GOVERNMENT OF KERALA



# report on manpower situation among tribals in kerala



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DEPARTMENT OF ECONOMICS & STATISTICS

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# MANPOWER STUDY SERIES No. 48

A REPORT ON
MANPOWER SITUATION
AMONG TRIBALS
IN KERALA

DEPARTMENT OF ECONOMICS AND STATISTICS, KERALA JUNE, 1984 -5483 331.11 KER-R

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# PREFACE

Inspite of the implementation of various programmes for the benefit of Scheduled Tribe people in the State, it seems that these people are not able to avail of the opportunities putforth to them in view of their cultural, social and economic backwardness. This paper attempts to highlighten the manpower situation of the girijans in the State. Sri P. C. Jain, Research Officer in the manpower division of this department has attempted to give a clear picture of the above aspects of tribal people. It is hoped that this report will be of much use for taking proper policy decisions for the welfare of the 'girijans' in the State.

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Director of Economics & Statistics.

Trivandrum, 20-6-1984.



# CHAPTER I GENERAL

#### 1.1 Introduction

Tribals in the state continue to be a weaker section, inspite of the implementation of a series of programmes for their uplift. They could not join the mainstream as independent economic units but remain as a 'marginalised' section of the society.

Increased alienation of tribal land have distorted their land based occupations and they are unable to adapt to modern skills due to low level of literacy. In this context it was found worthwhile to examine the changes that have come about in the manpower situation among tribal communities in the state.

#### 1.2 Database

This report is based on the data thrown out by different studies on tribal population, conducted by the Department of Economics & Statistics, the State Planning Board and other research institutions during the past few years. Besides relevant data from 1971 and 1981 population censuses also have been made use of.

#### 1.3 Objectives

The main objectives of the study are to examine:—

- (1) The characteritics of tribal economy and manpower.
- (2) the extent of work participation of tribal work force.
- (3) the occupational pattern of tribal work force.
- (4) the extent of skill formation among them and the existing institutional arrangements for the same.
- (5) the extent of unemployment and underemployment among tribals.
- (6) the role of training and self-employment in making the tribals economically active.
- (7) the pattern of employment and income generation under various tribal development programmes

and

(8) the possibilities of effective utilisation of tribal manpower.

#### 1.4 Limitations

The main limitation of this study is that it is based on secondary data.

#### CHAPTER 2

#### FINDINGS

#### 2.1 Characteristics of tribal economy and manpower

#### (1) Tribal population

According to 1981 census, tribals numbered 2.61 lakhs, constituting 1.03% of State's population. In the 1971 census there were 2.69 lakhs of people belonging to different tribal communities forming 1.26% of the population. The decadal decline in the tribal population was mainly due to the deletion of certain communities from the list of tribals of the 1971 census.

#### (2) Tribals in the districts

Distribution of tribals in the districts and its proportion to the total population of the district (table 1) shows that more than 75% of the tribals are distributed in the districts of Idukki, Palghat, Wynad and Cannanore. Nearly one fifth (17.25%) of the population in Wynad is tribals. In Idukki the proportion of tribals is about 4% and in the other districts they are proportionately insignificant.

TABLE 1

Distribution of tribals in the disricts

District/State	19711 population	1976° population		19813	
	·	· ·	Population	Percentage in the district	Percentage to total population in the district
Trivandrum	11059	10277	14145	5.41	0,54
Quilon	3737	5604	7442	2.86	0.26
Alleppey	435	2264	327 <b>3</b>	1.25	0.14
Kottayam	11059	13466	15227	5.82	0.90
Idukki	23181	34255	38712	14.80	3.98
Ernakulam	580	1717	3551	. 1.36	0.14
Trichur	9363	2750	3227	1.24	0.13
Palghat	255 <del>94</del>	20867	28794	11.01	1.41
Malappuram	8882	7791	<b>795</b> 5	3.04	0.33
Kozhikode	84982	51309	3888	1.49	0.17
Wynad		, .	95557	36,54	17.25
Cannanore	90464	49742	<b>3</b> 9704	15.18	1.42
State	269356	200042	261475	100.00	1.03

<sup>&</sup>lt;sup>1</sup> Census of India 1971

<sup>&</sup>lt;sup>2</sup> Report on Socio-economic Survey of Tribals in Kerala 1976-78, Bureau of Economics & Statistics, September 1979

<sup>&</sup>lt;sup>3</sup> Census of India 1981.

#### (3) Regional concentration

There is regional concentration in the distribution of various tribal communities (table 2) and there is no single community which is scattered throughout the State. The northern region, comprising the districts of Trichur, Palghat, Malappurams Kozhikode, Wynad and Cannanore, contain more than 60% of tribal population in the State.

Table 2

Regional distribution of Tribals (Percentage)

Region	1976(4)	1981(5)
South	33.8	31.5
North	66.2	68.5
State	100.0	100.0

#### (4) ITDP areas

The 'Integrated Tribal Development Project Areas', identified in connection with the introduction of sub-plan strategy of tribal development, contain 45% of scheduled tribes in the state and the rest 65% are dispersed over other areas. A Population, threshold of 10,000 in contiguous forest ranges having more than 50% tribal population was treated as a 'tribal area' and according to this norm, five Integrated Tribal Development (ITD) project areas (Punalur, Idukki, Nilambur, Attappady & Manantoddy) have been identified.

These 'Sub-plan areas' have a total of 32239 households of which 25093 (77.8%) are tribal households. In all the 'tribal areas', except Attappady, tribals constitute more than three fourth of the population (table 3).

<sup>(4)</sup> Ibid....2

<sup>(5)</sup> Ibid....3

	TAE	3LE	3		
Population	in	IT	D	Areas	6

Households					ition			
ITD Project	Tribal	Non- tribal	Total	% of tribal H.H.S.	Tribal	Non- tribal	Total	% of tribal bopulation
Punalur	4676	1138	5814	80.4	21288	6091	27379	77.8
Idukki Nilambur	5210 2912	425 381	5635 3293	92.5 88.4	25573 12623	2178 1772	27751 14 <b>39</b> 5	92.2 87.7
Attappady	4638	4398	9036	48.3	20893	22912	43805	
Manantoddy	7657	804	<b>84</b> 61	90.5	38525	4348	42873	89.9
Total	25093	7146	<b>3223</b> 9	77.8	118902	37301	156203	76.1

<sup>6</sup> Bench mark survey of ITD project areas, 1980-82 Department of Economics & Statistics

#### (5) Level of literacy:

Inspite of the special efforts of the government for the betterment of education among tribal population, the level of literacy in awfully low among tribal communities in the state (table 4). While 70% of general population are literate about that much percentage of tribals are illiterate. Rate of growth of literacy is also very low. 'Tribal literacy' is comparatively very poor in the northern districts of the State.

Table 4
Level of literacy of tribals (Percentage)

D'. ( ) ( ) ( ) ( )	1971	1971 <b>(7</b> )		1976 (8)		1981 (9)	
District State	Tribal	General	Tribal	General	Tribal	General	
Trivandrum	42.17	62.54	63.04		58.06	70.50	
Quilon	32.59	64.97	54.21		50.30	74.11	
Alleppey	60.23	70.44	37.90		53.71	78.52	
Kottayam	<b>38.4</b> 4	72.88	75.19		73.63	81.66	
Idukki	N.A.	56.42	44.82		43.35	67.44	
Ernakulam	45.12	65.37	38.50		52.60	76.82	
Trichur	<b>25.0</b> 6	61.61	26.47		29.90	73.59	
Palghat	7.13	46.69	6.98		12.04	58.00	
Malappuram	13.67	47.90	6.17		16.33	60.50	
Kozhikode	23.24	57. <b>2</b> 5	17.07		21.45	70.12	
Wynad					14.24	58.33	
Cannanore	25.52	54.84	10.40	• •	33.18	65.74	
STATE	25.72	60.42	26.55		31.79	70.42	

<sup>(7)</sup> Ibid....1

<sup>(8)</sup> Ibid....2

<sup>(9)</sup> Ibid....3

#### (6) Transition of tribal economy:

Tribal society from time immemorial had been forest based. The tribals consider forests with veneration and do everything possible to avoid inflicting injury on it. The forests in its turn provide the tribals with everything for their existence like food, shelter, clothing etc. Thus there developed a symbolic relationship between forest and the tribals.

Ever since they passed the "collectional stage of socio-economic evolution", the tribals' major occupation had been cultivation, predominantly of the 'Slash-and-burn' type. Easy availability of vast stretches of forest land provided enough opportunities for, unhindered 'shifting cultivation'. Cultivation practices were prinitive, and crops were mainly dry land crops like millets and pulses. Cultivation used to be supplimented by other occupations like hunting, fishing collection and sale of minor forest produce, food gathering cottage industries like basket making, matweaving etc. The minor forest produce collected and the products of cottage industries found market in the 'plains' through the intinerant traders with whom the tribals exchanged their goods for cloth, salt, tubacco etc.

Formerly right on the land held by the tribals was that they had no ownership and that they had only operational right. Now they are being given full ownership right also. But due to population pressure in the 'plains' a large inflow of people from the 'plains' took place into the forest regions, with the intention of permanent settlement. These new entrants in the area occupied the tribal land and extended the frontiers to settled agriculture. Along with this, large scale plantations were also established by the affluent settlers. Indiscriminate distruction of forests shattered the subsidiary occupations of the tribals.

The men from the 'plains' became the 'agents of change' of the tribal economy. Large scale immigration of settlers and continued deforestation disturbed the 'subsistance economy' of tribals and made the traditionally cultivating tribals landless. The land alienation that followed the immigration resulted in the paradox of making the tribals cultivators into labourers in their own land. The 'land-man ratio' of the tribal economy declined due to land a lienation. Tribals became either landless or marginal holders of land. As the settlers flow was more to northern districts from 'central travancore' area, more landless tribals are seen in northern districts of the State (table 5). The predominance of landless tribals in the districts of Kozhikode and Cannanore is worth noting.

Table 5

Distribution of tribal households by size of land holding (Percentage) (10)

Distributes a	Below 0.4 hects of land					
District State	No Land	Below 2 Ares	2-4 Areas	4-40 Ares	Total	0.4 hects. of land
Trivandrum	0,46	0.09	0.46	19.39	20.40	79.60
Quilon	3,39	3.03	4.81	45.05	54.28	45.72
Alleppey	23.80	18.20	48.10	9.70	99.80	0.20
Kottayam	5.37	4.75	8.31	24.78	43.21	56.79
Idukki	10.03	0.37	1.32	13.62	25.25	74.75
Ernakulam	16.71	10.68	48.23	14.52	90.14	9.86
Trichur	12.77	5.88	29.08	36.13	83.86	16.14
Palghat	20.31	17,34	5.55	8.65	51.85	48.15
Malappuram	25.01	13.89	30.32	15.98	85.20	14.80
Kozhikode	40.25	10.89	8.01	17.40	76.55	23.45
Cannanore	52.34	1.29	7.43	17.52	78.58	21.42
State	29.62	6.63	8.16	17.34	61.75	38.25

<sup>(19)</sup> I bid ... 2

Note: 1 Are= 2.5 cents.

The 'non-tribals' in tribal areas developed an advaced agriculture in addition to their advancement in the secondary and tertiary sectors. This 'settler-sector' developed fast at the expense of the 'tribal-sector'. Tribal shifted to inferior lands in the forests and began to keep land fallow increasingly (table 6). Thus cultivation lost its significance as the main avocation of tribals in the state.

TABLE 6

Extent of land left uncultivated by tribals by reasons (percentage)

Year	Rocky and unculti- vable waste-lan
1962-63	2.20% (11)
1975-76	14.72% (12)

<sup>(11)</sup> Report on the evaluation of schemes implemented in the tribal development block
—Attappady—1977, Bureau of Economics & Statistics.

<sup>(12)</sup> Ibid . . . . 2

#### (7) Impact of forest nationalization:

Nationalisation of forests in 1971 had another impact on tribal economy in the state. Consequent on forest nationalisation, hunting was banned in the forests. Collection of minor forest produce used to be let out to private contractors who employed mostly non-tribals for the purpose. Mobility of tribal labour force was thus affected. The number of families engaged in forest produce collection also is found negligible (table - 7). Only less than 12% of tribal families are engaged in minor forest produce collection. Their percentage is comparatively very low in the northern districts of Kozhikode and Cannanore. "As the same household collecting different produces have been counted separately under each produce the actual number of householders engaged in this occupation would be much smaller..." (13)

Table 7

Households engaged in the collection of forest produce (Percretage) (14)

Disaniat Gt	Produce collected				
District State	Honey	Herbs	Lac	Firewood	Others
Trivandrum	0.05	• •	0.05	0.05	
Quilon	3.92	3.48	3.83	3.83	3.48
Alleppey	2.02	20.40	1.01	1.01	1.01
Kottayam	1.09	1.09	1.09	1.09	1.09
Idukki	31.65	6.01	6.19	29.48	17.68
Ernakulam	6.85		0.27	8.49	1.37
Trichur	71.09	53.28	2.35	0.34	0.34
Palghat	2.44	1.50	2.33	57.94	0.44
Malappuram	18.18	1.92	0.73	3.27	0.96
Kozhikode	0.89	0.11	0.63	0.41	0.03
Cannanore	0.20	0.01	0.18	0.51	0.10
State	7.70	2.39	1.70	11.94	3.07

<sup>(13)</sup> Ibid....2

<sup>(14)</sup> Ibid .... 2

#### (8) Decline of industrial activities

Percentage of tribal households engaged in household industries is negligible (Table 8). there is no scope for development of industrial activities of the tribals as they are following the primitive industrial activities, the products of which cannot compete with the modern products of scientific era.

Table 8

Distribution of tribal households engaged in cottage industries (Percentage) (15)

District State	Percentage of tribal households engaged in industrial activities				
	Basket making	Beedi making	Total		
Trivandrum	0.05		0.05		
Quilon	1.87		1.87		
Alleppey					
Kottayam	0.04		0.04		
Idukki	0.06		0.06		
Ernakulam	• •				
Trichur			• • •		
Palghat	0.04		0.04		
Malappuram					
Kozhikode	2.01		2.01		
Cannanore	0.75	2.21	2.96		
State	0.78	0.55	1.33		

<sup>(15)</sup> *Ibid*.....2

#### (9) Wage labour dependance

High incidence of landlessness, lack of household industry, restrictions on collection of forest produce, absence of secondary and tertiary employment etc., have made the tribals too much dependant on the wage labour offered by the non-tribal farmers. Agricultural wage labour constitute "the major source of income (71.73%) of tribal households in the State" (18).

#### (10) Dual wage system

The dual market for agricultural labour existing in tribal areas is yet another feature of tribal economy. The low resource position of tribal farm labour household and the low level of literacy among tribals make the tribal wage' very low. The non-tribal employeers pay a high wage for the non-tribal workers and hence the 'dual wage' (table 9).

<sup>(16)</sup> Ibid.....2

TABLE 9

Average wage rate of general & tribal farm labour—1976 (Rs.)

Category	Male	Female
General (17)	8.44	5.89
General (17) Tribal (18)	6.03	4.26

"About 63 types of wage system have been found existing in Wynad area among tribal working class" (12). Excessive dependence on agricultural wage market, lack of mobility of labour etc., have created a 'buyers market' for tribal manpower. The non-tribal employer is facing a perfectly elastic supply curve of labour, offered at a very low wage. The 'monopsony' power of non-tribal farmers has resulted in the exploitation of tribal manpower.

#### 2.2 Work participation of tribal labour force

## (1) A declining work participation rate

A declining trend in the work participation rate is observed among Tribal work force (Table 10). As the tribals are mainly agricultural workers, with low level of literacy, having no other sources of income and employment their decreasing work participation rate is indicative of shrinking employment opportunities for this group of people.

Table 10

Work participation of tribal work force (Percentage)

Year	Workers*	Non-workers
1976 (20)	49.35	50.65
1981 (21)	45.25	5 <del>4</del> .75
(*Main workers &	marginal worke	-rs)

(17)	Statistics for	Planning-1980,	Department	of	Ecconomics	and
	Statistics.	•	-			

- (18) *Ibid* . . . . . 2 (19) *Ibid* . . . . . 2
- (\*0) *Ibid* . . . . . . . 2

#### (2) Work participation in the districts

Work participation is below 50% in all the districts except the district of Palghat (54.46) (Table 11), which has the highest work participation of tribal work force. The district of Kottayam has the lowest work participation rate (31.63%) and conversely the highest percentage of non-workers. It is seen that work participation rate is comparatively higher in the northern districts and lower in the southern districts of the State.

Table. 11

Work participation of tribals in the district (22)

XD. 1. 1/C1-1	Wo	Workers		
District/State	No.	%	No.	%
Trivandrum	5366	37.90	8779	62.07
Quilon	2732	36.71	4710	63.29
Alleppey	1273	38.99	2000	61.01
Kottayam	4816	31.63	10411	68.37
Idu <b>kki</b>	16078	41.54	22634	5 <b>8</b> .46
Ernakulam <sub>.</sub>	1344	37.85	2207	62.15
Trichur	1509	46.77	1718	53.23
Palghat	15681	54.46	13113	45.54
Malappuram	3936	49.48	4019	50.52
Kozhikode	1 <b>63</b> 5	42.05	2253	57.95
Wynad	46699	48.87	4 <b>88</b> 58	51.13
Cannanore	17254	43.45	<b>2245</b> 0	56.55
State	118323	45.25	143152	54.75

<sup>(22)</sup> Ibid.....3

# (3) Female work participation

Female work participation is more in respect of tribals in the State. More women have to toil to make both ends meet for tribal house hold. When the general women work participation ratio in 1981 is 12.79%, work participation of tribal women is 37.68% (Table 12). Women workers

among tribals are seen comparatively more in the northern districts. The higher women worker participation, among the tribals seems to be that they are still continuing their old pattern of employment. This in turn affects the education of their children also.

TABLE 12

Work participation of tribal women (23)

District (	M	ain workers	
District   State	Total	Women	%
Trivandrum	4606	1023	22.21
Quilon	2354	583	24.77
Alleppey	988	284	28.74
Kottayanı	4340	701	16.15
Idukki	14961	4662	31.16
Ernakulam	1176	321	27.29
Trichur	1381	521	37.79
Palghat	14044	5793	41.25
Malappuram	3528	1608	45.53
Kozhikode	1362	446	32.74
Wynad	41485	17881	45.10
Cannanore	15577	6108	39.21
State	105982	39931	37.68

<sup>(23)</sup> Ibid.....3

#### 2.3 Occupational pattern of tribal work force

# (1) Type of workers

About 72% of tribal workers are agricultural labourers (Table 13). Cultivators form only less than 12%. Proportion of workers in all other occupations is found very small. Cultivators are found more in the southern districts of the State (30%) and agricultural labourers the highest (82%) in northern districts. About 5% in the southern districts are Government servants and their percentage in northern districts is very low (0.38%). 37/4531/MC.

Table 13
Occupational distribution of tribal workers (percentage) (24)

	Occ <b>up</b> ation	Southern districts	Northern districts	State
1	Cultivators	30.03	4.92	11.06
2	Agricultural labourers	40.35	81.92	71:73
$\frac{2}{3}$	Livestock rearing	0.05	0.60	0.46
4	Household industries	0.29	0.63	0.55
5	Collection of forest produce	0.97	0.69	0.76
6	Household workers	2.18	2.31	2.28
7	Employment in Government service	4.50	0.38	1.39
8	Employment in private service	0,84	0.09	0.27
9 .	Food gathering	0.62	0.34	0.41
10	Other occupations	20.17	8.12	11.09
	Total	100.00	100.00	100.00

#### (24) Ibid.....2

#### (2) Employment in Government sector

Employment of educated tribals in State Government departments is very low. Inspite of the "Special Recruitment Programme" for Scheduled Caste/Scheduled Tribe persons, implemented in the State to rectify the backlog of employment for these category of persons, tribals are not placed in sufficient number in Government departments. (Table. 14).

TABLE 14
Employment of educated tribals in State government departments (1-1-1980) (25)

Category of posts	Total strength	Number of ST Officers	% of ST Officers	Percentage of special recruitment to total No. of STs in service
Gazetted	14688	48	0.4	34.4
Non-gazetted	235319	1185	0.5	49.5
Total	250007	1233	0.5	X

<sup>(25)</sup> Report of Employment Review committee—1980, Government of Kerala.

#### (3) Nature of post held

Besides the weak participation of tribals in Government sector of employment, majority of tribals employed in this sector are holding clerical posts (table 15) due to low level of skill formation among them.

Table 15
Employed tribals according to post held (percentage) (26)

	Category of Post	Percentge
1	Executive post	2.3
2	Managerial post	6.8
3	Clerical post	68.2
4	Professional (Advocates & Private Doctors)	2.3
	Other posts	20.4
	Total	100.00

(26) Study of Educated Unemployed SC/STs in Kerala, 1981, Department of Economics & Statistics, November, 1983.

#### (4) Attitude to new occupations

A positive attitude to new avocations have come among tribals in the State. Tribals are slowly adapting to new skill situations around them. About 65% of tribal households are willing to take up new occupations (Table 16) But tribals of Cannanore district seems to prefer the traditional occupations as about 79% of them are unwilling to take-up new occupations.

Table 16

Distribution of tribal households according to willingness to take-up new occupations (percentage) (27)

District/State	Willing to take-up new occu- pations	Not will- ing to take- up new occu- pations
Trivandrum	87.77	12.33
Quilon	95.90	4.10
Alleppey	78.99	21.01
Kottayam	86.04	13.96
Idukki 💮	99.55	0.45
Ernakulam	87.95	12.05
Trichur	99.33	0.67
Palghat	<b>88.4</b> 5	11.55
<b>Malappura</b> m	97.63	2.37
Kozhikode	54.38	45.62
Cannanore	21.28	78.72
State	65.01	34.99

#### (5) Shift in occupational pattern

It is seen that the excessive dependance of tribals on wage-labour is declining and they are adapting to new occupations. Their increasing participation as cultivator households (Table 17) may be mainly due to the land distribution and alienation orders made by the State Government. "Of the one lakh beneficiary households of surplus land distribution in the State upto November 1983, tribal households constituted 5624". (28)

Table 17

Shift in the occupational pattern of tribals 1976-81)

Occupational group	Percentage 1976 (29)	of workers 1981 (30)
1 Agricultural Labourers	71.73	57.47
2 Cultivators	. 11.06	20.54
3 Household Industry workers	0.55	0.75
4 Other workers	16.66	21.24
Total workers	100.00	100.00

(28) Economics Review 1983, Kerala State Planning Board.

(29) Ibid...........2

(30) Ibid.....3

# 2.4 Skill formation and institutional arrangements

#### (1) Level of education

Development of any economy depends to a great extent on the effective utilisation of its available manpower, which in turn is determined by the degree of skill possessed by them. Level of education is an important indicator of the skill position. But level of education is very low among tribal population. The 'less qualified manpower' is comparatively more in the northern districts of the State (Table 18). Technically qualified persons are negligible among them.

. Table 18  $\label{eq:Table 18}$  Distribution of literate tribals in the State by levels of education (percentage) (31)

District/State	primary p	rimary up & upper pr rimary & up 10	pper an rimary <b>D</b>	d ca i <b>p</b> loma	l n	Tech- ical verti ficate holders
Trivandrum	42,65	33.67	21.78	1.78	0.02	0.01
Quilon	61.39	28.08	9.78	0.68		0.07
~ Alleppey	56.89	29.84	11.66	1.50		0:,1\1
Kottayam	40.02	31.21	21.20	7.05	0.21	0.31
Idukki	48.08	29.15	17.47	5.15	0.02	0.13
Ernakulam	40.07	36.91	19.38	3.32	0.16	0.16
Trichur	77.18	15.26	7.14	0.42		
Palghat	72.21	17.05	8.60	1.72	0.28	0.14
Malappuram	70.99	18.48	9.56	.0.81	0.16	
Kozhikode	62.74	30.87	5.51	0.82		0.06
Cannanore	61.54	26.73	8.17	3.27	0.19	0.10
State	51.67	29.57	14.88	3.65	0.08	0.15

<sup>(31)</sup> Ibid.....2

Level of education of tribals in the "Sub-Plan areas" also is very low as 25% of them are below primary in education (Table 19). In the ITD project areas of 'Nilambur' and 'Attappady' highest percentage of tribals are below primary in educational standard.

TABLE 19 Distribution of literate tribals in "Sub-plan areas' by levels of education (percentage) 32

IT <b>D</b> P area	Below primary	primary	Upper primary	Metric	Graduates	Post graduates
I Punalur	38.7	58.4		2.8	0.1	
2 Idukki	39.0	54.6	• •	5.7		
3 Nilambur	64.4	<b>34</b> . I	0.1	1.4		•
4 Attappady	<b>50.2</b>	42.3	4.7	2.6	0.2	
5 Manantoddy	46.5	44.8	7.8	0.3	0.1	
Total	42.9	51.7	2.2	3.0	0.1	0.1
39 77 . 1						

*Ibid* . . . . . . . . 6

#### (2) Institutional arrangements

The Department of Tribal Welfare' conducts a number of institutions (Table 20) in the specific field of tribal education. There seems to be more institutions for pre-primary education of tribal students and institutions for higher studies are comparatively lesser in number.

Table 20 Institutions for tribal education \*\* (1984-85)

Catagoriu	No. of institutions				
Category	ITD area & I tribe are	State			
1 Tribal schools*	64	32	96		
2. Government recognised basic schools	4	5	9		
3. G. R. B. Hostels	29	35	64		
4. Tribal Hostels	10	28	38		
5. Training centres	19	12	31		
6. Balawadies	148	32	180		
7. Nursery schools	4	10	14		
T'otal	278	154	<sup>;;</sup> 432		

Department of Tribal Welfare, Kerala.

\*Under the control of Director of Public Instruction.

## (3) Utilisation of educational facilities

Tribal students from the nursery schools to the professional post-graduate levels are paid financial assistance in the form of 'Lumpsum grants', 'monthly stipend' 'mess allowance' 'pocket money' etc. Besides 2% of the total seats in general, technical and professional institutions is reserved for ST students to safeguard the interest of tribal education. But it remains a fact that tribal students have not become qualified to avail of the opportunities put forth to them. (table 21)

Table 21
Strength of tribal students in educational institutions (1979-82)

	1979-80		1980	-81	1981	-82
Category of institutions	No. of % & institutions studen to total admiss		tal tions to total		institu- students tions to total	
1. School educa- tion 84	11561	0.70	11590	0.72	11665	0.73
2. College-educa- tion 35	132	0.45	136	0.49	162	0.40
3. Technical education 36						
(A)Egg. Degree	6	0.32	6	0.34	6	0.31
(B)Egg. Diploma	14	0.84	16	0.87	16	0.83
(C) Egg. Certificate		0.67	151	0.62	<b>22</b> 6	0.53
(D) Medicine	4	0.21	4	0.20	4	0.19

<sup>25</sup> Directorate of Public Instructions, Kerala

## (4) Reasons of non-utilisation

Analysis of reasons for tribal children not attending schools throws some light on the non-utilisation of education in the skill formation of tribal man power. About 53% of children have no aptitude for study, which is linked to the cultural and Socio-economic backwardness of tribal existence. Almost 19% of them did not attend school since school is far off. Children detained to

Directorate of Collegiate Education, Kerala

Directorate of Technical Education, Kerala

look after young ones and detained for work constitute 26.2% (table 22), which shows that the 'opportunity cost' of education is very high and is more important than the low cost (highly subsidised) tribal education. There is also regional difference in the relative reasons of tribal children not attending schools. As majority (57%) in the southern districts abstain from schools due to the far away location of schools a highest percentage (62.4) in the northern districts abstain due to lack of aptitude for study.

TABLE 22

Reasons for tribal children not attending schools 38

Reasons	Southe distric		North dist		State	?
	No.	%	No.	%	No.	%
Detained to look after young	268	4.7	3744	15.4	4012	13.4
2. Detained for work	1081	19.1	<b>276</b> 5	11.4	3846	12.8
3. School is far off	3231	57.0	2468	10.2	5699	19.0
4. Constant failure	221	3.9	130	0.5	351	1.2
5. No aptitude for study	860	15. <b>2</b>	15162	62.4	150.22	53.5
6. Other reasons	. 12	0.1	27	0.1	39	0.1
Total	5637	100.0	24269	100.0	29969	100.0

<sup>&</sup>lt;sup>38</sup> Ibid . . . . . 2

The non-utilisation of educational apportunities by tribal population and the regional disparity in the level of literacy among them have to be looked into not in the efforts made in the form of concessions or monitary incentives at the superstructural level of education but in the general socio-economic conditions and cultural backgrounds of tribals. For instance low level of land holdings, extreme dependence on wage labour, high rate of female work participation etc. have some relation to their low literacy. Low percentage of students to total tribal population is in turn related to the above factors. Besides lack of motivation and absence of ambition for development are strong forces, perpetuating their educational backwardness

Table 23
Socio-economic determinants of educational backwardness

Land ownership  Landless Marginal holders		Agricultural labourers	Female work participation	percent Literacy	
		, modern (73	participation	total populati	
29.62	61.75	71.13	37.68	26.55	10.57

#### 38 Ibid.....2

#### 2.5 Unemployment and underemployment

#### (1) Under employment

The problem of underemployment is severe among tribal work force viewed from the angle of mandays worked. 78% of agricultural labourers (table 24) get work only for 7 to 18 days in a month. As regards own account workers 38% have no work for the entire month.

Table 24

Distribution of workers according to number of days worked (last month) (percentage) 40

No. of days worked	Employees on daily wage	Own acc- ount Worker
No. of work	1.85	37.94
1-6 days	4.95	2.89
7-12 days	47.21	15.58
13-18 days	30.70	13.36
19-24 days	13.72	20.02
25-30 days	1.57	10.21
All	100.00	100.00

From the manhours worked point of view also a high rate of under employment exists among tribal manpower. At the standard of 48 hours of work per week nearly 50% of tribal manhours go unutilised (table 25) and by the 36 hours per week standard about 30% of manhours is under utilised.

TABLE 25
Distribution of tribal manhours by utilisation:percentage 42

in the second se	per w				worker	
Tribal   ** *** manhours   **** *******************************	Employ- ees on daily wages	Agri- cultural labourers	bonded labourers		Agri- cultural labourers	Bonded labou- rers
Manhours utilised Manhours not utilised Total manhours	52.32 47.68	50.34 49.66	93.17 6.83	69.76 30.24	67.12 32.88	124,23* 24.23
available	100.00	100.00	100.00	100.00	100.00	100.00

<sup>42</sup> *Ibid*.....2

#### (2) Educated Unemployment

Employment Exchange figures on tribal registrants show the paradox of educated unemployment among triabals. Above 70% of registrants are below SSLC in almost all the years and the remaining 30 percent are above S.S.L.C. (table 26) Educated registrants at the employment exchange has increased by 77 percent in 1983 when compared to that in 1980.

TABLE 26
ST. registrants on the live register of Employment
Exchanges (1980-83)

	Educational	Ι.	umber of reg	istrants as on	
	lev <b>e</b> l	31.3.80	31.3.81	31.3.82	31.3.83
ļ	Below S.S.L.C.	3208	4415	4988	5044
		(100)	(138)	(155)	(157)
2	S.S.L.C.	1052	938	`11 <b>7</b> 2	`1833
3	Pre-degree	69	60	112	157
ŀ	Graduate	24	13	26	40
5	Post-graduate	5		4	4
5	S.S.L.C, and above	1150	1011	1314	2034
5.5.11.6, and above	(100)	(88)	(114)	(177)	
	Total	4358	5426	6302	7078
		(100)	(125)	(145)	(162)

<sup>&</sup>lt;sup>41</sup> Directorate of Employment & training, Kerala (Index is given in brackets)

<sup>\*</sup>Exploitation.

# 2.6 Training and self-employment

#### (1) Training Programmes

At present training programmes for tribals are conducted by the field level functionaries of Tribal Welfare Department. Many other agencies and organisations in the government and co-operative sectors have taken up the task of training tribal manpower in the line of self-employment avocations. But majority of the programmes are meant for persons with a certain degree of literacy and educational standard. A total of 1899 persons have been trained during 1980-84 under various programmes (table, 27). The training programmes have to be restructured to take care of the 'illiterate majority' of tribal manpower.

N

Table 27

Number of tribals trained during 1980-84 by different training agencies 43

	Type of training		Training institution/		No. of perso	ns trained		Total
		J1 J B		980-81		1982-83	1983-84	•
1.	Train	ning in Farms	Tribal Joint Farm	50				50
2.	,,	Animal Husbandry	Animal Husbandry					
	,,		Department	70		47	100	217
3.	,,	Power tiller operations	Agro-industries Corporation			5	10	15
4.	,,	Cashew processing	Cashew Development					
	22		Corporation	10	7		15	32
5.	5)	Plywood industries	Government Plywood					
	"	,	Factory, Punalur	3	3	8	15	29
6.	,,	Rattonworks	Departmental Training centr	e 70	83	98	123	374
7.	"	Weaving	27	48	50	54	55	207
8.	,,	Carpentry	,	32	17	16	1 <b>4</b>	79 94
9.	22	Cutting & Tailoring	"	<b>2</b> 5	11	9	49	94
10.	"	Kora grassmat weaving	23	2	4	7	6	19
11.	"	Under master craftsman	**		20	30	30	80
12.	"	Radio assembling	Industrial Co-opertive Society				30	30
13.	,, ,,	Utensil makir g	Government of India Exten-					
	*,	3	sion Centre, Attingal		3	3	10	16
14.	23	Brick making	Co-operatives		20	40		60
15.	33	Motor driving	SC/ST Development					
	23		Corporation		91	98	<b>50</b>	239
16.	,,	Educated tribals in	C.D. Blocks	• •				
	"	extension work			20	20	40	80
17.		TRYSEM programme	Various agencies &	• •				
	• • • • • • • • • • • • • • • • • • • •	Tatalogia programmo	D.R.D.Ä.S.	39	47	89	103	278
		Total		349	376	524	650	1899

<sup>&</sup>lt;sup>48</sup> Draft Tribal Sub-plan of Kerala 1984-85-Department of Tribal Welfare, Kerala.

#### 2) Self-employment in trade

Much expenditure is incurred every year to aid tribals to start "petty shops" as part of self-employment programme in tribal areas. But it is seen that tribals are facing competition from non-tribals in the trading sector (table 28). It is doubtful how far these "imposed skill" can help tribals in joining the mainstream as independent economic units.

TABLE 28
Self-employment in trades in tribal areas \*\*

	Number of households owning							
ITD Project	Tea shops		Other	shops	, To	tal		
	Tribal	Non-tribal	Tribal	Non-tribal	Tribal	Non-tribal		
I. Punalur	53	67	24	. 54	77	121		
2. Idukki	27	66	37	76	64	142		
3. Nilambur		38		36		74		
1. Attappady	8	442		506	8	948		
5. Manantody	25	180	1	117	26	297		
Total	113	793	62	789	175	1582		

<sup>44</sup> *Ibid*......6

#### 24

#### 2.7 Employment/income generation

#### (1) 20 point programme and tribal sub-plan schemes

In view of the unemployment and economic backwardness of tribals in the State various programmes are implemented to create employment opportunities and income for the tribal population. There is remarkable growth in the number of beneficiaries of schemes under '20 point' programme and 'tribal-sub plan' (table 29).

Table 29

Physical achievements of schemes under 20 point programme and tribal sub-plan (1980-84)

Sch	emė/Programme		$\stackrel{-}{Unit}$	1980-81	1981-82	1982-83	1983-84
I. 20 Poi	nt Programme <sup>45</sup>						
(1) (2) (3)	I.R.D.P. Economic assistance N.R.E.P.		of families do. days (000)	••	••	2276 4 <b>9</b> 69 7226	1706 2 <b>02</b> 5 5153
II. Triba	il Sub-plan <sup>46</sup>	(1)	No. of families benefited	3916	4883	7752	4770
		(2) (3)	No. of beneficiaries No. of works	20500	28367	33439	30190
		<b>(</b> 4)	undertaken No. of persons	364	146	113	990
	vid28	<b>(</b> 4)	No. of persons given employment	109	405	234	49

<sup>46</sup> Ihid

#### (2) Expenditure on tribal development

The per capita annual expenditure on tribals in 1976 came to Rs. 5000 and it increased to Rs. 22,000 in 1981. The per capita expenditure in tribal areas (ITDP) stood at Rs. 31,000. In addition to the amount furnished below (table 30) there are contributions from other sectors/departments to the efforts for development of tribals. The adequacy or otherwise of financial allotment and a cost-benefit analysis of the expenditure already incurred are not done at present. In spite of these efforts on tribal development alarge majority of tribal population are still below poverty line. This situation indicates the inherent inadequacy of schemes in making tribal workforce, having low cultural standards economically re-generative. pattern of developmental approach may not be a workable proposition in respect of tribals in various parts of the state. As the tribals of a region/ settlement are greatly influenced by the socio-economic conditions of surrounding non-tribal population a 'standard socio-economic' 'setting' assumed in the plans and schemes may not fit in to all settlements/regions and hence their response to these programmes may show much variation among settlements/regions.

Table 30

Expenditure on tribal development<sup>17</sup>

(Rs. in lakhs)

Year	Expenditure in ITD project areas sub- plan area	Expenditure on dispersed tribes and non-plan schemes	Total Expen- ditures
1976-77	34.48	106.82	141.30
1977-78	42.46	102.78	145.24
1 <b>978-7</b> 9	77.70	1 <b>25.02</b> .	202.72
1979-80	121. <b>2</b> 5	114.19	<b>2</b> 35.44
19 <b>80-81</b>	<b>224</b> .15	129. <b>2</b> 5	353.40
1981-82	370.79	201.12	571.91
1982-83	386.56	160.68	547. <b>2</b> 4
1983-84	391.70	172.03	56 <b>3</b> .73
Total	1649.09	1111.89	2760.98

<sup>47</sup> Ibid . . . . . . . 43

#### 2.8 Effective utilisation of tribal manpower

The special characteristics of tribal economy, low level of literacy and skill formation, non-effectiveness of tribal development programmes etc. have resulted in the 'sub-optimal' utilisation of tribal manpower in the State. A detailed assessment of the characteristics of skill desposition in the settlement (regional) level is a pre-requisite for this attempt. Some suggestions in the light of the above analysis are discussed below.

- (1) Efforts are essential to create more of employment opportunities in tribal areas in the agricultural and allied sectors of animal husbandry and poultry. Possibilities of utilising tribals in the unskilled activities associated with construction works implemented under tribal development programmes may be considered. The present arrangement of contract system' is the major obstacle in this line. Contractors employ non-tribals for unskilled work also.
- (2) Agro and forest based industries can be started in the vicinity of tribal settlements. The availability of various forest products provide ample scope for the development of such industries. Instead of 'exporting' the forest products to 'urban-growth centres', these can be processed in the forest regions themselves. If pursued, this will generate employment for surplus labour power available in tribal regions. Also, through the process, effective links with the larger society can be established which will accelerate the pace of development of tribals leading to their ultimate integration with the mainstream society. At present the tribals do not have the adequate skill to participate actively in the industrial ventures. However through a gradual process the requisite skill can be formed among them.
- (3) Generation of farm and non-farm employment opportunities in tribal areas, preferably in the co-operative fold can free the tribals from bonded labour, if any. It soems that in certain regions tribals prefer to be bonded labourers. This 'voluntary bondage' is mainly due to the pressure of unemployment and absence of alternate sources of income.
- (4) Unemployment among tribals is a paradox to be enquired into in detail. As is evident from the administration reports of Kerala Public Servee Commission many posts advertised for appointment from among tribal iare left unfilled due to non-availability of qualified condidate (C.N.A.). But many of educated tribals are seen registered with the Employment Exchanges. This may be due to the fact that tribal candidates find it difficult to qualify in the standard tests/interviews conducted by the recruiting agencies. They should be exempted from written tests or interviews and suitable on the job training may be given to them. Besides starting of 'pre-examination training centres' for tribal candidates may be of great use. Recently the 'State Bank of Travancore' did conduct such a training course for tribal candidates in a selection test for clerical posts. The pre-examination training centres now, run by the 'Harijan Welfare Department' of the State are found over crouded with scheduled caste candidates, though certain percentage of seats are reserved for ST candidates.

- (5) Efforts to increase the level of education of tribals is the basis of "planning tribals for jobs". Tribal schools with complete staff and other amenities should be started in tribal settlements. It is a fact that many of the existing tribal schools are in very bad condition with inadequate staff and lack of proper maintenance. Parents and teachers are unable or unconcerned to motivate tribal children for education. Children of illiterate tribals continue to be indifferent to education. A reorientation in the strategy of tribal education is the vital aspect in growth of tribal literacy.
- (6) Intercommunity variations in literacy, education, employment, income etc. is very wide among-different sub-castes of tribal population. For instance 'Malai Arayas' are far advanced in the above mentioned aspects. Large scale concession in this locality and the modern outlook to life of christian converts may be the reason for this advanced status. This variation sets in imbalances within the "Subsystem' and perpetuates the skewed pattern of economic and cultural standards, which inpeeds balanced development of tribal manpower in response to development efforts. In order to develop the tribals much has to be done in the field of adult education also.

#### CHAPTER 3

#### SUMMARY AND CONCLUSION

#### 3.1 Summary of findings

- (1) Tribals constitute 1.03% of States' population (1981), nearly one fifth of the population in Wynad district is tribals and more than 60% of tribals are concentrated in the northern region of the State.
- (2) The Integrated Tribal Development areas contain about 45% of tribal population and the rest are dispersed tribes. More than 76% of the total population in the project areas belong to tribal communities.
  - (3) Literacy level of tribals is found very low; 31.79% in 1981.
- (4) "Settlers' formed the 'agents of change' of the land based tribal economy and the land alienation that followed made the tribals either landless or marginal holders of land.
- (5) Nationalisation of forests, adversely affected the 'forest-based' subsidiary occupations of tribals and free mobility of tribal labour.
- (6) Tribals are seen not actively participating in (household) industrial activities due to competitions from non-tribals, lack of patronage and market bottlenecks.
- (7) Wage labour dependance of tribals is found very high (72%) due to absence of alternate sources of employment. Co-operatives farming could be a remedy.
- (8) A 'dual market' for agricultural labour exists in tribal areas and the 'tribal wage' is kept very low due to the monopsony' power of non-tribal employers of tribal workers.
- (9) Work participation rate of tribal workforce shows a declining trend indicating declining employment opportunities for tribal manpower.
  - (10) Female work participation of tribals is found higher (38%).
- (11) Employment of educated tribals in Government department (0.5%) and other organised sectors is found very low and most of them are holding lower posts.
- (12) Tribals are found adapting to modern skills and 65% of them are found willing to take up modern occupations.
- (13) The shift in the occupational pattern of tribals is found in the right direction as only 57% of tribals depend on wage labour in 1981 as against 72% in 1976.

- (14) Educational facilities in general and technical fields are not optimally utilised by tribal students due to academic and non-academic reasons.
- (15) Problems of unemployment, educated unemployment and under-employment exist among tribal population.
- (16) Training programmes for tribal employment are concentrated on the literate group (minority) of tribals and the illiterate (majority) group is not adequately covered under the programmes.
- (17) 'Imposed skill' like trade, do not seem to be a right area of self-employment for the tribal unemployed.
- (18) Huge expenditure is incurred every year for implementation of tribal development schemes and a cost-benefit analysis of these expenditure seems to be necessary.
- (19) At present tribal manpower is not optimally utilised. Starting of agro-forest based industries, generation of non-farm employment, an enquiry in to the reasons of unemployment of educated tribes, starting of pre-examination training centres for them, efforts to increase the literacy of tribes. an indepth study of the reasons of inter-community variations in income employment etc. are some of the steps required to attain effective utilisation of tribal manpower.

#### 3.2 Conclusion

Tribal development plans have to be worked out in accordance with their social cultural and educational background. Dedicated implementation of the correct plans may improve the situation of tribals. A comprehensive assessment of tribal manpower is limited by non-availability of adequate data. As manpower alone is the major asset of tribals in the State, a detailed study of manpower situation among tribals with the specific objectives of identification of skills, its interlocal and intralocal variations, its possibilities of adaptation to modern skill etc. may bring forth relevant data explaining the manpower requirements and potential in tribal areas in the context of developmental programmes.

Appendix
Other Manpower studies

No.	Title	Author	Sector	Details of Publication
(1)	(2)	(3)	(4)	(5)
1	Technical manpower for agriculture in Kerala	V. P. Nair	Agriculture	M. P. Studies, Vol. I, October 1977
2	Attrition rate of agricultural personnel in Kerala			
3	Utilisation of veterinary personnel	**	"	29
-	in Kerala	K. V. Bhattathiri	Animal Husbandry	>>
4	Employment potential of fisheries development programmes in Kerala	>>	Fisheries	97
5	Manpower involvement in the School education of Kerala	R. G. Nair	Education	97
6	Unemployment among B.Ed. degree holders in Kerala	V. P. Nair	33	>>
7	Employment trends among engineering graduates on the live register of employment exchanges, 1974	R. G. Nair	Engineering	22
	Employment of engineering personnel in Kerala	V. K. P. Unni	,,	<b>72</b>
9	Medical manpower (Allopathic) in Kerala	A. Sarasamma	Health	

10	Unemployment among allopathic Doctors in Kerala	K. V. Bhattathiri	>>	<b>»</b>	
11	Nursing profession in Kerala	Lillykutty Varghese	>)	<b>33</b> ′	
12	Higher education (general) & educational manpower in Kerala	K. V. Bhattathiri	Education	M. P. Studies, Vol. II, July 1979	
13	A Study on statutory apprenticeship programme in Kerala	A. Meerasahib	Engineering	· "	
14	Fishermen population and Fishing implements in Kerala	E. P. R. Namboothiri	Fisheries	"	
15	Technical manpower in fisheries sector in Kerala	<b>3</b> 2	23	, 39	
16	A report on manpower utilised by PWD in Kerala by its activities during 1976-77	K. M. Unni	Engineering	,,	į c
17	Migration of Engineering graduates a case study	T. P. Rajagopal	Engineering	<b>3</b> 2	_
18	Availability of specialists in modern medicine in Kerala	Parukutty Amma	Health	M. P. Studies, Vol. III, July 1979	
19	Report on the study of capacity utili- sation and manpower involvement in the manufacturing industries of cartons, paper bags and envelopes in Kerala	<b>M</b> ohammedkutty	Industries	voi. 111, july 1373	
20	Employment in fish processing industries in Kerala	E. P. R. Namboo- thiri	Fisheries	"	
21	A report on the study of the employ- ment of craftsmen in different trades in Kerala	A 3.6 1.11			
-	III Neraia	A. Meerasahib	Engineering	<i>31</i>	

(1)	(2)	(3)	(4)	(5)	
 22	Study on the characteristics of un- employment among post-graduates in Kerala	P.C. Jain	Education	M. P. Studies, Vol. III, July 1979	
23	Study on the employment potential in Khadi & Village industries in Kerala	P. C. Jain	Industries	M. P. Studies, Vol. IV, 1980 (In press)	
24	Involvement of manpower in Mini industrial estates in Kerala	T. Mony	,,	23	
25	Manpower involvement in Private medical care in Kerala Some high-lights	Parukutty Amma	Health	"	
26	Inservice training of medical and paramedical personnel in health services department	<b>33</b>	<b>33</b>	33	į
27	Manpower involvement in Co- operative sector of fishing industry	C. Bhaskaran	Fisheries	<b>&gt;&gt;</b>	
28	Employment in fish marketing in Kerala	35	23	"	
29	A study on the utilisation of agricultural post-graduates in Kerala	V. P. Nair	Agriculture	M. P. Studies, Vol. V, 1981	
30	A study on the utilisation pattern of apprentice in Kerala	A. Meerasahib	Engineering	33	
31	A study on the preparation of middle- level manpower for industries in Kerala	>>	<b>&gt;</b>	33	

32	Study on the growth of employment in the state governments sector in Kerala	A. Sarasamma	Services		
Ma	npower study series				
33	Study of educated unemployed SC/STs in Kerala	P. C. Jain	Unemployment	October 1983 (printed)	
34	Manpower involvement in mechanised fishing in Kerala	L. R. Lilly Bai	Fisheries	November 1983 (Stencilled)	
35	Study on the utilisation of post- graduates in modern medicine	Parukutty Amma	Health	November 1983 (printed)	
36	Study on employment prospects for non-technical less qualified (NLMP) manpower in Kerala	P. C. Jain	Unemployment	January 1984 (Printed)	33
37	Study on the utility pattern of engineering graduates in Kerala	N. Sivadasan	Engineering	February 1984 (printed)	
38	Study on womens industries programme in Kerala	T. Mony	Industries	February 1984 (printed)	
39	Manpower involvement in engineering industries in Kerala	"	<b>3</b> ·	February 1984 (Stencilled)	
40	Study on employment generation under TRYSEM programme in Kerala	P. C. Jain	Employment	February 1984 (Stencilled)	

(1)	(2)	(3)	(4)	(5)
41	An indepth study on student wastage in engineering colleges and poly- technics in Kerala	N. Sivadasan	Engineering	February 1984 (Stencilled)
42	Study on the utilisation pattern of trained technical personnel in the department of agriculture	K. K. Samantha Bhadran	Agriculture	March 1984 (Stencilled)
43	Utilisation of trained engineering personnel in PWD	K. M. Unni	Engineering	February 1984 (Stencilled)
44	Study on JTSLC holders in Kerala	N. Sivadasan	**	March 1984 (Stencilled)
45	Supply of and demand for engineering personnel in Kerala during the period 1978-83	K. M. Unni	· •	June 1982 (printed)
46	Study on migration of medical and para-medical personnel in health department	Parukutty Amma	Health	May 1984 (Stencilled)
47	A report on the stock of technical manpower in Kerala	P. C. Jain	Engineering	April 1984 (Stencilled)

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