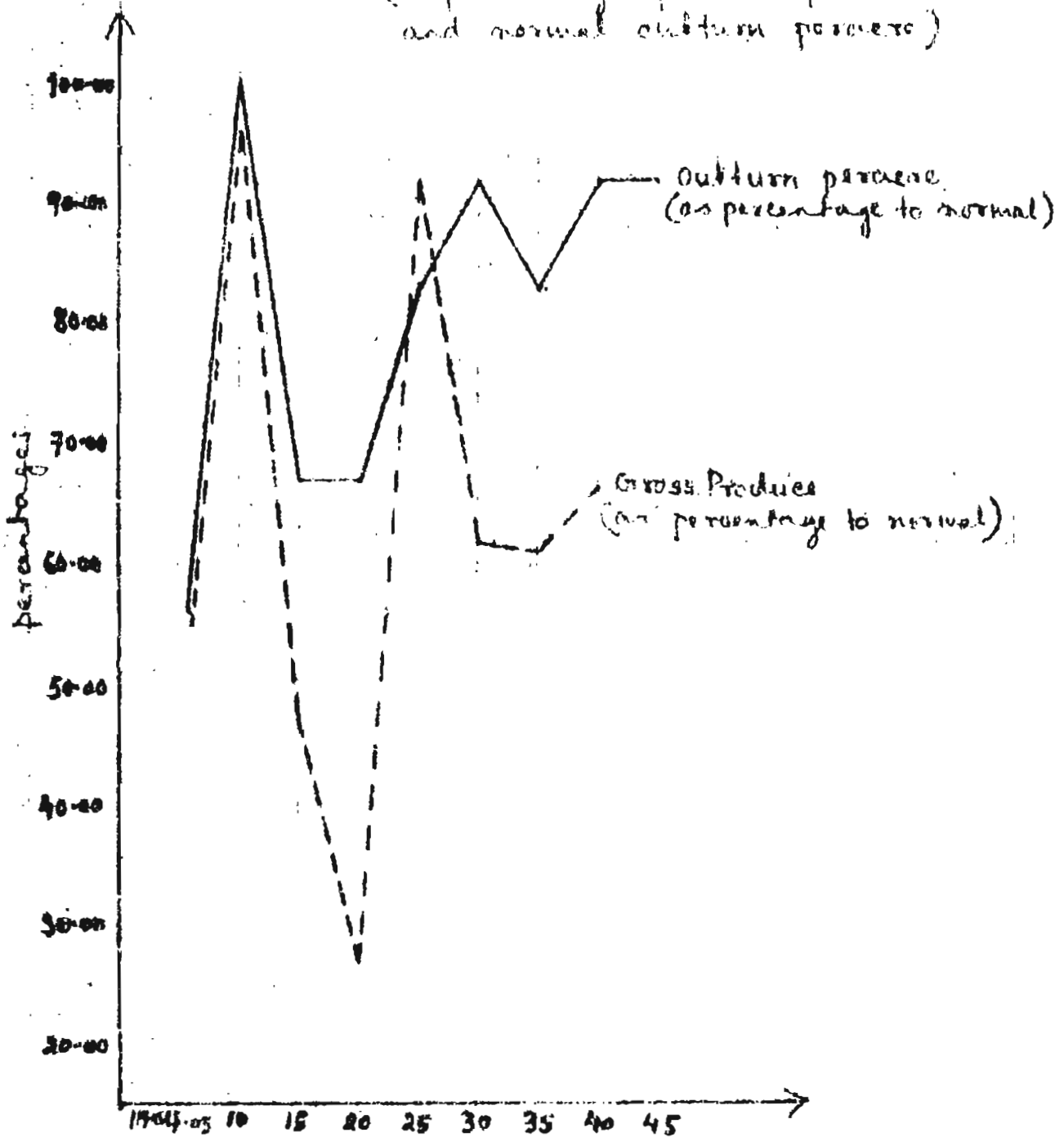
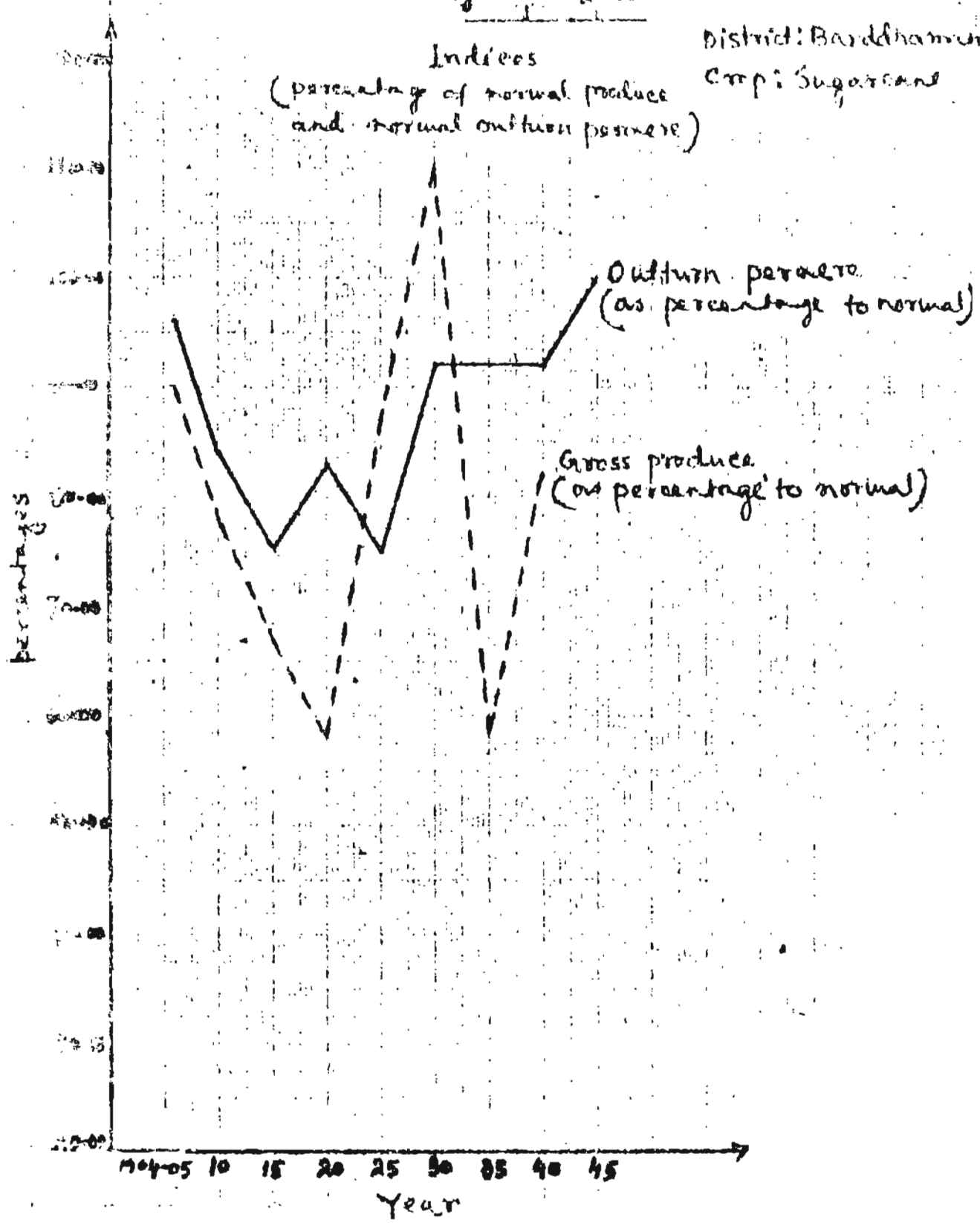


Diagram 2.10

District: Bardhaman

Crop: Sugarcane

Indices
(percentage of normal produce
and normal outturn per acre)



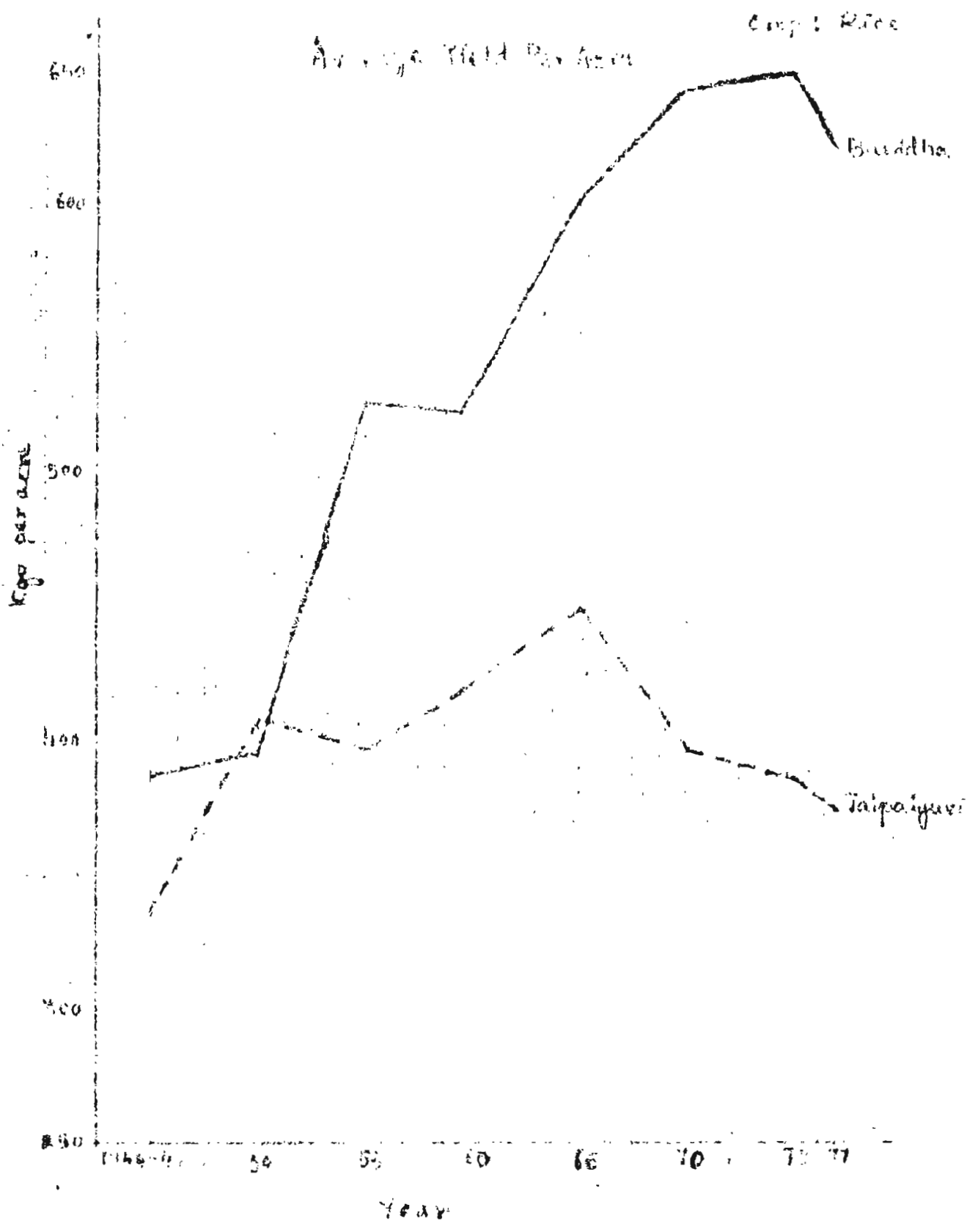


Diagram 212

Growth of Production

crop : Rice

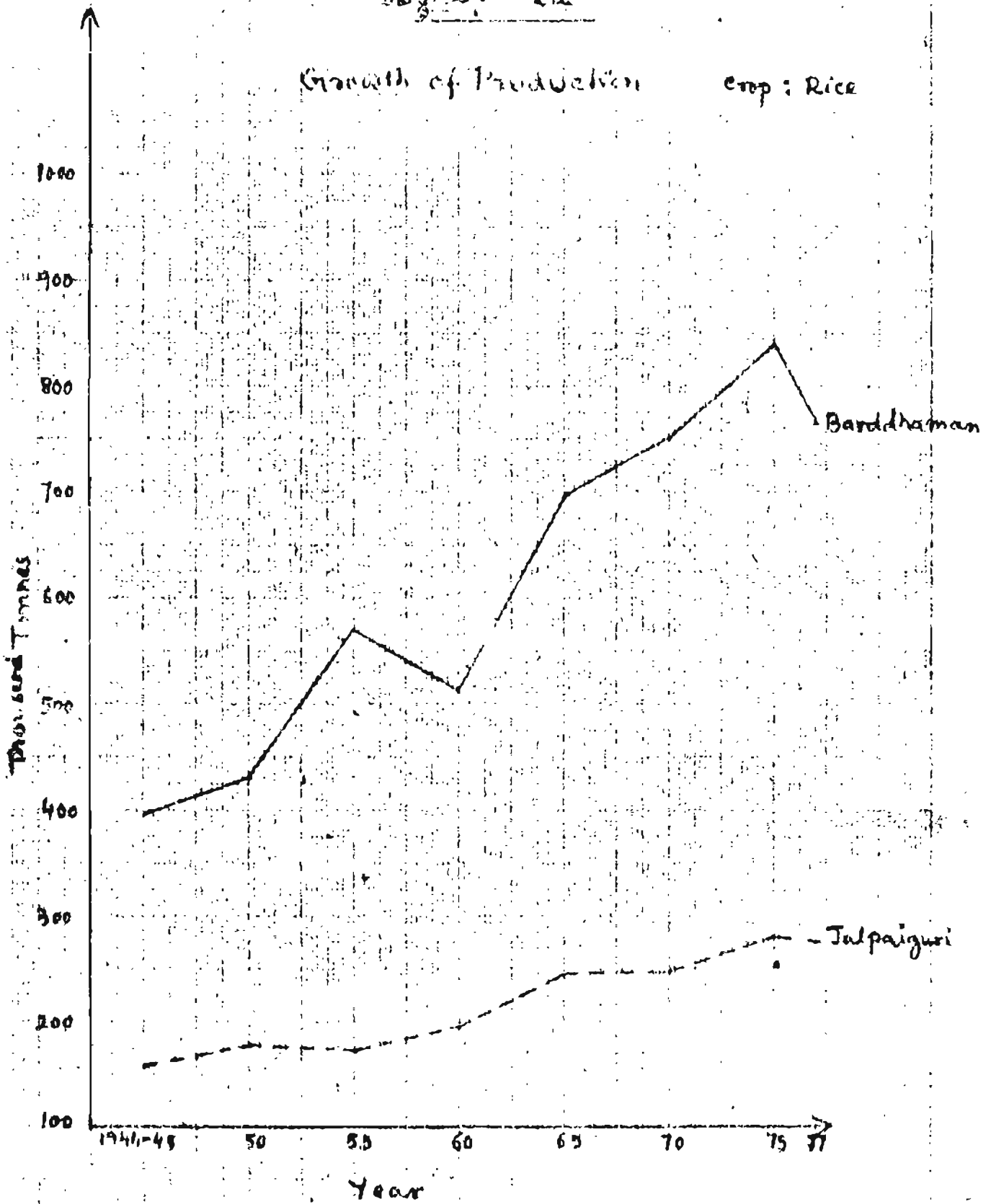
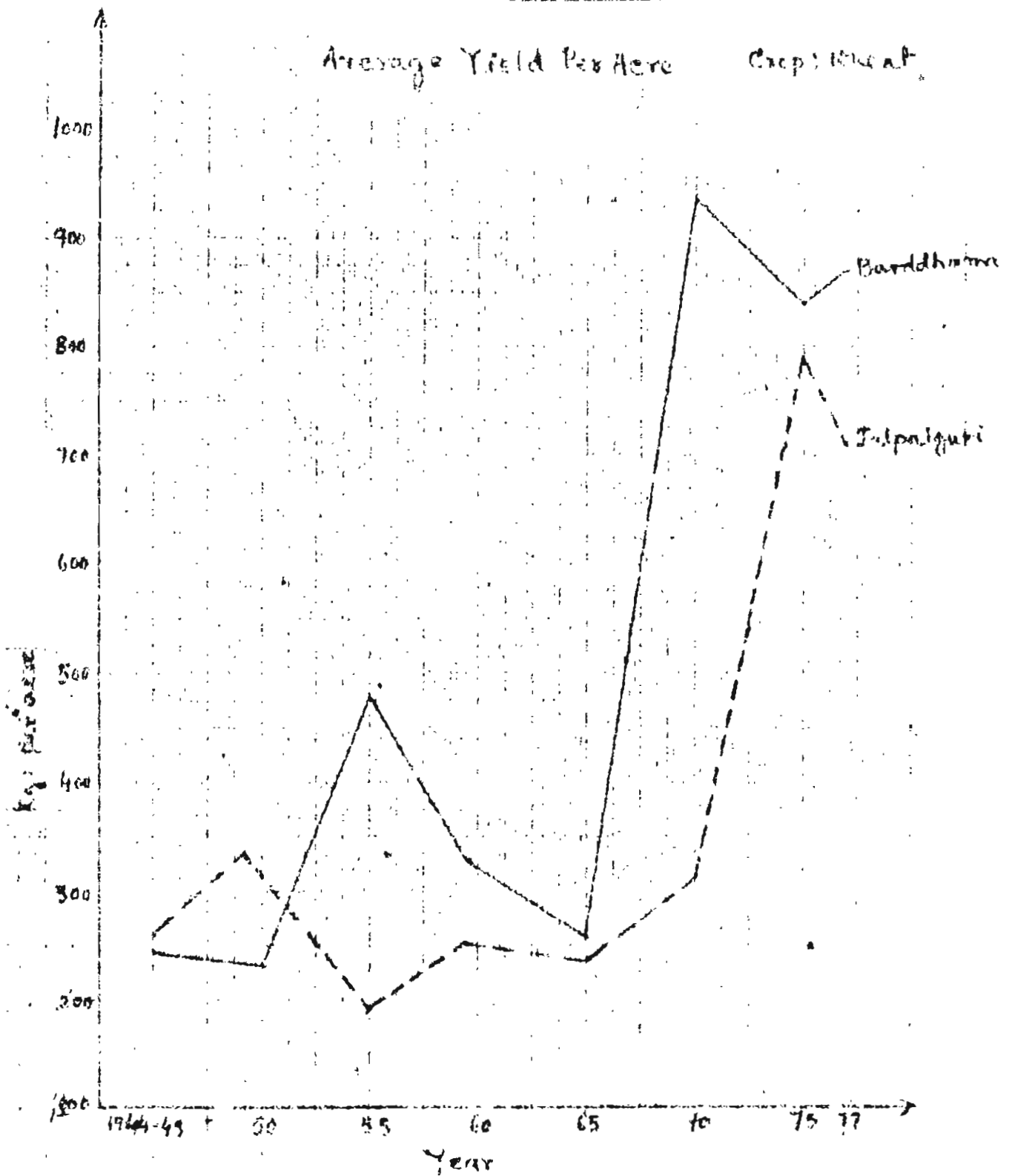


Diagram 2A2



2014

Average Yield Per Acre

Crop: Oilseeds

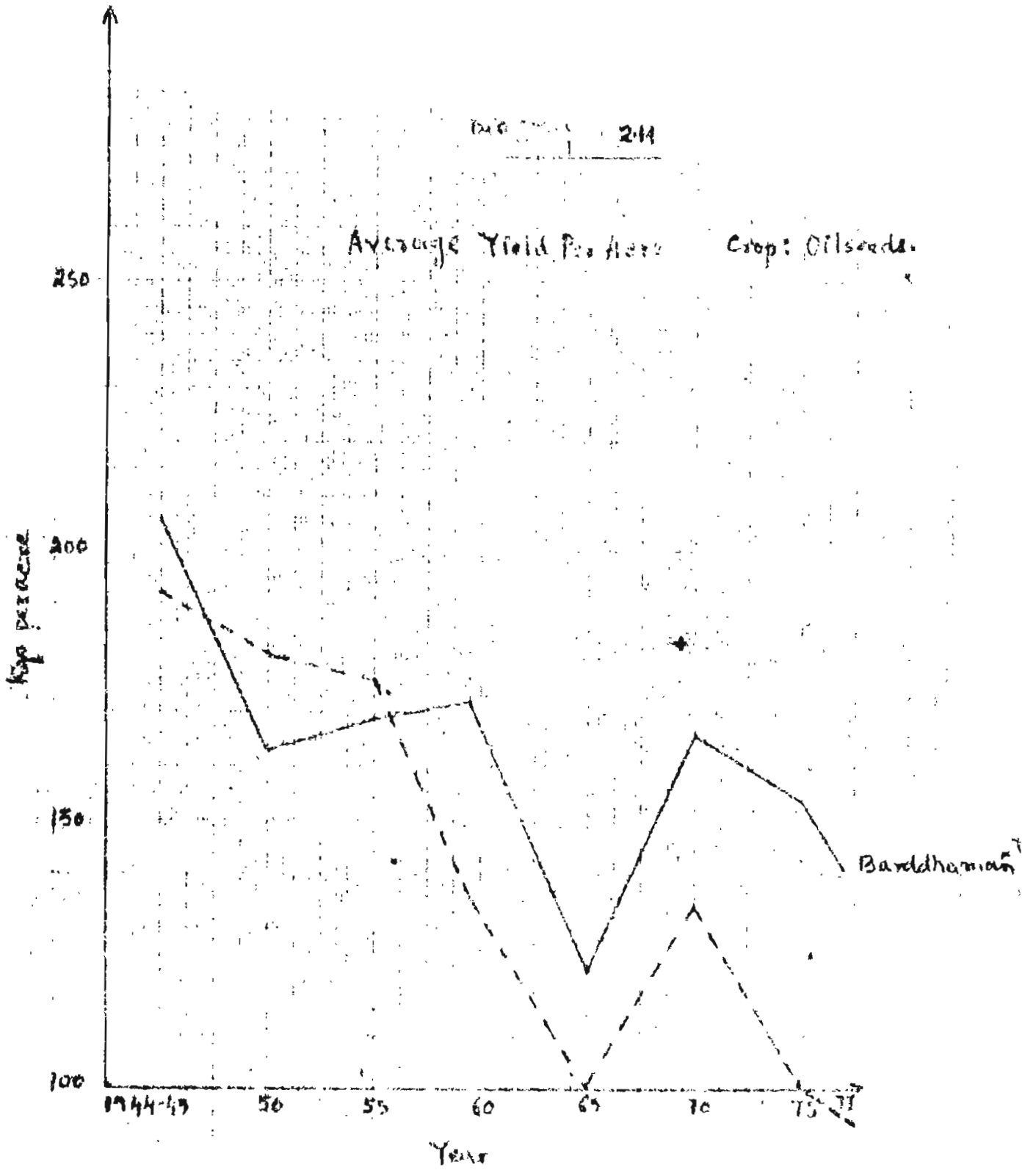
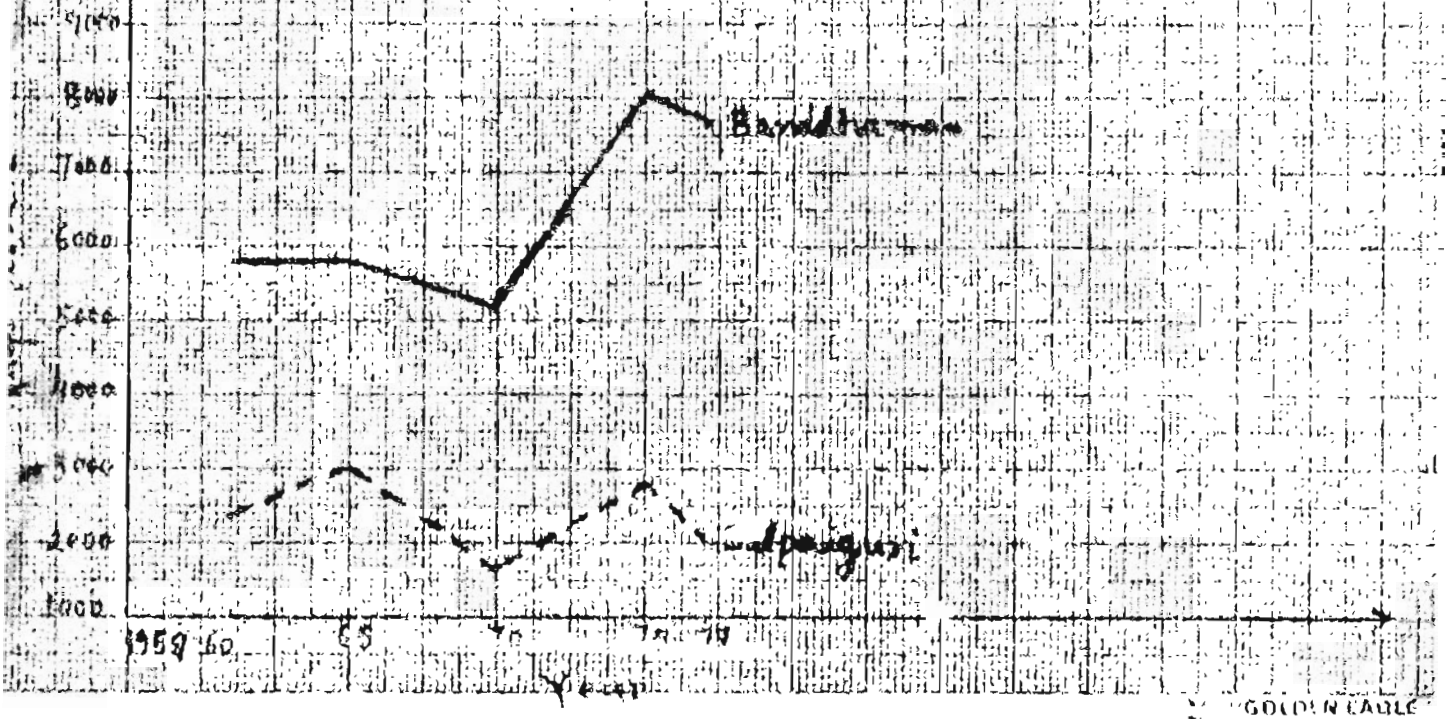


Diagram 2.15

Average Yield per Acre

Crop : Potato

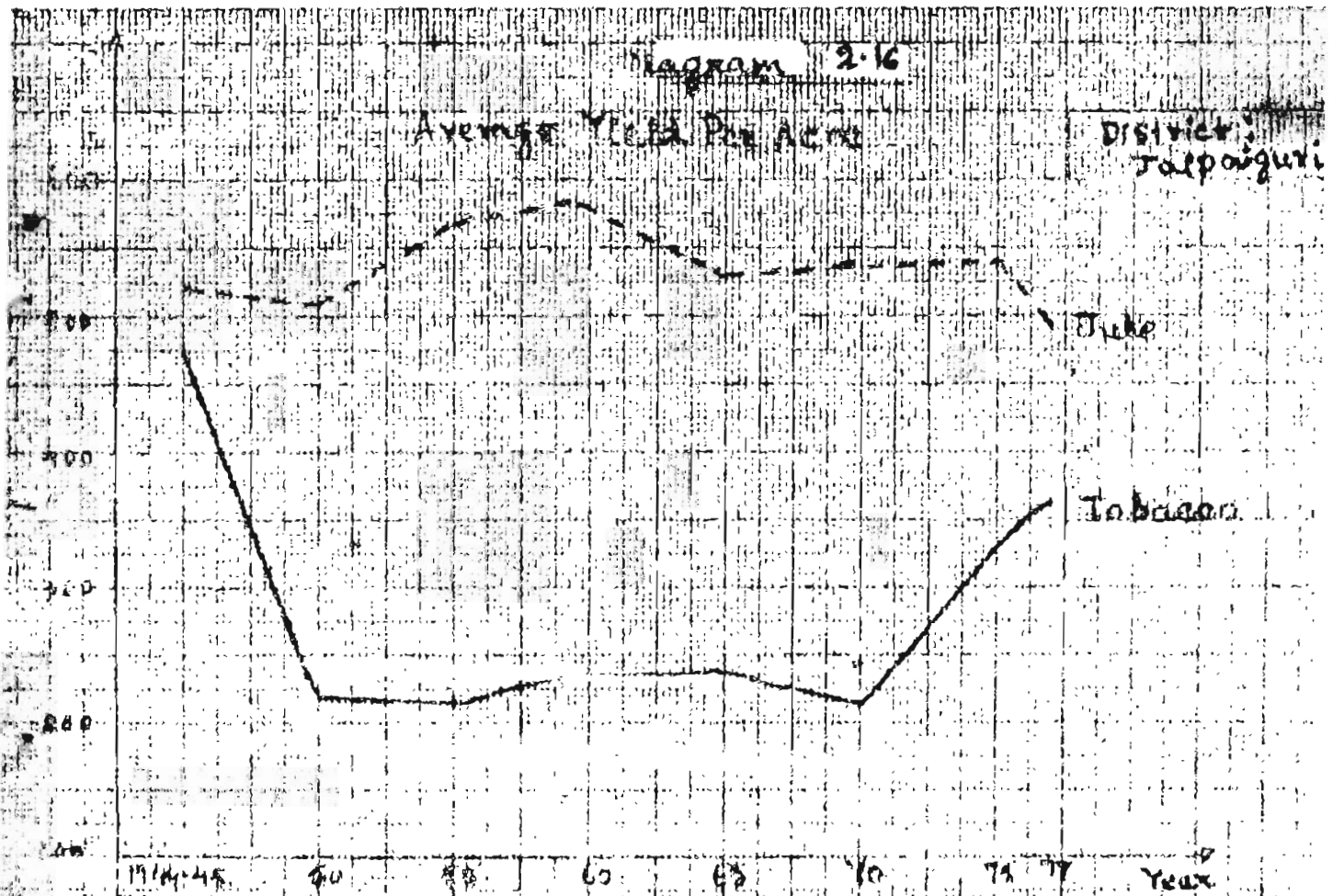


GOLDEN TABLE

Diagram 2.16

Average Yield per Acre

District : Jalpaiguri



Chapter 3

Relations of Production

3.1 Data pertaining to relations of production are scanty and what little is available does not permit comparisons over time. On the most important aspect of these relations, namely distribution of land among farmers of different size, we have got comparable data for 1951 & 1961. Diagrams 3.1 & 3.2 and Tables 3.1 & 3.2 compare the frequency distributions of holdings in the two districts. It would seem that the distribution is very much more skewed in Bardhaman than in Jalpaiguri. Despite this difference there does not seem to be much of a difference in the inequality of distribution as measured by the Concentration Ratio. The Concentration Curves shown in Diagram 3.3 are almost overlapping, with just a marginally higher degree of inequality in Bardhaman in the lower size range. There does not seem to have been any significant changes in these distributions between 1951 & 1961. Nothing can be said of what the conditions might have been before 1951 or after 1961. The only important point to note here is that the greater preponderance of small farmers and the greater inequality of distribution of land in Bardhaman which is in apparent contradiction with Bardhaman being the more advanced district. This particular feature of the relations of production in Bardhaman does not seem to have affected the growth of the forces of production in that district that we have recorded in the previous chapter.

3.2 The second aspect of land relations on which we have got some data refers to tenancy. The institution would seem to be very much more important in Jalpaiguri. Land under tenancy constituted in 1969-70 about 28% of total land under cultivation in Jalpaiguri as against 20% in Bardhaman. Table 3.4 shows that in 1961 of all the holdings as much

Table 3.1
Cumulative Distribution of Holdings by Size-Groups - 1961

Size of holding (in acres)	Cumulative Percentage of households	
	Bardhaman	Jalpaiguri
1	2	3
Less than 1.0	8.82	8.25
1.0 to 2.4	35.86	22.61
2.5 to 4.9	62.60	52.96
5.0 to 7.4	80.17	83.01
7.5 to 9.9	87.19	88.72
10.0 to 12.4	92.19	94.98
12.5 to 14.9	94.20	96.19
15.0 to 29.9	98.22	99.54
30.0 to 49.9	98.60	99.71
50.0 and above	100.00	100.00
All size	100.00	100.00

Source: Census, 1961 (Household Economic Tables, West Bengal And Sikkim).

Table 3.2

Cumulative Distribution of Holdings by Size-Groups — 1951

Size of Holding (in acres)	Bardhaman	Jalpaiguri
	Cumulative Percentages	Cumulative Percentages
1	2	3
Less than 1.00	13.20	4.20
1.01 to 2.00	30.80	13.30
2.01 to 3.00	44.70	24.60
3.01 to 4.00	56.80	31.80
4.01 to 5.00	65.40	50.90
5.01 to 6.00	72.90	55.10
6.01 to 7.00	79.40	59.50
7.01 to 8.00	84.80	65.20
8.01 to 9.00	87.60	67.40
9.01 to 10.00	90.70	78.40
10.01 to 15.00	94.40	87.70
15.01 to 20.00	96.60	92.30
20.01 to 25.00	97.70	95.30
25.01 to 33.33	98.60	97.30
33.34 and above	100.00	100.00
All size	100.00	100.00

Source: Census, 1951 (An Account of Land Management in West Bengal)

Table - 3.3

Cumulative Distribution of Total Cultivated Land by Size-Groups -1951

Size of holding (in acres)	Bardhaman	Jalpaiguri
	Cumulative percentages	Cumulative percentages
1	2	3
less than 1.00	1.32	0.25
1.01 to 2.00	6.57	1.90
2.01 to 3.00	13.50	5.31
3.01 to 4.00	21.94	8.34
4.01 to 5.00	29.61	18.69
5.01 to 6.00	37.84	21.49
6.01 to 7.00	46.32	24.96
7.01 to 8.00	54.34	30.15
8.01 to 9.00	60.60	32.35
9.01 to 10.00	66.02	44.92
10.01 to 15.00	75.37	58.91
15.01 to 20.00	83.22	68.51
20.01 to 25.00	88.16	76.71
25.01 to 33.33	93.25	83.75
33.34 and above	100.00	100.00
All size	100.00	100.00

Source: Same as Table 3:2

Table 3.4

Proportions of Owners and Tenants by Size - Groups - 1961

Size of Holding (in acres)	Bardhaman			Jalpaiguri		
	Percentages of Size-Group Total					
	Pure Owners	Pure Tenants	Part owners	Pure owners	Pure Tenants	Part owners
1	2	3	4	5	6	7
Less than 1.0	85.98	10.40	3.62	19.17	80.19	0.63
1.0 to 2.4	71.77	18.13	10.10	42.06	51.98	5.96
2.5 to 4.9	57.26	17.76	25.04	34.28	50.21	15.51
5.0 to 7.4	60.88	10.14	28.97	39.26	46.46	14.28
7.5 to 9.9	66.31	6.81	26.88	46.27	24.73	29.00
10.0 to 12.4	73.94	3.81	22.25	58.00	25.01	16.98
12.5 to 14.9	75.25	2.87	21.88	58.39	10.07	31.54
15.0 to 29.9	83.74	1.27	14.99	69.61	92.01	21.18
30.0 to 49.9	84.12	0.58	15.29	76.19	9.52	14.28
50.0 and above	77.78	14.81	7.41	53.33	13.33	33.34
Unspecified	98.18	1.15	0.66	93.22	6.78	..
All size	67.91	13.14	18.95	39.51	46.72	13.77

Source: Census, 1961 (Household Economic Tables, West Bengal And Sikkim).



as 47% where held by pure tenants, that is tenants owing no land of their own. This percentage was much lower in Bardhaman - only 13%. The proportion of pure owners was nearly 70% in Bardhaman as compared with only 40% in Jalpaiguri. Yet another difference lies in the fact that the proportion of holdings of mixed tenure, that is consisting of partly owned and partly rented land, is higher in Bardhaman. This reflects the fact that much of the leasing in of land in Bardhaman is carried out by relatively bigger farmers. This is seen very dramatically in the extremely high proportion of pure owners in the smaller size group in Bardhaman as compared to the very low figure for the same in Jalpaiguri. A corroboration of the same fact is seen in Table 3.5. The proportion of land owners leasing out land is more than double for holdings upto three acres in Bardhaman as compared with Jalpaiguri. The relation is exactly opposite among the big sized owners - the proportion of owners leasing out is nearly 80% in Jalpaiguri where as it is less than 40% in Bardhaman. This suggest that even as early as in 1951 there was in Bardhaman some amount of what has been called "reverse tenancy" that is, small owners leasing out land to bigger land owners. To the extent leasing out of land is indicative of lack of interest in cultivation and leasing in by bigger farmers an indication of their being oriented towards production, the reverse tenancy of Bardhaman is in conformity with the district being relatively more advanced.

3.3 A third aspect of the relations of production consists of the employment of hired labourers. We have seen in chapter 2 (Tables 2.2(a) & 2.2(b)) that the proportion of agricultural labourers in the working population of Bardhaman is very much higher than that in Jalpaiguri. This of course is in conformity with the greater polarisation of the

Table 3.5

Proportion of Landowners Leasing out Land to Tenants - 1951

Size of Holding (in acres)	Bardhaman	Jalpaiguri
	Percentages	Percentages
1	2	3
Less than 1.00	29.36	13.85
1.01 to 2.00	29.15	14.10
2.01 to 3.00	26.55	13.90
3.01 to 4.00	24.00	20.93
4.01 to 5.00	34.90	17.78
5.01 to 6.00	29.90	36.68
6.01 to 7.00	26.86	29.53
7.01 to 8.00	31.56	34.72
8.01 to 9.00	28.86	53.31
9.01 to 10.00	31.42	34.34
10.01 to 15.00	29.56	53.04
15.01 to 20.00	38.74	65.47
20.01 to 25.00	34.74	77.40
25.01 to 33.33	42.52	78.11
33.34 and above	31.69	78.54
All size.	29.20	32.04

Source: Census, 1951 (An account of Land Management in West Bengal).

population in its relation to land in Bardhaman. Table 3.6 highlights this phenomenon by showing that the number of farm servants per holding is almost 10 times in Bardhaman that of the same in Jalpaiguri. This is true not only on the average but in most of the size groups, even smaller ones. Employment of farm servants indicates not only greater amount of work in the farm but also work all round the year and therefore an agriculture with a greater variety of activities.

Table 3.6

Employment of Hired Workers by Size-Groups of Holdings - 1951

Size of Holding (In acres)	Number of hired workers per household	
	Bardhaman	Jalpaiguri
1	2	3
Less than 1.00	0.07	0.05
1.00 - 2.40	0.24	0.05
2.50 - 4.90	0.44	0.04
5.00 - 7.40	0.85	0.07
7.50 - 9.90	1.19	0.11
10.00 - 12.40	1.62	0.18
12.50 - 14.90	1.94	0.31
15.00 - 29.90	2.88	0.34
30.00 - 49.90	3.80	0.41
50.00 and above	4.78	1.00
Unspecified.	0.12	..
All Size	0.71	0.08

Source: Census, 1951 (An Account of Land Management in West Bengal).

3.4 If the land relations in Jalpaiguri have remained more backward in so far as they may be judged in terms of tenancy and hired labour, there must also have been less of developmental efforts in the former district. We have got some information of interest to us on only one aspect of the developmental super-structure, namely the organisation of co-operatives. It may be seen from Tables 3.7(a) & 3.7(b) that the co-operative movement was far more weak in Jalpaiguri than in Bardhaman immediately after independence. It is also seen that the growth of the movement ever since has been insignificant in Jalpaiguri compared to that in Bardhaman.

Table - 3.7(a)
Jalpaiguri
Progress of Co-operative Movement

Types of Societies	Year	Number of		Working Capital (Rs. in lakh)
		Societies	Members (in '000)	
1	2	3	4	5
Central Banks	1949 - 50	1	0.2	2.1
	1971 - 72	1	0.5	57.7
Primary Land Mortgage Banks	1949 - 50
	1971 - 72	2	2.0	23.3
Agricultural Credit Societies	1949 - 50	217	3.8	1.81
	1971 - 72	363	30.0	52.7
Non-agricultural Credit Societies	1949 - 50	5	1.5	1.65
	1970 - 71	17	3.2	7.52

Source: District Statistical Handbook (1977), Govt. of West Bengal.

Table 3.7(b)
Bardhaman
Progress of Co-operative Movement

Types of Societies	Year	Number of		Working Capital (Rs. in lakh)
		Societies	Members (in '000)	
1	2	3	4	5
Central Banks	1949 - 50	4	1.5	57.2
	1971 - 72	2	1.4	44.8
Primary Land Mortgage Banks	1949 - 50
	1971 - 72	2	4.4	50.8
Agricultural Credit Societies	1949 - 50	1400	25.7	15.9
	1971 - 72	809	103.0	21.3*
Non-agricultural Credit Societies	1949 - 50	21	3.8	6.42
	1971 - 72	64	49.0	372.0

*This figure relates to 1970-71

Source: District Statistical Handbook (1974), Govt. of West Bengal.

3.5 These differences in land relations in the two districts have obviously got different histories associated with them and accounting for them. It is however difficult to reconstitute this history in any satisfactory manner from the fragmentary sources of historical information which we shall mention in Chapter 5.



Chapter 4

Superstructural Features

4.1 In this chapter we shall be providing whatever little data that are available pertaining to different aspects of the superstructure of the society in so far as they affect the development of the forces of development. It would be seen that these supporting institutions have all been lagging behind in Jalpaiguri as compared with Bardhaman.

4.2 Let us take education first. Diagram 4.1 shows that the literacy rate in Bardhaman has been more than double that in Jalpaiguri till about 1951 by which time the rate in Bardhaman had reached only a miserable 20%. After that there has been growth in both the districts but even in 1971 literacy in Jalpaiguri was less than that in Bardhaman by about a third. Table 4.1 shows that till 1951 the comparison was not very different for the proportion of schoolgoing children in the population of children in the schoolgoing age. We have not managed to collect data for any later period. We suppose that it can be taken for granted that their relative positions has not got substantially altered. Our conjecture is strongly supported by the extremely divergent rates of growth of higher education as seen in Table 4.2

4.3 As may be expected, the health services for the public also lag behind in Jalpaiguri. The two to three times more numbers of hospitals and dispensaries in Bardhaman are not fully accounted for by the differences in population size (Tables 4.3 & 4.4)

4.4 Two other indicators go to support the proposition of super-structural facilities lacking in Jalpaiguri. It has been recognised rather late in our country that means of communication constitute a most

Table 4.1

PROPORTION OF SCHOOLCHILDREN IN TOTAL POPULATION OF
SCHOOLGOING AGE (Percentages)

District		1921-22 (i)	1930-31 (i)	1941-42 (ii)	1950-51 (ii)	1960-61 (ii)
Burdwan	M	26.1	31.8	33.0	55.8	..
	F	4.1	6.2	7.7	19.2	..
Jalpaiguri	M	16.4	23.3	27.0	28.0	29.0
	F	2.2	3.9	10.0	15.0	

Source: (i) Bengal District Gazetteer Statistics 1921-22 to 1930-31
(ii) District Census Hand books (1951, 1961)

Table 4.2

Growth of College Education

Year	Number of Colleges		Number of Students	
	Barddhaman	Jalpaiguri	Barddhaman	Jalpaiguri
1	2	3	4	5
1921 - 22	1	-	112	-
1930 - 31	1	-	180	-
1941-42	1	-	530	-
1950 - 51	1	2	825	514
1960 - 61	..	4	..	1555
1965 - 66	24	9	15127	4242
1970 - 71	12	9	15037	3431

Source: District Census Handbooks, District Statistical Handbook (1974)
and Bengal District Gazetteers.

Table 4.3

NUMBER OF DISPENSARIES AND NO. OF BEDS

		1906-09	1931	1951	1960	1965	1970	1972
Burdwan	No. of Dispensaries	16	49	103	187	225	257	247
	No. of Beds	--	225	669	1545	2171	2391	2999
	No. of Dispensaries	--	16	32	63	69	76	86
Jalpaiguri	No. of Beds	--	117	308	446	658	830	1201

Source: 1906-09 from Bengal District Gazetteer (Burdewan), 1910, T. Peterson (ed.)
 1931 from Bengal District Gazetteer Statistics (1921-22 to 1930-31)
 1951, 1960 from District Census Handbooks
 1965-72 from District Statistical Handbooks (W.B. Bureau of Applied Econ. & Stats.) (1974).

Table 4.4

NUMBER OF HOSPITAL BEDS PER LAKH OF POPULATION

District	1931	1951	1961	1970
Burdwan	14	30	42	61
Jalpaiguri	12	33	34	47

Sources: Calculated from Table 1 above and figures for total population.

important necessary adjunct to the process of development, not only of industries but also that of agriculture. The figures in Table 4.5 show the neglect of roads in Jalpaiguri and their promotion in Bardhaman. This neglect seems to be very much more in the case of roads made and maintained by the Local Bodies, though the P.W.D. also exercises discrimination. But the difference in treatment is not staggering in the case of electrification of villages as may be seen in the same table. The number of villages electrified in Bardhaman are four and half times that of the same in Jalpaiguri whereas we saw in Chapter 1 that the number of villages in Bardhaman is only 2.5 times more.

Table 4.5
Development of Communication and Electrification

Year	Road Kilometrage				No. of villages Electrified	
	Bardhaman		Jalpaiguri		Bardhaman	Jalpaiguri
	P.W.D.	Local Bodies	P.W.D.	Local Bodies		
1	2	3	4	5	6	7
1960-61	383.3	1668.0	622.0	623.0	197	138
1965-66	965.0	2483.0	628.0	634.0	256	145
1971-72	1281.8	2500.0	1201.0	634.0	576	166

Source: District Statistical Handbook (1974)

4.5 What explains these differential treatments of different districts is a question difficult to answer. One would expect that the more backward a district is, the greater the attention it would receive from Government planners. This however is not true anywhere in the country. The more developed an area is, the greater the political power of the local elite and the greater the pull they exercise on national resources. Jalpaiguri and Bardhaman seem only to reflect this general pattern.

Chapter - 5

Historical Information

5.1 The information that have been presented in the previous chapters date at the most from the beginning of the century and in many cases from much later dates. Also the information used there are all of a purely statistical character; that is, without any qualitative dimensions. We thought it fit to look around for other material which might contain more of qualitative information or which might refer to earlier dates. We indeed could trace some such material but we find that they do not help us very much more than the more systematic figures presented in the earlier chapters about the process of development in the districts. One of the most important source is of course the reports by W.W. Hunter contained in his famous work "A Statistical Account of Bengal, (1874)". We provide below some illustration of the kind of information that one finds in his accounts.

5.2 One gets a detailed breakdown of the population in terms of ethnic groups (Table 5.1) the total populations may not be compared with what they have been in the post independence period, given that the partition severely affected the districts both by reallocation of territory and movements of population. The preponderance of Musalmans and the insignificance of upper caste Hindus in the pre-partition population of Jalpaiguri, as seen in Tables 1.4 and 5.1, is a factor that might have been expected to be conducive to development. The expectation is reinforced by the presence in greater importance of lower caste people described as semi-Hinduised aborigines in Jalpaiguri but the expectation is belied. The only feature making any sense in Table 5.1 is the importance occupied by agricultural and pastoral castes in Bardhaman and their insignificance in Jalpaiguri.

Table 5.1Ethnic Division of the People

(According to Hunder, 1874)

	Number in '000 (Percentages)	
	Jalpaiguri	Barddhaman
1. Aboriginal Tribes	0.5 (0.0)	8.1 (0.4)
2. Semi-Hinduised aborigines	148.0 (45.1)	454.0 (22.3)
3. Superior and intermediate castes (Bramhans, Baidyas, Kayasthas)	2.4 (0.7)	232.0 (11.4)
4. Trading castes	0.6 (0.0)	62.0 (3.0)
5. Agricultural and pastoral castes	5.3 (1.6)	434.0 (21.3)
6. Artisan and Weaver castes	13.0 (4.0)	287.0 (14.1)
7. Other lower castes	11.0 (3.4)	171.0 (8.4)
8. Total Hindus (3 to 7)	32.0 (9.7)	1186.0 (38.2)
9. Musalmans and others	147.0 (44.8)	387.0 (19.0)
10. Total	328.0 (100.0)	2035.0 (100.0)

5.3 The information given by Hunter concerning outturn of crops confirms the stagnation or decline noted by us for the period covered in our previous chapters. Thus for Bardhaman he reports 10 to 16 maunds of unhusked paddy per bigha in good soil and half of that yield in poorer soil. For Jalpaiguri he quotes the figure of 3 to 10 maunds for Aus paddy and 10 to 12 maunds of for Aman paddy. What is very striking about these figures is that the average yield of paddy in 1975 was as low as 5.5 maunds per bigha in Jalpaiguri and about 8.5 maunds per bigha in Bardhaman (See Diagram 2.11 where, it may be remembered, one has plotted yield per acre of rice and not that of paddy. Paddy, incidentally, loses a third of its weight in the process of husking.) Relation between an acre and a bigha is at present three bighas for one acre. This equivalence does change with time and place. But we have checked that the bigha in Hunter's time was the same as now.

5.4 As to cropping pattern, Hunter mentions for both the districts the two traditional paddy crops, namely, Aus and Aman. Further, pulses and oilseeds are mentioned as winter crops of Bardhaman whereas for Jalpaiguri mention is made of mustard, tobacco, pan, betelnut and sugarcane.

5.5 Some information is available about holding sizes. In Jalpaiguri, it is written: "A cultivator's holding exceeding 60 bighas or 20 acres in extent would be considered a very large farm and anything below 15 bighas or 5 acres a very small sized farm for a husband man. From 20 to 33 bighas or from 7 to 11 acres would be considered a fair sized comfortable holding for a cultivator and amply sufficient to maintain his household". For Bardhaman the corresponding assessment is as follows: "A cultivator's holding exceeding a hundred bighas or say 35 acres in extent



would be considered as a large size farm; and anything below 10 bighas or above 3½ acres, would be looked upon as a very small one. A holding consisting of 30 bighas or 10 acres of land of all description would be considered a fair sized comfortable holding for a husbandman". It would seem from the above that the distribution of holdings was very much less skew in Jalpaiguri than in Bardhaman at the time of Hunter just as it is now a hundred years after, as we have seen in Chapter 3.

5.6 As to tenurial status, cultivators in Jalpaiguri were in a more vulnerable position than those in Bardhaman. In the former, even in the permanently settled part "the number of husbandmen who have acquired a right of occupancy in their fields ... is about equal to those who cultivate their lands merely as tenants - at - will. "Whereas in the rest of the District "hardly any of the cultivators have acquired occupancy rights ...". In contrast, "nearly two-thirds of the husbandmen of Bardwan District hold their lands with right of occupancy, the remaining one-third being simple tenants-at-will." About Jalpaiguri it is stated that, "there are no instances .. of small proprietors who own occupy and cultivate their hereditary lands without either a Zamindar or superior landlord above them or a subholder or labourer of any kind under them". A similar statement is made for Bardhaman, identical almost word by word, with the important difference that instead of "there are no instances" the wordings are "there are not many cases" which suggests that there were at least some such cases of independent small proprietors.

5.7 It is interesting that despite this greater insecurity of tenants of Jalpaiguri it is stated "generally speaking the peasantry are not in debt, their wants are few and they raise for themselves almost all the necessaries of life."

5.8 It would seem that both the districts were characterised by the absence of any important class of landless agricultural labourers. There were labourers but they were also possessors of small bits of land taken on lease. It would seem that the terms and condition for such leases as well as for the hiring of labour against wages where, a hundred years back, not very different from those that prevail even today. The extracts from the original report given below bear out this understanding. It may be noted that one is describing as labourers with the local name of bhag-jotdars what under present conditions would be considered as share croppers, with the name of 'bhagidar' or 'bargadar'. Krishans however are described exactly in the same terms as those carrying the name today would be described; except that today they do not occur much in Bardhaman but are concentrated mainly in Birbhum.

5.9 The following is extracted from the report on Bardhaman:

"Most of the labourers either possess or rent a patch of land, by the produce of which they eke out their wages. When day-labourers are employed to cultivate the fields of others, they are either paid daily in money or by its equivalent in kind, or by a fixed share of the crop. When paid by a share of the crop, the labourer obtains either a one-half or a one-third share. In the first case, he is called bhag jotdar, and has to find seed and cattle and all other attendant expenses, except the rent, which is borne by the holder of the land who employs him. In the latter case, the labourers are termed krishans, and give merely their labour and the seed necessary for the cultivation. The holder of the land generally advances the quantity of seed required, and recoups himself at harvest time with interest, by taking one and a half times the quantity originally advanced".

5.10 The following has been extracted from the report on Jalpaiguri.

"There is no tendency towards the growth of a distinct class of day-labourers in Jalpaiguri District, neither renting land nor possessing fields of their own. Almost every man in the District tills a little plot of ground for himself. Several of the smaller husbandmen, however, in addition to cultivating their own small patches, also till the fields of other, receiving in return for their labour a one-half share of the crop. These men are called adhiari cultivators; the holder of the land pays the zamindar's or landlord's rent, and also supplies the seed-grain, the cultivator having to find the plough cattle, agricultural implements, and labour". Alternatively, "The holder of the land or jotdar has to find seed-grain, cattle, and agricultural implements - everything except the actual manual labour. The cultivator's share of the crop, however, is the same in both cases".

5.11 A whole lot of details about the various ramifications of the tenurial systems as occurring at that time in the two districts are to be found in the reports. With the abolition of intermediary rights these have now all become obsolete. While the differences in the history of tenurial evolution are of interest by themselves to a student of the subject, we have not found it possible to extract anything out of them which might be of use to us for understanding the developmental contrasts in the two districts. The interested reader may consult not only Hunter but also References (2) and (3).

5.12 As to the technology of cultivation, mention is made of cowdung manure alone for Jalpaiguri whereas for Bardhaman mention is also

made, in addition to cowdung, of 'hol or oilcake and "muddy earth containing a quantity of decayed vegetable matter" from tanks and elsewhere.

Figures are also quoted about the rates at which these were applied.

5.13 As to irrigation we have the following for Bardhaman:

"IRRIGATION as a scientific system is almost unknown in Bardwan District, although tanks, and in some instances small khals and natural watercourses, are used to supplement the rainfall. It is a common custom to dam up the lesser streams, with a view to the irrigation of the neighbouring fields; and the systematic obstruction of the drainage channels by this practice is said to be one of the causes of the prevalence of epidemic fever".

5.14. The conditions in Jalpaiguri were not any more backward as may be seen from the following:

"Irrigation is very commonly practised in the eastern portion of the Western Dwaras Subdivision, principally for the aman or winter rice crop. The water is conveyed to the fields by small artificial channels and watercourses, cut from the neighbouring rivers and streams, which intersect the country in every direction, and which are dammed up for the purpose. These small channels or trenches, called dungs, are generally cut by the cultivators themselves, and not by means of hired labour. In the other parts of the Western Dwaras, irrigation is not resorted to. In the permanently settled portion of the District, regular wells are sometimes made: a hole is first dug, and is then enclosed by means of baked earthen rings about two feet in diameter, sunk into the ground, and placed one above another".

5.15 Another bit of interesting information about Jalpaiguri is about the absence of crop rotation. Thus we have:

"In the Dwars, where spare land is plentiful, the husbandmen seldom cultivate their aus rice, mustard, tobacco, etc., more than two years in the same spot; they then clear and cultivate a fresh piece of fallow or jungle land, returning to the old spot again after the lapse of a few years, when the productive powers of the soil have become renovated. The aman or winter rice crop is continuously cultivated everywhere on the same land year after year, which is not usually allowed to remain fallow".

5.16 An intriguing information relates to fallow land. While for Jalpaiguri it is stated that "there is a great deal of available spare land". The opposite is stated for Bardhaman, namely that "every little spare land exists in Bardhaman district". We have seen in Chapter 2 (Table 2.1) that current fallow has been exceedingly high in Bardhaman, much higher than that in Jalpaiguri. It would seem that in Bardhaman trouble had been taken to clear forests and make land suitable for cultivation but after doing that one did not find it profitable to put to cultivation much of that land.

References

- 1) W.W. Hunter, A Statistical Account of Bengal, 1874.
- 2) J.A. Milligan, Final Report on the Survey and Settlement Operations in the Jalpaiguri District, 1906-16.
- 3) V. Yaxa, "Evolution of Agrarian Structure and Relations in Jalpaiguri District", in Sociological Bulletin, March, 1980.

In Lieu of a Conclusion

We can hardly draw any conclusion. That is because all we have been able to do is to illustrate different aspects of the backwardness of Jalpaiguri District in comparison with Bardhaman District. We have not really been able to unravel the factors causing the differences.

Jalpaiguri has more of tenancy and less of hired labourers than Bardhaman. It is often supposed that tenancy constitutes a backward relation of production compared to self cultivation and cultivation with the help of hired labourers, in the sense that it retards the development of the forces of production. If one were to accept this idea one may say that we have indeed located the source of Jalpaiguri's backwardness.

But it does not appear satisfactory to us to treat that as a complete explanation. What lies behind this difference in the incidence of tenancy and hired labourers? It seems that a backward region remains backward sheerly by inertia and a forward region becomes more and more forward by virtue of its own momentum. That is because the more developed an area is the more it attracts capital and other resources, not only from the private sector but even from the government itself. It is paradoxical that the government should pay less rather than more of attention to a backward region. One should have expected the very opposite. This happens in two ways. The more prosperous an area is the greater is the political power that is wielded by the elite among the local population; and State power in India is increasingly susceptible to pressures exerted by the rural elite. But, even without any pressure from any lobby, government in our country has revealed a tendency to allocate more resources to the more

developed areas. This happens because of taking for each project a cost-benefit analysis view in isolation instead of taking an approach of regional planning. Taken in isolation an investment project in some productive activity tends to get a low rating for there not being enough of infrastructural facilities and externalities e.g., roads, rails, electricity, nearby markets etc. On the otherhand a proposal for the creation of any one of these overhead facilities tends to be viewed unfavourably for there not being enough of productive activities to justify the facilities. This vicious circle of myopic arguments can be broken only by an approach of regional planning which has been absent in West Bengal as in most other parts of the country.

DIAGRAM 3.1

FREQUENCY DISTRIBUTION OF HOLDINGS 1951

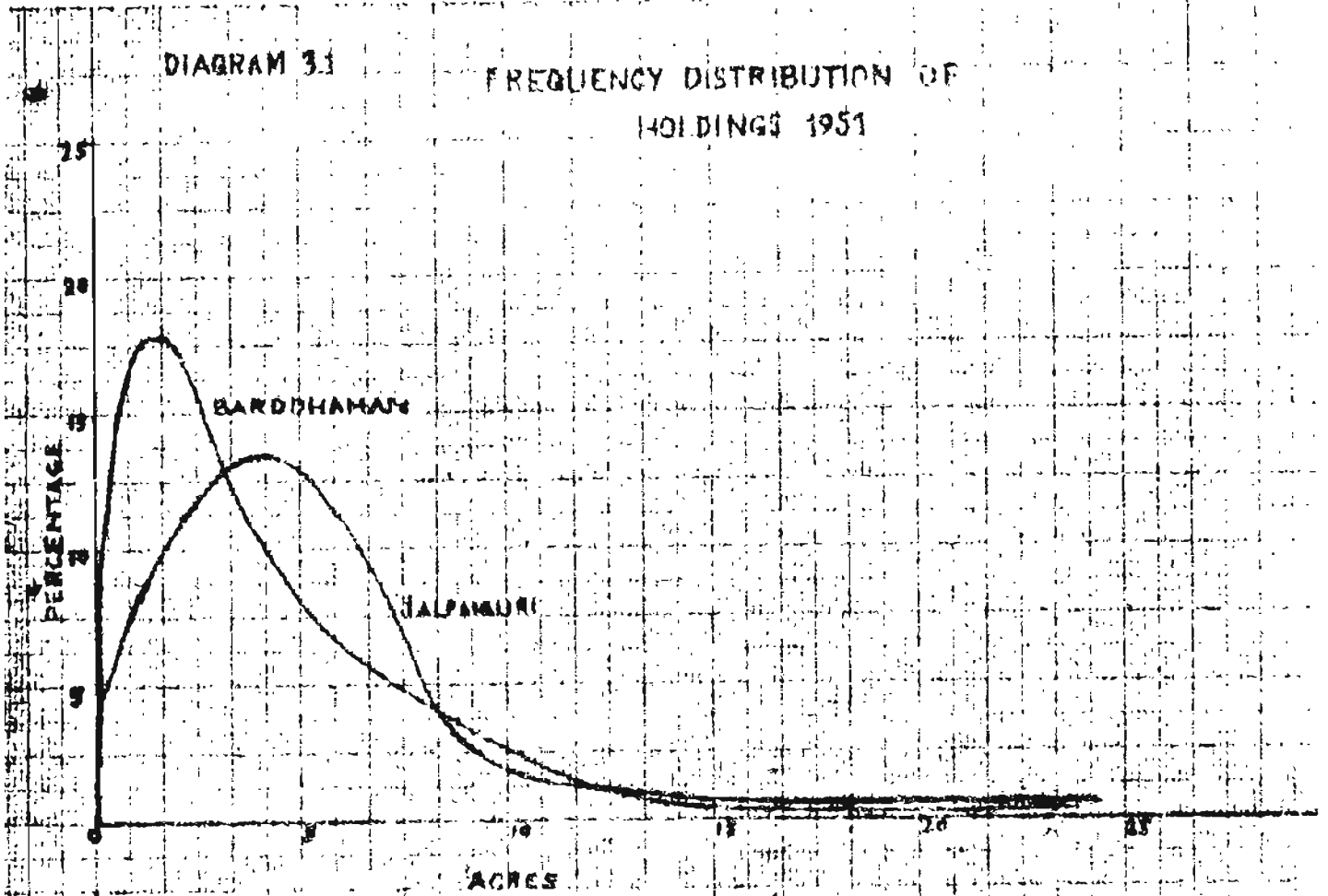


DIAGRAM 3.2

FREQUENCY DISTRIBUTION OF HOLDINGS 1961

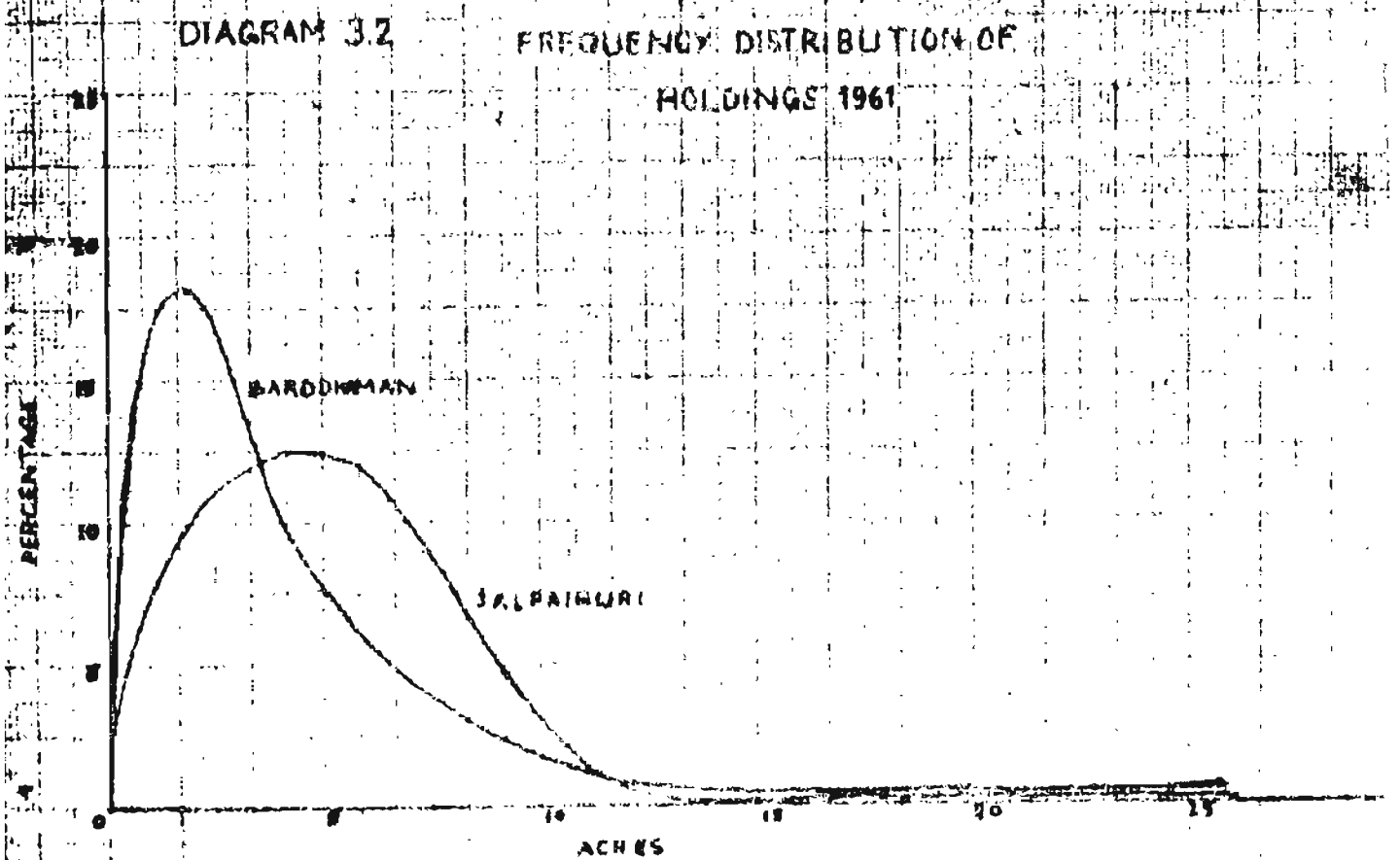


DIAGRAM 3.3
 CONCENTRATION CURVES
 FOR LAND HOLDINGS

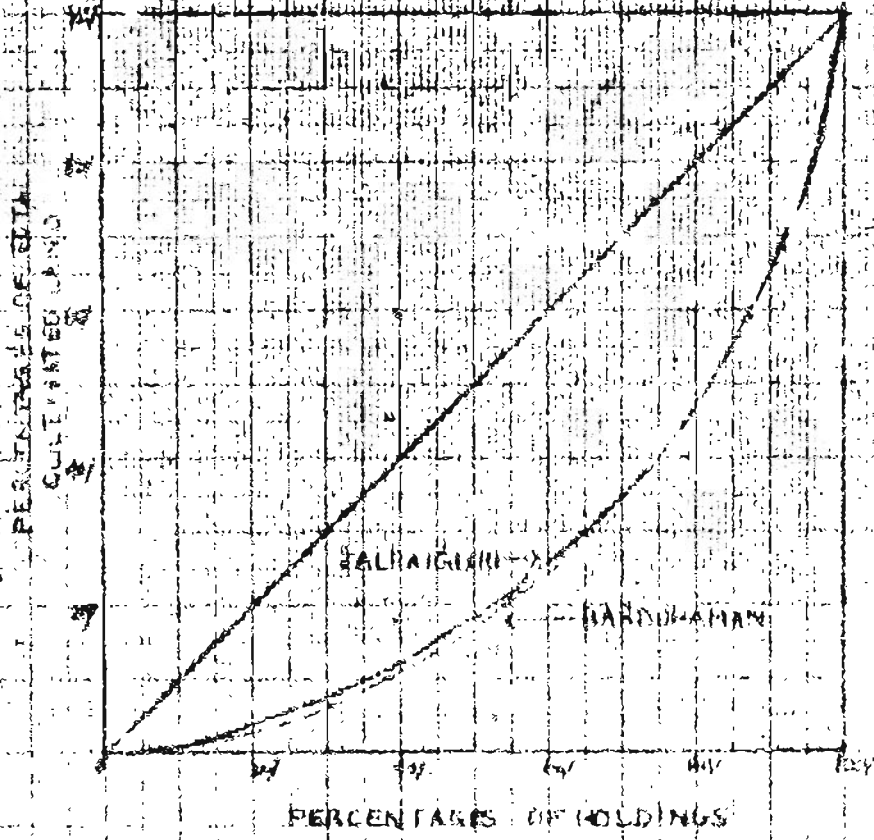


Diagram 4-1
Number of Literates per 1000 of Population

