

**Working Paper
384**

**ECONOMIC AND SOCIAL DYNAMICS
OF MIGRATION IN KERALA,
1999-2004
ANALYSIS OF PANEL DATA**

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ABSTRACT

Panel studies based on the same set of sample households or individuals at two points of time 5 or 10 years apart are time consuming and are relatively rare in social science research. Such a method, however, was used in the South Asia Migration study (SMS) conducted by the Centre for Development Studies in 2004. About 125 of the 200 Panchayats surveyed in SMS were the same as those surveyed in Kerala Migration Study (KMS) in 1999. About 5 thousand of the 10 thousand households of SMS in 2004 were the same as those selected in KMS in 1999. About 14 thousand individuals in the 2004 sample households were the same as those enumerated in 1999. Thus, SMS provides comparable panel data for about 125 Panchayats, about 5 thousand households and about 14 thousand individuals at an interval of 5 years. Analysis of these panel data is the objective of this paper.

The analysis of the panel data validated the trend in migration, remittances, employment and unemployment patterns, consumption habits, etc shown by the KMS and SMS (using the full set of 10,000 households). The trends shown by the full set of data were more or less the same as shown by the panel data using the same set of households. Thus, the panel analysis showed that sampling errors were within acceptable limits in both these studies.

A special feature of the panel analysis was that it could provide quantitative measures of shifts in employment pattern of the labour force during 1999-2004. An equally important result of the panel analysis is the information it provided on process of employment of those unemployed in 1999 and the background information on the economic activity of the unemployed in 2004. Thus, the panel analysis provides valuable information on the transition of the unemployed before becoming unemployed and the transition after becoming unemployed. A one time survey cannot give such information. This is a unique feature of this panel study described in this Working Paper.

Key Words: International Migration, Remittances, Unemployment, Replacement Migration, Kerala

JEL Classification: J21, J23

Introduction

This Working Paper is on dynamics of the socio-economic characteristics of external and internal migration in Kerala during 1999-2004. It is based on panel data collected in the South Asia Migration Study conducted by the Centre for Development Studies in 2003/04. Conclusions on the changes in the socio-economic characteristics of migrants based on panel data are unaffected by sampling errors as the same sample of households are used in both. That is one unique feature of the analysis provided in this paper. Secondly, question such as what had happened to the persons identified as unemployed in 1999 during 1999-2004 is answered with the help of a set of panel data. This paper gives follow up of the activity status of those enumerated in the earlier study. Only panel data can provide such analyses

The paper is organized into three parts. It starts with the analysis of about 14 thousand individuals enumerated in 1999 as well as 2004. This analysis is followed by the analysis of the 5 thousand common households. Third, the 125 common Panchayats are analyzed. In each of these cases, only special areas that are appropriate for the data are selected for the detailed analysis*

* *Not all the 5000 households from the 125 selected Panchayats could be traced in the 2004 survey. Some of the households had moved out during 1999-2004. Only 4795 households were included in this panel analysis. Not all members enumerated in 1999 in these 4795 households could be traced based on name, date of birth etc in 2004. The panel study includes only 14,114 individuals.*

I Migration and Remittances

Panel data provide a means to estimate emigration and return emigration for 2004 and 1999 from the same set of 4795 households. These estimates can be used to measure increases in the number of emigrants and return emigrants by districts and for the state as whole. Such comparison is not vitiated by sampling errors. According to these estimates the number of emigrants in Kerala in 2004 was 19.3 lakh compared with an estimate of 18.4 lakh from the full data. For 1999, the panel estimate was 13.7 lakh. The corresponding estimate from the full data was 13.6 lakh. Thus, the full data set seems to have underestimated the number of emigrants in 2004.

The Panel data indicated that return emigrants were 9.3 lakh in 2004 and 7.6 lakh in 1999. The corresponding numbers from full data were 8.9 lakh and 7.4 lakh respectively. Again the full data seem to have underestimated return emigration in 2004 but not in 1999. The number of Non-Resident Keralites according to panel data was 28.6 lakh in 2004 and 21.3 lakh in 1999 showing an increase of 34 percent. The full data showed that NRK numbered 27.3 lakh in 2004 and 21.0 lakh in 1999 with an increase of 30 percent.

Earlier analysis based on full data indicated that the total remittances to Kerala in 2004 were Rs. 18.5 thousand crore. This estimate was based not entirely on SMS data but also on the trends in emigration and relation between emigration and remittances in the past. A part of the total remittances, household cash remittances, was estimated using SMS data alone. The estimate was Rs. 5.509 thousand crore. For the state as whole, cash remittances received by households as estimated by the panel data were about 3 percent higher than the estimate from the full data. Thus, data on household remittances were relatively accurate at the state level.

The main contribution of the panel data is that they validated, in general, the estimates of migration and remittances made from the full

data. Conventional sample surveys can at best provide standard errors of the various estimates. Panel data enable the analyst to control for sampling variation. Analysis of panel data provided convincing evidence to conclude that the estimates of migration at the state level were fairly accurate. Estimate from the full sample was not much different from that from the 125 common panchayats or from the 4795 common households. Return migration estimates were more stable than emigration or out-migration.

II Panel Data at the Individual Level

Although the five thousand common households should have about 23 thousand members, not all the members in the 1999 sample could be matched with members in the 2004 survey. Clear matching, by way of name, year of birth, etc, could be done only for about 14, 114 individuals. Among the various individual characteristics that could usefully be analysed, we have selected in this section only characteristics of the economic sector of activity.

Economic Sector

Out of the total 14,114 persons common both in 1999 and 2004, 10781 had been 15 years or older in age in 1999. It is those 10,781 persons who are the objects of this analysis. Table 1 gives the distribution of these persons by the sector of their employment sector in 1999 cross-classified by the sector of their employment in 2004. How many of those who had been employed in the Government sector in 1999, for example, remained in the Government sector itself in 2004? How many moved out to other sectors? Which are the sectors to which they moved?

The diagonal figures given in Table 1 indicate the proportions of persons who remained in the same economic sector. For all the sectors, combined about 52 percent of the total workers remained in the same economic sector in 2004 as they had been in 1999 (sum of all the diagonal frequencies divided by the total of all frequencies --10,781). The other 48 percent moved to other economic sectors.

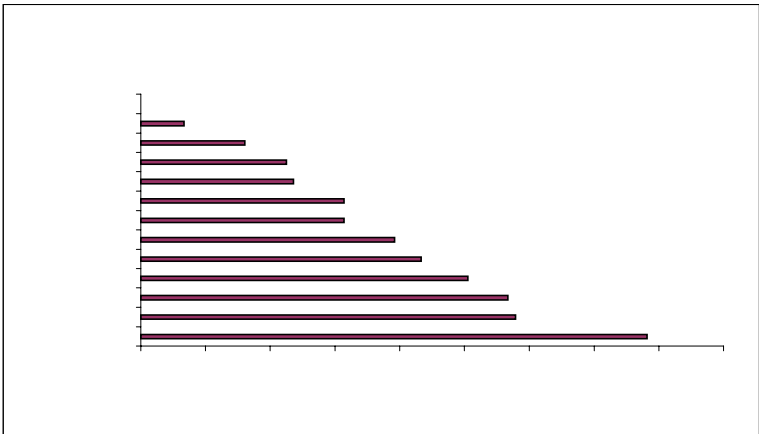
Table 2: Distribution by Employment Sector in 1999 by Employment Sector in 2004*

	1	2	3	4	7	8	10	11	12	Total
Government	60.0	10.2	4.7	3.7	3.2	6.2	4.0	5.0	0.5	98.0
Semi-Govt	15.6	14.6	20.0	4.9	9.3	12.7	16.1	4.4	0.0	98.0
Private	3.8	2.7	23.8	12.3	18.8	6.9	20.7	8.0	0.4	97.0
Self-Employment	1.6	0.4	5.8	50.5	14.8	5.2	4.9	6.9	0.3	90.0
Unpaid Family	0.0	0.0	4.3	36.8	7.7	5.1	6.0	20.5	1.7	82.0
Agri. Labour	0.3	0.1	1.0	23.5	23.7	2.2	1.0	10.4	0.3	63.0
Non Agri.labour	0.7	0.3	5.0	14.7	45.6	6.0	6.6	5.4	0.3	85.0
Unemployed	0.7	0.4	3.4	5.5	6.3	16.0	41.1	23.0	0.0	96.0
Not requiring job	1.4	0.2	1.8	14.0	7.3	0.7	0.4	25.5	2.8	54.0
Student	0.9	0.0	0.4	0.4	2.6	4.3	89.2	1.7	0.0	100.0
Household duties	0.6	0.1	0.6	3.1	4.0	2.8	1.4	80.0	0.2	93.0
Retired	15.1	2.7	3.0	12.8	4.3	1.8	0.2	12.6	5.0	58.0
Total	3.9	1.0	3.6	13.8	15.4	4.8	8.1	33.8	0.6	85.0

* Employment sectors (5,6 and 9 in 1998 are omitted in Tables 1 & 2. Therefore the totals in the Table 2 do not add to 100 (last column)

The important conclusion which emerges from this analysis is that the employment situation in Kerala was very dynamic during the period 1999-2004. Nearly half the workers changed their sector of employment during this period.

The most volatile of the 12 economic sectors was employment as unpaid family worker. Not too large a proportion had been employed in this sector in 1999 but ninety three percent of those who had employed in 1999 moved out of the sector and took up jobs in other sectors. The most stable economic sector was "household duties", a sector dominated by women. Seventy-eight percent of persons engaged in household duties in 1999 remained in the same sector of household duties in 2004. The 12 economic sectors are arranged according to the degree of stability in Figure 1. A few of these sectors are discussed below:



Unemployment

Some insight into the unemployment situation in Kerala is obtained by analyzing what happened during 1999-2004 to those who had been unemployed 1999. In terms of the degree of stability, unemployment sector ranks very low, 10 in a rank of 12. Most of the unemployed in

1999, about 77 percent, did not remain unemployed after 5 years. This is an important aspect of the unemployment situation in Kerala.

About 25 percent of the unemployed in 1999 became labourers in the non-agricultural sector in 2004. About 19 percent engaged themselves in household duties. Twelve percent became self-employed. These details are given below for all those who had been unemployed in 1999 and separately for those who were educated up to secondary or high level among them.

100 persons unemployed in 1999	100 Educated Unemployed in 1999
in 2004	in 2004

23 remained unemployed	31 remained unemployed
27 became labourers	17 labourers
12 self employment	5 self employment
10 Government, semi government job	15 Government, Semi-Govt
4 other gainful employment	6 other gainful employment
24 outside labour force	26 outside labour force

Among the educated unemployed in 1999, 31 percent remained unemployed even in 2004; fifteen percent received government or semi government jobs, a surprisingly high proportion, 17 percent, became labourers in the non-agricultural sector; and about quarter of them -26 percent- gave up continuing in the labour force.

Unemployed in 2004, what had been their status in 1999?

The majority of the unemployed in 2004 had been either students (41 percent) or persons engaged in household duties (23 percent). About 16 percent had been unemployed in 1999. About 6 percent had been labourers in non-agriculture. Nearly 6 percent had been self-employed. The rest had been in Government services or in the job not required category. It is important to note that most of the unemployed in 2004 had not been unemployed in 1999.

100 who were unemployed in 2004

41 were students in 1999
23 were engaged in household duties in 1999
16 were unemployed in 1999 also
6 were labourers in non-agricultural sector in 1999
6 were self-employed in 1999

Some of the individuals in the panel data had been return migrants in 1999. It is of interest to know what economic activity these return migrants were engaged in 2004. Table 3 gives the distribution of return emigrants and return out-migrants by economic activity in 2004.

Table 3: Distribution of Return Emigrants and Return Out-migrants in 1999 by Economic Activity in 2004

Economic Activity	REM	ROM
Government Service	1.7	4.5
Semi-Government	1.0	2.5
Private Sector	2.1	2.5
Self-Employment	9.6	10.0
Unpaid family worker	1.8	0.5
Agricultural Labourer	3.7	3.2
Non-Agricultural labourer	13.8	16.2
Unemployed	8.4	7.7
Job not required	9.2	7.4
Student	13.2	9.1
Household duties	33.1	28.9
Retired, etc	2.4	7.7
Total	100.0	100.0

The majority of the return migrants were not working; 66.3 percent of the return emigrants and 60.8 per cent of the return out-migrants.

About a-third of the return emigrants and 39.2 percent of the return out-migrants were gainfully employed. The proportions compare well with 39.7 per cent of gainful employment among the general population. From the point of view of unemployment rate, the proportion among the return migrants is only slightly lower than among the general population.

The general conclusion that follows is that return migrants to Kerala participate in economic activities of the state as much as the members of the general population. They are not a group of retirees doing nothing and enjoying the luxury of their hard earned money earned during their earlier work in other countries or states. Migration has not made much of a mark in the employment status of the return migrants in Kerala, as different from that of the rest of the population.

II Household Level Analysis

About 5000 households (50 percent) enumerated in SMS were from among those enumerated in 1999 in KMS. However, after scrutiny and editing of the data, only 4795 households could be identified as those enumerated in 1999. These 4795 households are the ones used for analysis in this section.

Unlike in the case of personal level data, which we used for an analysis employment sector only, the panel data at the household level are used for analysis of a variety of variables, some of which are household variables and others pertaining to characteristics of persons.

Components of Change in Household Population

The 4795 sample households included in the two surveys had 23,730 persons in 1999 and 21,389 persons in 2004. SMS included some persons who were born after 1999 and/or migrated into Kerala during 1999-2004. KMS included some persons who died and/or migrated out of Kerala during 1999-2004. The overall situation is indicated by the statistics given below in Table 4.

Table 4: Components of Change in Household Population

	KMS	SMS	Net Attrition
No. of Households	4795	4795	0
No of Persons	23730	22989	741
Born during 1999-2004 and surviving			1600
Gross Attrition due to mortality and migration 1999-2004			
	= 23730-22989+1600		= 2341
Net attrition	= 2341-1600		= 741

Thus, during 1999-2004, the 4795 sample households in KMS experienced a net attrition of 741 persons. The net change is the result of increase in numbers due to births and marriages (1600) and decrease through mortality and migration of 2341 persons.

Household Size

The distribution of the sample households by size is given in Table 5 for 1999 as well as for 2004. During 1999-2004 some households, especially small households of 1999, increased their size, which some especially large households decreased their size; only a few remained unchanged in size. About 38 percent of the sample households increased their size, 28 percent decreased their size and 34 percent remained unchanged. Among 2-member households of 1999, 66 percent had increased size while 33 percent of them remained unchanged. The decrease in size was negligible. On the other hand, among households with 9 or more persons in 1999, 71 percent decreased in size and 16 percent increased. Although the number of households which experienced increases were more numerous than those that decreased, in terms of the number of total members the number in 2004 was lower than in 1999. There was a decrease in the total number of persons in the 4795 households enumerated in 1999 and 2004.

Table 5: Distribution of Households by Size, 1999 and 2004

	No. of HHS		Percent of HHs which:			All
	1999	2004	Decreased	Increased	Unchanged	
1	88	139	0.0	69.8	30.2	100.0
2	350	418	1.0	66.5	32.5	100.0
3	625	725	8.7	64.1	27.2	100.0
4	1227	1181	18.2	35.9	45.9	100.0
5	1041	983	32.8	28.4	38.9	100.0
6	636	599	47.9	21.7	30.4	100.0
7	316	272	58.1	21.0	21.0	100.0
8	173	152	44.1	19.7	36.2	100.0
9+	339	326	70.6	13.5	16.0	100.0
Total	4795	4795	28.1	37.6	34.3	100.0

Attrition by Age

In Table 6, we present the number of persons in each age-group as between 1999 and 2004.

Table 6 indicates that there was attrition among the population of Kerala in the early age groups (up to 40 years) and gains (negative attrition) at older age groups. Attrition at younger age groups could have been mostly due to migration as mortality is not very significant in these age groups. Attrition due to mortality could be significant at older ages, but the figures show negative attrition or gains. The net effect of migration and mortality is a gain of population in these ages. The inference to be drawn is that Kerala experiences fairly large amounts of in-migration at older age groups, and that their numbers are larger than the number of deaths at these age groups. The net result is a gain in the elderly population, accentuating to the old age problems in the state. Direct information on net in-migration to Kerala at older ages is not generally

Table 6: Attrition by age group*, 1999 and 2004.

	KMS	SMS	Attrition (%)
0-4	1717	1600	6.8
5-9	1871	1608	14.1
10-14	2190	1764	19.5
15-19	2323	2050	11.8
20-24	2361	2230	5.5
25-29	2136	1915	10.3
30-34	1806	1784	1.2
35-39	1759	1608	8.6
40-44	1374	1485	-8.1
45-49	1384	1341	3.1
50-54	1109	1291	-16.4
55-59	996	1164	-16.9
60-64	953	984	-3.3
65-69	726	798	-9.9
70-74	507	604	-19.1
75-79	293	380	-29.7
80+	226	246	-8.8

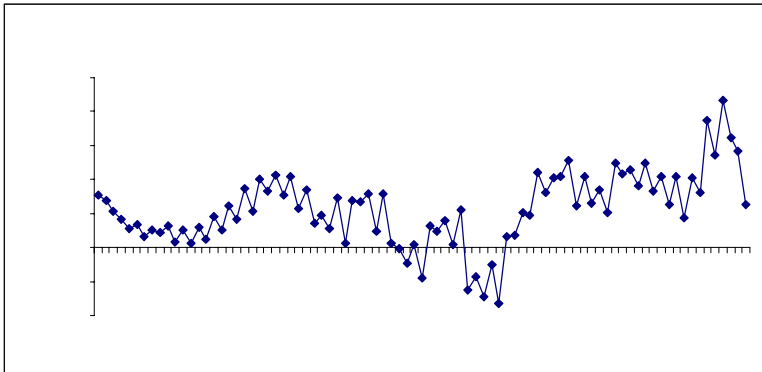
* *A positive number means attrition or decrease; a negative number indicates gain.*

available. The data given above support the general view that old age problem in Kerala is intensified by the in-migration of the elderly in large numbers from other state (Keralites who had migrated out at their younger ages and have been returning after retirement)

Attrition by Cohort

Figure 2 gives attrition rate by year of birth (cohort). Those who had been of the age group of 10-14 years in 1999, for example, may be compared with persons who were 15-19 years of age in 2004. The two groups are born in the same calendar years. The graph shows that almost all birth cohorts experienced attrition except those who were

born between 1945 to 1955, or those who were about 55-60 years of age in 2004. Every other cohort experienced decreases in their numbers, due to migration in the younger ages and mortality at older ages. It is through formation of new households that Kerala sustains its limited population growth.



Emigration

Panel data provide a means to estimate emigration and return emigration for 2004 and 1999 from the same set of 4795 households. These estimates can be used to measure increases in the number of emigrants and return emigrants by districts and for the state as whole. Such comparison is not vitiated by sampling errors. The results of the analysis are given in Tables 7 and 8.

According to these estimates the number of emigrants in Kerala in 2004 was 19.3 lakh compared with an estimate of 18.4 lakh from the full data. For 1999, the panel estimate was 13.7 lakh. The corresponding estimate from the full data was 13.6 lakh. Thus, the full data set seems to have underestimated the number of emigrants in 2004. The two estimates were the same for 1999. The full data indicated that return emigrants were 9.3 lakh in 2004 and 7.6 lakh in 1999. The corresponding numbers from full data were 8.9 lakh and 7.4 lakh respectively. Again

the full data seem to have underestimated return emigration in 2004 but not in 1999. The number of Non-Resident Keralites according to panel data was 28.6 lakh in 2004 and 21.3 lakh in 1999 showing an increase of 34 percent. The full data showed that NRK numbered 27.3 lakh in 2004 and 21.0 lakh in 1999 with an increase of 30 percent

Table 7: Emigrants, Return emigrants and Non-resident Keralites, 2004 and 1999: Panel data and Full data

		2004	1999	% Increase
EMI	Full	18.4	13.6	35.0
	Panel	19.2	13.7	40.8
REM	Full	8.9	7.4	20.9
	Panel	9.3	7.6	22.6
NRK	Full	27.3	21.0	30.0
	Panel	28.6	21.3	34.3

The difference between Panel data and full data is much larger at the district level than at the state level (Table 9). At the state level, the full data seem to have underestimated the increase in the number of non-resident Keralites by about 4 percentage points. But under-estimation is much larger in the districts of the former Travancore state, the largest being in Alappuzha district where the difference between the two estimates was as high as 72 percent. On the other hand, there was considerable overestimation in the northern Malabar districts, particularly Kannur and Kasargod.

Employment and Unemployment

The 4795 households included 17752 persons 15 years and above of age in 1999 and 18199 persons in 2004 indicating an increase of 2.5 percent in the 5-year period. Distribution of employment status of the adult persons is given in Table 10.

Table 8: Estimate of Emigration by District from Panel Data at the Household Level

	Emigration		% Increase	Return Emigrants		% Increase
	2004	1999		2004	1999	
Thiruvananthapuram	180259	138971	29.7	127326	122198	4.2
Kollam	135808	99259	36.8	88205	63165	39.6
Pathanamthitta	159659	105267	51.7	77295	58207	32.8
Alappuzha	77145	34826	121.5	33062	22162	49.2
Kottayam	75022	24965	200.5	18402	8738	110.6
Idukki	8160	6327	29.0	2720	7592	-64.2
Ernakulam	94129	100360	-6.2	68063	52039	30.8
Thrissur	195095	153508	27.1	111276	116168	-4.2
Palakkad	227090	156117	45.5	61934	49384	25.4
Malappuram	332560	275677	20.6	133024	129731	2.5
Kozhikode	170586	116088	46.9	118213	75592	56.4
Wayanad	8798	3972	121.5	2933	2648	10.8
Kannur	197574	108123	82.7	58852	34655	69.8
Kasaragode	65325	45311	44.2	31029	18407	68.6
KERALA	1927210	1368771	40.8	932334	760685	22.6

Table 9: Comparisons of Increases NRK from Household Level Panel Data with the Corresponding Increase Shown by the Full Data, by Districts

	Panel Data		% Increase	Full Data	Difference
	2004	1999		% Increase	
Thiruvananthapuram	307586	261169	17.8	8.6	9.6
Kollam	224013	162423	37.9	23.0	14.9
Pathanamthitta	236955	163474	44.9	42.9	2.0
Alappuzha	110208	56989	93.4	21.2	72.0
Kottayam	93423	33703	177.2	151.5	26.7
Idukki	10880	13919	-21.8	-6.1	-15.7
Ernakulam	162192	152398	6.4	31.5	-25.1
Thrissur	306371	269676	13.6	-4.7	18.3
Palakkad	289023	205502	40.6	50.0	-9.4
Malappuram	465583	405408	14.8	-1.7	16.5
Kozhikode	288799	191681	50.7	56.3	-5.6
Wayanad	11731	6620	77.2	46.7	30.9
Kannur	256426	142777	79.6	113.0	-33.4
Kasaragode	96354	63718	51.2	114.6	-63.4
KERALA	2859544	2129456	34.3	30.0	4.3

Table 10: Distribution of Persons 15 years and above by Employment Status and Sex In 1999 and 2004

Employment Status	1999			2004		
	M	F	T	M	F	T
Gainful Employment	6100	1551	7651	5859	1468	7327
Not in Labour Force	1868	7192	9060	2079	7120	9199
Unemployed	532	509	1041	695	978	1673
Total	8500	9252	17752	8633	9566	18199
Percent Increase 1999-2004	M		F	T		
Gainful Employment	-4.0		-5.4	-4.2		
Not in Labour Force	11.3		-1.0	1.5		
Unemployed	30.6		92.1	60.7		
Total	1.6		3.4	2.5		

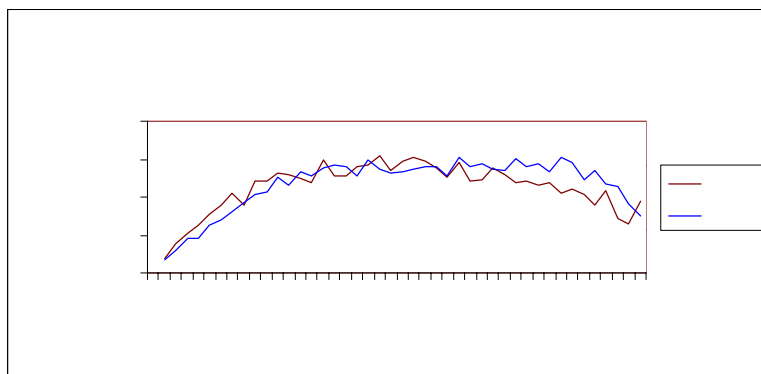


Table 10 indicates that according to panel data the number of gainfully employed persons experienced a decline of 4 percent, that the population outside the labour force showed a very modest increase of 1.5 percent and that unemployment increased by a whopping 61 percent

There are some differences between the numbers in respect of males and females. The differences are relatively small as far as the number of gainfully employed person concerned. While the number of persons outside the labour force showed an overall increase of 1.5 percent, the increase was 11.3 percent among males and a decrease of 1 percent among females. The number unemployed increased by 61 percent, 31 percent among males and 92 percent among females.

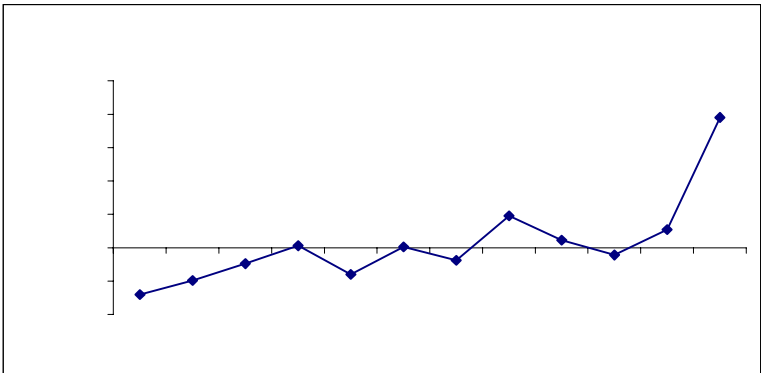
Gainfully Employed Persons

Full data indicated that gainful employment in Kerala was 9.7 million in 1999 and 10.1 million in 2004 indicating an increase of 442 thousand persons or by 4.6 percent. The same data indicated a decrease of 43 thousand among gainfully employed females.

The panel data given above came to a different conclusion. Assuming that the panel data give a better estimate (not affected by sampling error at the Panchayat level) SMS seems to have overestimated the increase in gainful employment. SMS gave a gain of 4.5 percent while Panel data give a decrease of 4.2 percent during 1999-2004.

Gainful Employment by age

As shown by Figure 4, gainful employment showed decrease at younger ages and increase at older ages. The change from negative



changes to positive change is relatively steady. It seems that those who get employed remain employed for a longer period than during the earlier years, that reducing the employment opportunities of the younger generation. This could be one of the factors responsible for the increase in unemployment in 2004.

Gainful Employment by Economic Sectors

Table 11 indicates that the decrease in gainful employment was shared by all economic sectors except the semi-government sector (comprising aided schools/colleges, co-operatives and local administration institutions etc). Another sector, which experienced increase in employment was at the non-agricultural labour, which experienced a hefty increase of 20 percent in the five-year period. The largest decline in employment was observed in the private sector, presumably due to emigration of employees from this sector.

Table 11: Gainful Employment by Economic Sectors

		Percent increase 1998-03
1	Government Employment	-8.0
2	Semi-Government	48.3
3	Private Sector	-34.6
4	Self-Employment	-28.7
5	Unpaid family worker	-7.6
6	Agricultural labour	-2.1
7	Non-Agr. Labour	20.7
	Total	-5.0

Persons not in Labour Force

Among the economically inactive persons, (pensioners, elderly persons and handicapped persons) showed the highest increase during 1999-2004, nearly by 5 times (425 percent). On the other hand, the unemployed not seeking jobs and persons engaged in household duties showed some decrease during the period (See Table 12). There was some increase in the number in the case of students. Age-wise classification showed that the increase in the number of pensioners was evident at all age groups above 40 years of age, the maximum number being in the 50-59 age group.

Table 12: Percent Increase in the Number of Persons not in Labour Force, 1999-04

	%
Unemployed not seeking a job	-21.8
Students	12.4
Household duties	-3.5
Pensioners, elderly, handicapped	425

Unemployment

Full data indicated that the unemployment rate increased from 11.2 percent to 19.2 percent during the 5-year period 1999-2004. The panel data indicated that the unemployment rate increased from 12.0 percent to 18.6 percent, or by 6.6 percentage points. Thus, the fact that the unemployment rate increased very significantly during 1999-2004 is well established.

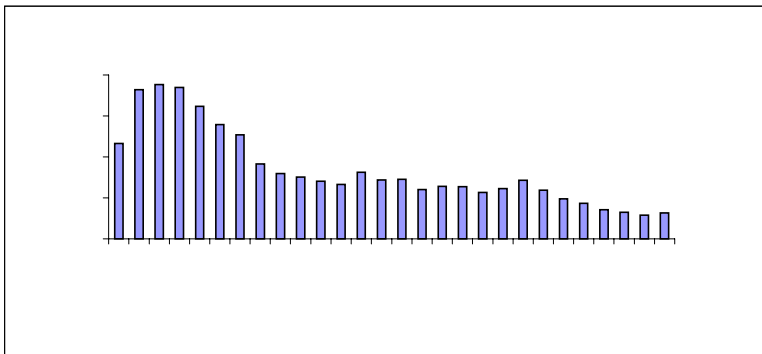
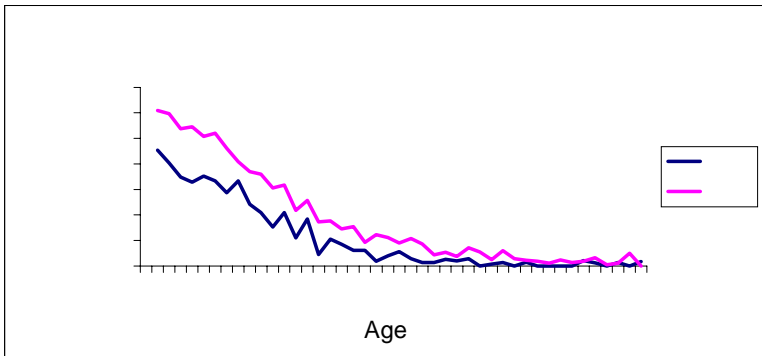
Unemployment was higher among females, 24.7 percent in 1999 and 40.0 percent in 2004 than among males, that is 8.0 percent in 1999 and 10.6 percent in 2004. Thus increase in unemployment was evident in both the sexes, but the increase among females was much higher among

females: by 15.3 percentage points among females compared with only 2.6 percentage points among males.

In the 4795 panel households, the number of unemployed persons increased by 60.7 percent during 1999-2004. The increase was as much as 92.1 percent among females compared with 30.6 percent among males.

Age as a factor in Unemployment

Unemployment rates are higher at younger ages than at older ages. This was true in 1999 and also in 2004. But the rates were consistently higher in 2004 than in 1999. Thus the overall increase in unemployment rate during 1999-2004 was shared by all ages (See figures 5 and 6)



Aging and Unemployment

The above analysis provided new insights on the increase in unemployment rate in Kerala during 1999-2004. **The hypothesis is that aging has been a factor in the increase in unemployment rate in Kerala during 1999-2004.** We have seen that unemployment rate is much higher at younger ages than at older ages. Therefore, a decrease in population at younger ages should contribute to a decrease in overall unemployment rate. A five-year period is too short an interval for any significant change in age composition. The decrease in the proportion of population at younger ages is relatively small, and as a consequence, decrease in unemployment rate should also be small. Calculations show that the possible decrease should be only about 1 per 1000 persons in the labour force. From this point of view, increase in unemployment rate during 1998-2004 could not be due to the age factor.

But there is another side to the story that could show that aging could be a factor in the increase in unemployment rate. Demographic transition causes not only decreases in the population in the younger age groups, but also increases in older age groups. As an increasing number of persons live beyond the age of 55 years (the retirement age in Kerala), the number of gainfully employed persons at older age groups would increase. Since more and more persons continue to be retained in their jobs after ages 50 or 55 years, fewer and fewer employment opportunities would open to the younger generation. As employed people tend to remain employed for longer periods, conversely unemployed persons too remain unemployed for longer periods. Thus, the aging process, which is taking place rapidly in Kerala, could have been a factor in the increased unemployment rate in Kerala. Aging as factor in increased unemployment is likely to be more relevant in the coming years. A few calculations, based on data from KMS and SMS, are given below to support this conclusion (Tables 13 and 14).

Table 13: Ratio (Percent) of gainfully employed at ages 50+ (55+,60+) to gainfully employed at ages 16-49 (16-54 years, 16-59 years) in 1999 and 2004

Ages	Ratio as Percent	
	1999	2004
50+ to 15-49	28.0	34.7
55+ to 15-54	16.2	18.8
60+ to 15-59	9.2	15.8

Table 14: Gainfully employed at ages 50+, 55+, 60+ to total population 50+, 55+ 60+ years

	1999	2004
50+ years	38.7	47.3
55+years	32.1	39.7
60+years	27.3	37.0

These figures indicate that the proportions of gainfully employed persons at older age groups have increased considerably during 1999-2004: from 28 percent in 1999 to 35 percent in 2004 for persons at ages 50+ years, from 16 percent to 19 percent for those at ages 55+ years and from 9 percent to 16 percent at ages 60+ years. The overall conclusion is that with aging, the employed persons remain employed for longer periods causing opening of fewer new employment in the state. Thus, aging could have been one of the factors in the increased unemployment rate in the state during 1999-2004.

Unemployment and Education

Full data has shown that education was closely related to unemployment in Kerala, that there was very little unemployment among

persons with less than primary education, and that unemployment rate is the highest among secondary educated persons.

Panel data more or less support the differentials as indicated by the full data. Unemployment rate is the highest among the secondary educated persons and that the increase in unemployment rate during 1999-2004 was also the highest among secondary educated persons (Table 15). Thus, the change in the unemployment scene as indicated the SMS data was not much vitiated by sampling error.

Table 15: Unemployment Rate by Education

Edu*	Panel Data			Full Data		
	1999	2004	increase	1999	2004	increase
1	0.0	1.2	1.2	0.1	1.2	1.1
2	0.3	1.2	0.9	0.3	1.4	1.1
3	1.6	0.8	-0.8	1.1	1.3	0.2
4	1.3	2.2	0.9	1.2	1.7	0.5
5	9.4	11.8	2.4	8.2	12.1	3.9
6	23.6	38.0	14.4	23.1	38.5	15.4
7	31.0	35.7	4.7	31.4	36.4	5.0
Total	12.0	18.6	6.6	11.2	19.2	8.0

* 1= illiterate; 2= literate without schooling ; 3 = below primary ;
4 = primary;

5 = below secondary; 6 secondary but no degree ; 7 = degree

Unemployment Rate and Emigration

Emigration could have contributed to the increase in unemployment rate. Two possible reasons were given for the proposition. One, emigration through remittances increases chances of higher education among family members. Since unemployment and education are positively correlated, emigration could be mentioned as one of the factors

causing higher unemployment in 2004; two, remittances enable family members to remain unemployed as there was no compelling reason for accepting immediately any job that come in their way. However, no statistical evidence has been given to support the association between emigration and unemployment. We attempt to furnish some evidence.

Table 16: Unemployment Rate by Number of Emigrants in a Household

No of Emigrants In the household	Unemployment Rate Total Population		Unemployment Rate Secondary Educated	
	2004	1999	2004	
0	11.1	17.5	224.0	36.7
1	17.6	26.8	29.9	48.6
2	22.9	28.1	44.8	50.0
All HHs	12.0	18.6	23.0	38.0

It is evident from Table 16 that unemployment rate among persons in households with emigrants, is much higher than among persons in households without emigrants. Unemployment increases steadily with the number of emigrants.

Such a relationship was observed in 1999 as well as in 2004. In both the years, unemployment is higher in households with emigrants than in households without emigrants. The rate is higher in households with 2 emigrants than in households with 1 emigrant. It is higher among households with 1 emigrant than in households without any emigrant.

One possible criticism of this conclusion could be the spurious effect of education. Emigration is higher among higher educated persons. Unemployment rate is also higher among higher educated persons.

Therefore, the positive relation between unemployment and emigration could be actually indicative of a positive relation between unemployment and education. To check this, we calculated the relationship between unemployment and emigration for secondary educated persons only. The estimates show that a high positive association between emigration and unemployment rate is observed strongly when education factor is controlled, that is by doing the analysis among secondary educated persons alone.

Remittances

Earlier analysis based on full data indicated that the total remittances to Kerala in 2004 were Rs. 18.5 thousand crore. This estimate was based not entirely on SMS data but also on the trends in emigration and relation between emigration and remittances in the past. A part of the total remittances, household cash remittances, was estimated using SMS data alone. The estimate was Rs. 5.509 thousand crore.

The Panel data (4795 common households) provided information on cash remittances received by households in 1999 and 2004. The rates of increase in cash remittances received by households in the various districts are given in Table 17.

For the state as whole, cash remittances received by households as estimated by the panel data were about 3 percent higher than the estimate from the full data. Thus, data on household remittances were relatively accurate at the state level. However, there are large differences between the panel data and the full data with respect to the districts. Some glaring differences were noticed in districts where remittances were on the whole very small, particularly in Wayanad, Idukki and Kasaragod.

Table 17: Percent Increase in Household Cash Remittances by Districts

	Percent Increase 1999-2004		Difference
	Panel Data	Full Data	
Thiruvananthapuram	22.6	17.0	-5.7
Kollam	71.5	104.3	32.8
Pathanamthitta	64.8	40.0	-24.8
Alappuzha	39.9	40.5	0.6
Kottayam	48.3	55.9	7.6
Idukki	575.7	290.6	-285.1
Ernakulam	20.1	13.8	-6.2
Thrissur	103.6	88.8	-14.7
Palakkad	10.2	16.0	5.9
Malappuram	81.5	61.2	-20.4
Kozhikode	34.4	67.2	32.7
Wayanad	2281.0	159.6	-2121.4
Kannur	36.7	55.1	18.4
Kasaragode	405.9	191.0	-214.9
Kerala	56.7	53.7	-3.0

Housing Amenities and Household Durables

Information obtained in the survey on housing amenities and household durables was not much affected by sampling. The full data give more or less the same level of consumer possessions or household amenities. Table 18 gives data for all households and those that had an emigrant.

Table 18: Percentage households with various Household and Consumer Possession among Households with Emigrants in 2004

	All households		Emigrants	
	Full	Panel	Full	Panel
High Quality houses	22.2	21.3	45.6	45.3
Electrification of houses	85.3	86.2	97.2	97.3
Use of LPG for cooking	34.5	34.9	58.8	47.8
Possession of:				
Car	2.8	2.8	12.3	14.6
Taxi	6.0	6.0	3.4	2.9
Scooter	15.8	15.2	19.2	19.8
Telephone	43.6	43.7	79.0	79.6
Cell Phone	6.8	6.8	13.4	14.0
Television	59.9	60.5	79.9	79.7
VCR	17.1	17.0	37.5	38.4
Refrigerator	30.2	30.2	62.5	60.4

III Panchayat Level Analysis

Panchayat level data are used for testing a particular aspect of the study, namely, the reliability of changes in migration estimates by districts during 1999 and 2004. Some districts such as Kottayam, Kannur and Kasargode experienced large increases in the number of NRKs. Are these increases real, or are they due to the sampling error? Household level analysis showed that migration estimates at the state level are fairly

reliable. This section checks the consistency of migration estimates using Panchayat level data.

About 50 percent of the sample localities were new and the other 50 percent were the same as those used in KMS. It is a fact that the localities vary considerably with respect to the number of emigrants, return emigrants, out-migrants and return out-migrants. Is the increase in migration in a district due to the set of new localities used in the 2004 study? Had we used the same set of localities in both the studies, would there have been this much increase/decrease in the number of migrants?

To answer this question we estimated two sets of estimates of the total number of migrants for each district. The first set used the 125 localities common to KMS and SMS studies (OLD localities). The second set used all the 225 localities. The increase in migration during 1999-2004 is given in Table 19.

At the state level, the differences are not very large for external migration. The common 125 localities showed an increase of 40 percent while all the 225 localities showed an increase of only 30 percent. Thus sampling factor tends to reduce the growth of NRK during 1999-2004. Had the same sample localities been used in both 1999 and 2004, the growth of NRK during the 5-year period would have been 40 percent.

While the common localities gave a 50 percent increase in emigration during 1999-2004, all localities together show only 35 percent increase. However, the difference is relatively small for REM and ROM (See Table 19). The general conclusion that follows is that sampling does have an effect on migration estimate at the state level but the effect is relatively large at the district level. Migration estimation at the district level should be used with some reservation.

Table 19: Migration Estimates of Common Panchayats, 1999 and 2004

	1999 (125 panchayats)				2004 (125 panchayats)			
	REM	EMI	ROM	OMI	REM	EMI	ROM	OMI
Thiruvananthapuram	147850	151847	127795	42044	101431	176123	48361	37492
Kollam	88537	93429	78284	64775	82982	165734	16828	49035
Pathanamthitta	68998	112499	63223	95303	97901	173647	94306	105769
Alappuzha	18518	36622	110745	74706	41583	83608	136725	86852
Kottayam	7128	24912	54056	31835	18272	73789	54522	178338
Idukki	6543	8748	9002	6516	1461	9305	3722	3534
Ernakulam	59023	108652	76212	44590	85726	110473	157203	32894
Thrissur	130181	133674	189576	64247	107771	220084	164163	106845
Palakkad	46214	171773	182696	71303	52937	221853	149300	283705
Malappuram	129918	264007	24936	22170	143243	316923	38797	38563
Kozhikode	49197	96138	57896	25030	143947	194889	83382	46669
Wayanad	3650	4527	23271	1995	2686	8725	11411	2776
Kannur	26089	85579	24104	31992	46096	178653	18169	81561
Kasaragode	17510	41849	28878	43518	50211	68535	93654	66227
KERALA	799358	1334255	1050676	620023	976247	2002341	1070543	1120260

Table 20: Percent Increase in Migration in Common and All Panchayats, 1999-2004

	Common Panchayats				All Panchayats			
	REM	EMI	ROM	OMI	REM	EMI	ROM	OMI
Thiruvananthapuram	-31.4	16.0	-62.2	-10.8	-13.3	28.6	-49.1	-10.9
Kollam	-6.3	77.4	-78.5	-24.3	-6.5	44.2	-57.3	-28.5
Pathanamthitta	41.9	54.4	49.2	11.0	53.1	37.1	107.6	8.9
Alappuzha	124.5	128.3	23.5	16.3	24.7	19.4	-38.7	-6.7
Kottayam	156.3	196.2	0.9	460.2	56.2	200.2	29.0	297.2
Idukki	-77.7	6.4	-58.7	-45.8	-24.9	6.6	-62.4	-54.7
Ernakulam	45.2	1.7	106.3	-26.2	65.3	16.9	235.2	32.9
Thrissur	-17.2	64.6	-13.4	66.3	-26.3	11.0	-25.8	-8.6
Palakkad	14.5	29.2	-18.3	297.9	40.2	63.3	10.2	10.2
Malappuram	10.3	20.0	55.6	73.9	14.4	-8.4	82.9	111.3
Kozhikode	192.6	102.7	44.0	86.5	79.1	44.3	14.9	134.5
Wayanad	-26.4	92.7	-51.0	39.1	15.8	69.2	-52.3	-52.3
Kannur	76.7	108.8	-24.6	154.9	60.6	129.8	-21.6	193.7
Kasaragode	186.8	63.8	224.3	52.2	184.8	84.4	210.4	8.2
Kerala	22.1	50.1	1.9	80.7	20.9	35.0	3.7	61.3

Table 21: Percentage Difference of NRK Estimates from Different Data Sources

	125	4795	Full	Difference	
	Panchayats	households	(225 localities)	(3)-(1)	(3)-(2)
	(1)	(2)	(3)	(3)-(1)	(3)-(2)
Thiruvananthapuram	-7.4	17.8	8.6	16.0	-9.2
Kollam	36.7	37.9	23.0	-13.7	-14.9
Pathanamthitta	49.6	44.9	42.9	-6.7	-2.0
Alappuzha	127.0	93.4	21.2	-105.8	-72.2
Kottayam	187.3	177.2	151.5	-35.9	-25.7
Idukki	-29.6	-21.8	-6.1	23.5	15.7
Ernakulam	17.0	6.4	31.5	14.5	25.1
Thrissur	24.3	13.6	-4.7	-28.9	-18.3
Palakkad	26.1	40.6	50.0	23.9	9.4
Malappuram	16.8	14.8	-1.7	-18.5	-16.5
Kozhikode	133.1	50.7	56.3	-76.8	5.6
Wayanad	39.5	77.2	46.7	7.1	-30.5
Kannur	101.3	79.6	113.0	11.8	33.4
Kasaragode	100.0	51.2	114.6	14.6	63.4
Kerala	39.6	34.3	30.0	-9.6	-4.3

Conclusions

The main areas of analysis of panel data were the same as those of the full data, namely migration, remittances, employment and unemployment, utilization of household amenities, household durables, etc. This being the case what is the special contribution of the panel data over the full data? Although the topics of analysis were the same the depth of analysis was deeper with the panel data.

The main contribution of the panel data is that they validated in general, the estimates of migration and remittances made from the full data. Conventional sample surveys can at best provide standard errors of the various estimates. Panel data enable the analyst to control for sampling variation. Analysis of panel data provided convincing evidence to conclude that the estimates of migration at the state level were fairly accurate. Estimate from the full sample was not much different from that from the 125 common panchayats or from the 4795 common households. Return migration estimates were more stable than emigration or out-migration. However, the analysis also showed that although estimates were quite reliable in a few other districts, the estimates were not quite consistent in some districts.

Some important conclusions about employment and unemployment which emerged from the panel study are the following: The Employment sector in Kerala is found to be highly dynamic. Nearly half the labour force changes their sectors of employment during a five-year period. The panel data established more firmly the fact of stagnation in the employment sector suggested by the full data. Unlike the full data, the panel data showed all-round negative growth of gainful employment - both among males and females - and in most employment sectors. Nearly 80 percent of the unemployed in Kerala find employment in five years; only 20 percent remain unemployed for more than five years.

A new factor in the increased unemployment rate could be aging. Panel indicated that aging could have contributed to the increase in unemployment rate in Kerala during 1999-2004. As aging in Kerala is going to increase progressively, aging would continue to play a part in keeping the unemployment rate high in the state in the coming years. The fact that emigration has been a factor which contributed to the high order of unemployment rate in Kerala during 1999-2004 is more firmly established with concrete evidence by the panel data.

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Annex I : Questionnaire used for the Study in 1998

Schedule Number

**KERALA MIGRATION SURVEY 1998
KERALA STATE - INDIA****CENTRE FOR DEVELOPMENT STUDIES****Migration status: Write the answer as 0, 1, 2 etc from
Block 5 and 6**

1. Return migrants from outside India
2. Emigrants living outside India
3. Return migrants from other states in India
4. Out-migrants living in other states in India

MIGRATION SURVEY

Consequences of International Migration

Schedule 1

BLOCK - 1

Identification Particulars

District.....Taluk

City/Panchayat.....Ward.....

Number..... House No. /House Name

Name of Informant

Details about visits to the household	1	2
Date (s) of Interview		
Name of Investigator		
Name of the supervisor		
Time Taken		

The respondent should be the Head of the household.

If the head of the household is not present, the information should be collected from the immediate responsible person

Block - 2 HOUSE HOLD DETAILS

01	02	03	04	05	06	07	08 09		10	
Serial No.	Name of members of Household (Head of the HH first)	Relation with the Head (Code)	Sex Male – 1 Female – 2	Date of Birth	Place of Birth	Educational Status (See code)	15 years or above		Classification	
							Occupational status (See code)	Marital Status (See code)		
01										
02										
03										
04										
05										
06										
07										
08										
09										
Codes:		Column – 07								
Column - 03		Illiterate			Employed in Private sector		3		Widow / Widower	3
Head of the Household		Literate without school Education			Self employment		4		Divorced	4
Husband/Wife		Primary			Unpaid family work		5		Separated	5
Unmarried children		UP to lower secondary			Coolies in non-agric. Sector		6		Column – 10	
Married children		Secondary passed but no other qualification			Job seekers		7		Married women with age less than 40	
Son in law/Daughter in law		Degree holders			Job not required		8		Mala / Female above 60	
Grand child		Primary incomplete			Students		9		Married women with husbands outside Kerala	
Father/Mother/Mother in law		Column - 08			Household duties		10		3	
		Employed in State /Central Govt.			Old age/ Pensioners		11			
Column – 06		Column - 09					12			
In kerala		Employed in Semi Govt. Aided school/college, co-operative / local administrative bodies.			Unmarried		1			
Outside Kerala Within India					Married		2			
Outside India										

Block – 3 MIGRATION STATUS

01	11	12	13	14	15	16	17	
Serial No.	Ever lived outside Kerala for a period of one year or more? <i>Yes – 1</i> <i>No – 2</i>	Ever lived outside Kerala for less than a year for work / looking for work / for studies <i>Yes – 1</i> <i>No – 2</i>	If there is anybody in column 11 and / of Column 12				Whether the person came back to India on the basis of declaration of amnesty	IF “Yes” to Ques No. 16 from where did he get financial support to come back
			Where was the person living before coming to Keala	Residence code <i>Within India – 1</i> <i>Outside India - 2</i>	When did the person come back to India <i>Yes – 1</i> <i>No – 2</i>			
Abu Dhabi – UAE	1	South East Asia –		Others	18	Rajasthan	28	
Dubai – UAE	2	Philippines, Malaysia,				Tamil Nadu	29	
Saudi Arabia – Jeddah	3	Singapore, Hongkong	11	States in India		Uttar Pradesh	30	
Kuwait	4	Latin America,		Andhra Pradesh	19	West Bengal	31	
Muscat	5	Carebian Islands		Assam	20	Delhi	32	
Oman	6	& West Indies	12	Bihar	21	Pondicherry	33	
Qatar	7	Nepal, Bangladesh, Srilanka,		Gujarat	22	Others	34	
Bahrain	8	Maldives & Pakistan	13	Karnataka	23			
Sharja – UAE	9	USA	14	Madhya Pradesh	24	Column 17:		
Iraq & Iran	10	Europe	15	Maharashtra	25	No Support (Self)	1	
		Africa	16	Orissa	26	Government	2	
		Australia	17	Punjab	27	Others	3	

Block – 4 EMIGRATION AFTER 1980

01	18	19	20	21	22	23	24	25		26	27	28
Serial No.	Resident of this house who have out of kerala after 1980 and stay there still?	Relation of the member with the head of the H hold	Sex	Name of the State/Country presently residing	Reason for going to other states/ abroad	When did you go outside Kerala for the first time?	Age at when you first went outside Kerala	Educational status at time of emigration /out-migration		Marital status at the time of emigration /out - migration	Occupational status at the time of emigration/ out - migration	Occupation status at present
								A	B			

Code: For columns 19, 20 21, 26, 27 and use the same codes used in Block 2 and Block 3

Column 22

- For job 1
- For seeking job 2
- To stay with relatives 3
- For studies 4
- Other reasons 5

BLOCK 5: RETURNED MIGRANTS

29.1 Returned from Abroad

	1	2	3	4
Serial No. As in Block 2				
Name As in Block 2				

29.2 Returned from other states

	1	2	3	4
Name As in Block 2				

BLOCK 6: CURRENT MIGRANTS

30.1. Persons residing Abroad

	1	2	3	4
Serial No. As in Block 4 Columns 18 and 21				
Name As in Block 2 As in Block 4 Columns 18 and 21				

30.2. Persons residing in other states

	1	2	3	4
Name As in Block 2 As in Block 4 Columns 18 and 21				

**BLOCK – 7 EXPENSES FOR MIGRATION
(FOR THOSE WHO HAD GONE ABROAD)**

Qn. 31

	1	2	3	4
Name				
Travelling Expenses				
Visa cost				
Commission to agents				
Loss due to cheating				
Total				

**BLOCK – 8
SOURCES OF SPENDING FOR MIGRATION ABROAD**

Qn. 32

	1	2	3	4
Item				
From own savings				
From family members				
Borrowing from friends /relatives/bank				
By selling gold ornaments etc.				
By selling landed property				
Others				

BLOCK – 9 QUESTIONS TO HOUSEHOLD MEMBERS

33. During the last one year did you or any member of your family receive money or goods from any persons who is living outside India?
Yes (Go to question 34) No (Go to question 37)
34. How much money you have received from emigrants during the last 12 months? Total from all emigrants.
.....
- 35.1 Kind of goods you received (If there are more than one answer enter it in 35.2)
(1) Clothes
(2) Gold ornaments
(3) Light electricals
(4) V.C.R, TV and similar heavy electircals
(5) Others
- 35.2 Kind of goods you received
(1) Clothes
(2) Gold ornaments
(3) Light electricals
(4) V.C.R, TV and similar heavy electircals
(5) Others
- 35.3 Total value of goods (Estimate)
- 36.1 How was this money used?
(1) To meed living expenses of the family
(2) To meet educational purposes
(3) To pay back debt incurred to by ticket, Visa, etc.
(4) To buy land
(5) To pay dowry of relatives
(6) To build or renovate house
(7) To start a business
(8) Agricultural purposes
(9) Deposited in Banks
(10) Others (Specify)

BLOCK – 10 HOUSEHOLD

37. Is your house electrified?
1. Yes 2. No
38. What type of fuel is used for cooking?
1. Wood 3. Kerosene 5. L.P. Gas
2. Electricity 4. Others
39. What type of toilet facilities do you have in the house
1. Flush 3. Common latrine facility
2. Pit 4. No latrine facility
40. Does any member of this HH owns a house here or elsewhere?
1. Yes 2. No
41. When was this house constructed or bought? Year
42. Did you take any loan from Govt. or Bank or any other institution to construct or buy your house?
1. Yes 2. No
43. Did you get any money from abroad for constructing your house?
1. Yes 2. No
44. What is the approximate cost of construction of this house?
1. Below Rs. 20,000 2. Between 20,000 and 1,00,000
3. Between 1,00,000 and 5,00,000 4. Above 5,00,000
45. Type of house which the HH is now occupying
1. Luxurious
2. Very Good (2 bed rooms with attached bathrooms, concrete roof, Mosaic floor)
3. Good (1 bed room, brick and cement walls, concrete or tiled roof)
4. Poor (Brick walls, cement floor, tin or asbestos roof)
5. Kutchra (Mud walls, Mud floor & Tatched roof)
46. How much land, Agricultural & Non-Agricultural together is owned by the members of this HH
1. Wet land (Cents)
2. Dry land (Cents)
3. Total (Cents)

47. Does the household own any of the following

1. Motor car	Yes	No
2. Taxi	Yes	No
3. Truck	Yes	No
4. Motor Cycle /Scooter	Yes	No
5. Telephone	Yes	No
6. Television	Yes	No
7. VCR/VCP	Yes	No.
8. Radio/ Transistor	Yes	No
9. Sofa set	Yes	No
10. Water pump	Yes	No
11. Sewing Machine	Yes	No
12. Fridge	Yes	No
13. Washing Machine	Yes	No
14. Fan	Yes	No
15. Mixer/Grinder	Yes	No
16. Toaster	Yes	No
17. Gas stove/Electric range	Yes	No
18. Clock	Yes	No
19. Electric Iron	Yes	No
20. Camera	Yes	No
21. Stereo system	Yes	No
22. Watch	Yes	No
23. Cycle	Yes	No

48. What is your religion & caste

1. Schedule Caste/Tribe	6. Shia Muslim
2. Nair	7. Sunni Muslim
3. Ezhawa	8. Others
4. Syrian Christian	9. Nadar Hindu
5. Latin Christina	

Annex II: Questionnaire used for the Study in 2003Schedule No.

**ECONOMIC CONSEQUENCES OF
GULF MIGRATION IN SOUTH ASIA;
CASE STUDY OF KERALA, INDIA AND SRI LANKA**

KERALA STATE – INDIA 2003**Was this Household Included in the 1998 Survey**Yes No

If Yes, Write the questionnaire Number from the 1998 Survey

Number **Migration status : Write the number of Migrants (REM, EMI, ROM, OMI)**1. Return migrants from outside India from Q : 16 2. Emigrants living outside India from Q : 22 3. Return migrants from other states in India from Q : 16 4. Out-migrants living in other states in India from Q : 22

MIGRATION SURVEY
DEMOGRAPHIC CONSEQUENCES

BLOCK - 1

Identification Particulars

District.....Taluk

City/Panchayat.....Ward.....

Number.....House No. /House Name

Name of Informant

Details about visits to the household	1	2
Date (s) of Interview		
Name of Investigator		
Name of the supervisor		

The respondent should be the Head of the Family
In the absence of the Head of the family the answers should be
collected from the next responsible member

BLOCK – 3 MIGRATION STATUS

01	10	11	12	13	14	15	16	17
Serial No.	Migration Status of person from column 2		If atleast one name in column 10 and 11					When did the person come back to India Month and Year
	Ever lived Kerala for a period of one year or more?	Ever lived Outside Kerala for less than a year for work/looking for work/	Year & Month in which the first stayed outside Kerala		Country/State in which the person first stayed outside Kerala	Occupational status of the person before living from Kerala (Code of column 7)	Where was the person living before coming to Kerala Sate/Country	
Within			Outside					

BLOCK - 5 QUESTIONS TO THE MEMBERS OF THE HOUSEHOLD

29. Did anyone in your family gets money or any other things from those residing abroad for the last one year?

Yes (If Yes, go to Q.30) No (If No, go to Q.33)

30. If Yes, total amount received last year Rs.....

31. Any other things

- (1) Clothes
- (2) Gold ornaments
- (3) Small electrical equipments
- (4) T.V, V.C.R etc
- (5) Others (Specify)

Total amount Rs.

32. In what way did you use the money

- (1) For day-to-day life
- (2) Education
- (3) To repay the debts incurred
- (4) To purchase land
- (5) Dowry payment of relatives
- (6) To built / purchase new house / renovation of old house
- (7) Business
- (8) Maintain agricultural land
- (9) Deposited into bank
- (10) Others (Specify)

Interviewer to note – The amount which is not included in Q. No. 30, 31 should only be included in the below Q. No. 33, 34

33. Did anyone in your family residing abroad brought money to build house / to purchase land for the last one year?

Yes No

If Yes, how much Rs.....

To Purchase / renovation of land

To Purchase / renovation of house

34. Did anyone in your family brought money for any purpose which is not included above for the last one year?

To buy Car/Scooter/Taxi Rs.

To start small scale enterprise Rs.

Others (Specify) Rs.

(For eg: Dowry, education, medical expenses, repayment of debts etc)

Total amount Rs.

BLOCK - 6 HOUSEHOLD

35. Is your house electrified?
 1. Yes 2. No
36. What type of fuel is used for cooking?
 1. Wood 3. Kerosene 5. L.P.Gas
 2. Electricity 4. Others
37. Type of house which the household is now occupying
 1. Luxurious
 2. Very Good (2 bed rooms with attached bathrooms, concrete roof, Mosaic floor)
 3. Good (1 bed room, brick and cement walls, concrete or tile roof)
 4. Poor (Brick walls, cement floor, tin or asbestos roof)
 5. Kutcha (Mud walls, Mud floor & Thatched roof)
38. Does the family own any of the following
 1. Motor car Yes No
 2. Taxi / Truck / Lorry Yes No
 3. Motor Cycle /Scooter Yes No
 4. Telephone Yes No
 5. Mobile Phone Yes No
 6. Television Yes No
 7. VCR/VCP Yes No
 8. Fridge Yes No
39. What is your religion and caste.
 (Hindu- 1, Christians - 2, Muslims - 3, Others- 4)
40. On which category of religion and caste do you belong to
 1. Scheduled caste/tribe 8. Yacobites
 2. Nair 9. Marthomas
 3. Ezhava 10. C.S.I.
 4. Brahmins 11. Other Christians
 5. Other Hindus 12. Muslims
 6. Roman Catholic 13. Others
 7. Latin Catholic

BLOCK - 7 EDUCATIONAL STATUS

41. Do any one in your family go to College / School

1. Yes

2. No

If Yes	1	2	3
42. Serial Number as per Block 2			
43. What type of School 1. Government 2. Private aided 3. Unaided			
44. If he / she school student, for what examination he/she is preparing 1. SSLC 2. ICSE 3. CBSE			
45. If he / she is a college student which type of college 1. Government 2. Private aided 3. Unaided 4. Self Financing			
46. Total educational expenses for one year			

BLOCK - 8 HEALTH STATUS

47. What type do treatment do you usually get

1. Homeopathy

2. Ayurvedic

3. Allopathic

3. Others (Specify)

48. If Allopathic treatment which type of hospital

1. Government Hospital

2. Private Hospital

49. If Private Hospital, which type

1. Private Clinic

2. Private Hospital

3. Specialty Hospital

50. How much money did you

spend for the last one year: Rs.

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