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SOME COMMENTS ON THE DEMOGRAPHIC TRANSITION IN KERALA

THESE comments on the present stage of demographic transition in Kerala are based on a general evaluation of the official demographic and family planning statistics of the state and on the basis of my involvement in two special studies on the determinants of fertility decline in the state. The first stud,' was conducted in 1980 in Ernakulam, Aleppuzha and Palakkad districts, and the second one is being carried out in Ernakulam, Palakkad and Malappuram Districts. This (second) study is far from complete, and the data used here are derived from an unedited computer tape and are, therefore, subject to change.

I

Demographic transition in Kerala is indeed well advanced. The BR is about 20 and the TFR is about 2. Thus, the fertility level in Kerala is at or below replacement level. The source of this information is the SRS , but other sources of which I am aware, on the whole, support this conclusion. A recent study, DOFFIK, indicated that the BRs in Ernakulam, Palakkad, and Malappuram Districts from the survey are slightly higher than those shown by the SRS. The differences are significant in Palakkad and Ernakulam , but insignificant in Malappuram. The World Bank Fertility Survey (WBFS) conducted in 1980 saw smaller differences in the BRs in Ernakulam, Aleppuzha and Palakkad (Table 1).

TABLE 1 : ESTIMATES OF BIRTH RATE, SELECTED DISTRICTS OF KERALA

District	SRS 1989-91	DOFFIK 1986-91	WBFS
Ernakulam	15.8	18.9	
Palakkad	18.9	22.9	
Malappuram	28.4	28.2	
	1975-80		1975-80
Aleppuzha	21.4		19.5
Ernatculam	20.9		21.3
Palakkad	26.9		26.6 _

The DR is about 6 and the expectation of life at birth is about 70 years, significantly lower than the level in many developed countries. Thus, although the life expectancy in

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Kerala is very high compared to other Indian States, there is still considerable margin (about 10 years) for improvement in life expectancy in the State.

II

There are several districts in the State, where the transition has a long way to go. In general, the southern districts of Kerala are very much more advanced in their transition than their northern counterpart. One evidence for this difference is in the 1981-91 growth rates. The growth rate varied from 0.5 per cent per year in the Pathenamthitta district of south Kerala to 2.5 per cent in the Malappuram district of north Kerala. The variation in BR from SRS is not as large as that of the census based growth rates, but is still very substantial: from 14.8 in Aleppuzha to 28.4 in Malappuram (1988). The variation in the DR is very much smaller. Thus, while some districts in the State are more or less at par with the average situation in other parts of the country, others have advanced to the levels reached by some of the countries of Europe. The fertility rates in most districts in the erstwhile Travancore and Cochin states are very much below replacement level, while those in the Malabar districts are very much above replacement level.

The evidence from census and the SRS is supported further by the official data on family planning practice in the state. They also show that some districts are well advanced with respect to fertility transition while others are far behind. According to the 1990 data, the proportion of couples effectively protected was 61 percent for the state as a whole, but varied from 43 per cent in Malappuram to 75 in Thiruvananthapuram. There is a loose relationship between decline in BR and the increase in the use of IT practice, but the relationship requires a much closer look (more of it elsewhere).

III

Official statistics, on the whole, underestimate the degree of family planning use in the State. The proporation of couples effectively protected was 68 per cent in Ernakulam District according to the official statistics. The DOFFIK study gave a much higher figure. According to the official data the proportion of couples protected by sterilization in Ernakulam was 48 per cent; the proportion protected by IUD was 8 per cent; that by pills was 3 per cent and the protection offered by conventional contraceptives was 10 per cent. In the DOFFIK study, couple protection rate was not calculated, but the proportion of users of various methods has been calculated. Some comparisons are given in Table 2.

TABLE 2: ESTIMATES OF DEGREE OF FAMILY PLANNING

	Official (1990)	DOFFIK (1991)
Sterilization	47.7	56.5
IUD	8.0	6.0
Pills	2.8	1.7
Conventional C	9.8	15.7

It appears that the rate of sterilization and the use of condoms are underestimated in the official statistics, while the use of lUDs and Pills is overestimated.

IV

Family planning practice has become so widespread in some districts of south Kerala that almost all eligible women resort to some sort of fertility control. In Ernakulam, among the families included in DOFFIK, there were 1,619 women in the child bearing ages 15-49 years; only about 70 to 80 of those who needed protection are in fact not protected. The others are either protected or are not in need of it.

TABLES: FAMILY PLANNING PRACTICE IN SOME DISTRICTS OF KERALA

	Ernakulum	*Malappuram*
Total women 15-49 years	1,619	1,600
Never married	540	342
Widowed. divorced etc.	63	63
Currently married	1,016	1,195
Pregnant	62	75
Sterilized (Wife or Husband)	543	297
Can't conceive (in their opinion)	97	183
Exposed to conception	314	638
Users of temporary methods	137	45
Non-users among exposed	177	917

Who are these non-users? A very high proportion (75 per cent) of them are under 30 years who have not perhaps achieved their desired number of children. The question on the reasons for the non-use of a family planning method to those who have never used a method indicated that about 40 per cent (of the non-users) are not using any method because their husbands are against the use of any method; about 30 per cent have married very recently and they thought that it was too early to control fertility: about 10 per cent want more children; another 10 per cent said their husbands are away working in the Middle East and therefore don't need any contraceptive. The figures for Malappuram are very much different. The proportion of non-users is very much higher, and the reasons for the non-use are also different.

While there is a thinking that almost all pregnant women in Kerala register themselves with a PHC or other hospitals and most of the children are immunized, the DOFFIK study in Ernakulam showed that while most mothers and children are in fact well protected, a significant proportion in Ernakulam are still left out In that district only 18 per cent of the mothers were registered with an ANM, only 21 per cent of the mothers had their blood examined for hemoglobin; only 25 per cent received iron supplement; but 82 per cent had received tetanus injection; 85 per cent delivered the baby in a hospital; 77 per cent of the children had triple injection; 75 per cent had polio vaccine; 81 per cent had BCG, and 70 per cent had measles vaccination. These percentages are high enough to provide "herd immunity" to the entire cohort of children and the non-immunization of the remaining children is not likely to create any noteworthy health problems.

VI

As fertility declined in the state so did the socio-economic differentials in fertility. There are no major socio-economic groups whose fertility is still very high. It is said, that at one time in Kerala's history, all Keralites were alike.

MAVALINADU VANIDUM KALAM
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(Wfien Mahabali was ruling Kerala, all people were alike). Demographically speaking, Mahabali is already here to rule some districts of the state and is likely to spread his rule to the other districts very soon. Socio-economic differentials in fertility have practically disappeared in most districts of south Kerala. Ernakulam district is a good example. It may be recalled that Ernakulam is the first district in India which introduced what is called the CAMP system of delivering family planning. It is also the first district in India to achieve cent per cent literacy in the country.

In Ernakulam District, the average number of children per woman (this is not a good index to compare current situation as it is- a cumulative number) was 2.35 for the scheduled castes, 2.37 for the Ezhawas, 2.42 for the Christians, 2.45 for the Muslims, 1.95 for the Nairs and 2.29 for others. For persons with high levels of education, the average was low, but for all the others the average number of children was more or less the same. The proportion sterilized was 54 per cent for Hindus, 51 per cent for Christians and 51 per cent for the Muslims, etc. Current data give smaller differences than cumulative rates or ratios.

I wonder what is the degree of mortality differentials in Kerala ?. I don't have any data. The little I saw from the DOFFIK study indicates that relatively speaking, mortality differentials are larger than fertility differentials. Tetanus injection among pregnant women varied from 60 per cent among those without any schooling to 85 per cent among those with 10 years or more schooling. Vaccination of children against Measles indicated a variation from 54 per cent to 83 per cent according to education. Similar differences were noted for other immunizations.

VII

Demographic transition in Kerala, as perhaps in all other societies, is not an isolated phenomenon. It is an integral part of the overall social transformation. The principal elements of this overall transition in Kerala are:

(i) educational transition;
(ii) health transition;
(iii) economic transition, especially transition in the wage level and structure, land tenancy and employment;
(iv) family planning transition.

An interplay of these transitions has contributed to the demographic transition—transition in theDR, marriage rate, BR, and migration rate and through them all in the age-sex structure. The demographic transition in Kerala would not have reached this advanced stage within the short period of a generation without the corresponding transitions in education (to begin with), health, land reforms, wage structure, employment structure and family planning (which followed).

VIII

In my 1980 study (WBFS), I gave prime importance to education for generating a series of changes which brought about and quickened the demographic transition in Kerala:

> ".... the introduction of formal education as a criterion for admittance to public service, brought about a basic change in the society after centuries of fundamental stability. It became, so to say, unhinged, ushering in a movement away from inherited to achieved status, from interdependence of castes to competition of individuals, from traditional authority to modern bureaucracy".

One interesting corollary is; if we now move away from an era of achieved status and go back to an era of inherited or ascribed status, what will happen to the fertility trend?. The question has relevance in the light of the recent trends in the country's 'reservation' policy whereby jobs, admission to educational institutions, grants from the Government, etc. are distributed on the basis of one's *ascribed* status (instead of one's *achieved* status as was case for some time now). Will the new policy usher in a new era of increasing fertility among those benefitting from the reservation system. While I don't subscribe to the view that a reversal in Kerala's fertility trend will be caused by the reservation policy of the Government (because, education still plays a critical role in getting a job or for success in other areas of life), I feel that without a strong Government family planning programme, fertility rate of those benefitting from the reservation policy will not decline very much further, and in fact, might show some increase. This brings me to my last point.

IX

I started my comments by saying that fertility level is at or below replacement level in Kerala now. It is certainly below replacement level in several districts in south Kerala. Has the demographic situation in Kerala reached self-sustaining stage?. Can it be left on auto-pilot? Have we reached a stage in which there is no need for the Government to do anything in the matter of family planning?. Are the Keralese people 'grown up' enough to take care" of themselves in the matter of desiring a socially acceptable number of children and achieving the number they desire?. My own feeling is that all sections of the population are not. It will be a mistake if the Government relaxes its family planning programmes. Without a strong Government programme, with its free services and incentive system, the gains achieved so far may partly be lost, at least among the weaker sections of Kerala's population.

X

I would like to conclude my comments by recommending the undertaking of a research project on Kerala's demographic transition. The project should include an in-depth analysis of the educational revolution in Kerala since 1950, and impact of this revolution on fertility, mortality and migration trends. Similar analysis should be undertaken on the health transition, the economic transition (particularly on the land reform, wage rate and structure, employment and unemployment) and on the development of family planning programme in

the state. Much of the needed data are already available but the contribution of private sector in education, health and family planning needs to be documented through additional data collection. The study should also give adequate attention to the future labour supply and on health and related problems of the aged.