

**Higher Education and
Development in Kerala**

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Abstract

Despite high levels of literacy, near universal enrolment in elementary education, high levels of social and human development, why could Kerala not transform itself into a prosperous developed state. Why does the state of Kerala lag behind other states in India in economic development? It is argued here that the principal reason for this is the neglect of higher education in the state. Universal elementary education is a worthy goal and is necessary for development of the societies; but it does not provide the wherewithal necessary for economic growth. While reviewing the higher education scene in Kerala, this short paper examines some general premises, which are questionable, but are widely in circulation, and form the basis for policy formulation, relating to 'over' expansion of higher education and financing of higher education.

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The Paradox of Kerala

Among the several states in India, Kerala occupies an enviable position in terms of several indicators of social and human development. In fact, in terms of human development (or human development index in particular), Kerala ranks fairly well in comparison with some of the advanced countries of the world. It stands as the most literate state and as a state that provides elementary education to all the eligible children. Kerala's education performance has been so impressive that it could receive the distinctive acclamation as the 'Kerala model'; and some recommend *Keralization* of the whole education system in India (Lewis, 1997, p. 341).

While many important lessons can be drawn from the valuable education experience of Kerala, a few uncomfortable lessons also flow from the same Kerala experience: (a) the immense historical advantage Kerala enjoyed, in terms of massive historical investments in education, might mean for the other societies that do not have such historical advantages, and have lately realized the importance of education and began investing in education only recently, that they cannot become literate societies and they cannot achieve goals of providing universal basic education in the near future; (b) as Kerala concentrated rather exclusively on primary and secondary levels of education and ignored higher education, it might suggest that universalisation of elementary education is possible only if higher education is ignored; (c) Kerala's seeking of external assistance for primary education might warn others that foreign aid becomes necessary even to sustain the already achieved high levels of enrolment in elementary education; and (d) education miracles do not necessarily lead to economic miracles, as Kerala ranks in

terms of the level of economic development, very poorly among the major states in India.

In terms of SDP per capita, Kerala is behind several states such as not only Punjab, Haryana, Maharashtra, and Gujarat, but also other states in the southern region including Tamil Nadu and Karnataka. Its per capita SDP is marginally above that of Andhra Pradesh in 1996-97. Annual rate of growth of per capita SDP of Kerala has been the lowest: it is 1.4 per cent per annum during the period 1960-61 to 1995-96 among the states for which such an estimated was made by Dasgupta et al (2000).¹ This is the same rate of growth experienced by the two major states of the BiMaRu group, viz., Bihar and Uttar Pradesh and it is also the same as that of Jammu and Kashmir and West Bengal.

On the poverty front also, Kerala is not in a much better position than many other states. Though there has been much improvement, the poverty ratio declining from nearly 60 per cent in 1973-74 to 25 per cent in 1993-94, and the current level of poverty in the state is much less than the national average, it is important to note that the most literate state and the state with the highest level of human development in the country has 25 per cent of its population living below the poverty line.

Despite high levels of literacy, near universal enrolment in elementary education, high levels of social and human development, why could Kerala not transform itself into a prosperous developed state like, say, Singapore? Why does the state of Kerala lag behind other states in India in economic development? It is argued here that the principal reason for this is the neglect of higher education in the state. Universal elementary education

¹ It is lower: 1.1 per cent for the period 1970-71 to 1995-96.

is a worthy goal and is necessary for development of the societies; but it does not provide the wherewithal necessary for economic growth.

While reviewing the higher education scene in Kerala, this short paper examines some general premises, which are questionable, but are widely in circulation, and form the basis for policy formulation. Three major issues examined are: the relationship between higher education and development, 'over' expansion of higher education and financing of higher education. It also briefly touches upon the specific phenomenon of the parallel colleges and the issue of graduate unemployment. On the whole, the attempt of the paper is to present a cursory look at some of the problems of higher education in the state.

Higher Education and Development

There is a general presumption that higher education is not necessary for economic growth and development. On the other hand, it is literacy and primary education that is argued to be important. Estimates on internal rate of return also contributed to strengthening of such a presumption.² Increased national and international concerns for Education For All, also led to overall neglect of higher education in many developing countries. The problem of resource scarcity added further to the problem.

But given the inter-dependence of one layer of education on the other, higher education becomes critically important for developing and sustaining a good quality primary and secondary education. It is also a critical factor necessary for economic growth and development and also for

² See the Report of the International Task Force on Higher Education (2000) for details.

its sustenance. It is important to note that while literacy and elementary education are important and necessary for development, they are not adequate for economic development. Without realising the importance of higher education in development, many governments tend to ignore higher education. Many recent policies initiated at the national as well as state level, including in Kerala, confirm this. This may result in outcomes that would prove to be costly to the society not only in the long run but also even during the short to medium terms.

Available evidence shows that societies that have focused their attention rather exclusively on literacy and basic education and ignored higher education (e.g., Viet Nam, Rwanda and Sri Lanka) have not succeeded on economic front. Some of them could not succeed even in terms of social and human development.

International evidence also shows that no country could become an economically advanced country, if the enrolment ratio in higher education is less than 20 per cent. In fact, we find no country in the group of the developed countries whose enrolment ratio in higher education is less than 20 per cent, and conversely we find very few countries with an enrolment ratio of above 20 per cent among the developing countries.³

Even at the national level, the relationship between higher education and economic development is found to be significant. A simple coefficient of correlation between GDP per capita (GDP/pc) (1995-96) and percent of population with higher education (HREDPOP) (1995-96) in

³The classification of developing and developed countries is based on the standard classification adopted by the World Bank (*World Development Reports*).

various states and union territories is high and statistically significant. The value of the coefficient is 0.692. Similarly, the coefficient of correlation between poverty and percent of population with higher education is also significant, and the coefficient is negative in value, it is: -0.505.⁴

A simple semi-log regression equation on (SDP/pc) on HREDPOP also yields statistically significant and meaningful results,⁵ as follows:

$$\ln \text{SDP/pc} = \begin{array}{ccc} 8.835 & + & 0.0645 \text{ HREDPOP} \\ (80.3) & & (3.346) \end{array}$$

R-Square: 0.301 Adjusted R-Square: 0.274
F-Value: 11.19 n = 28
(Figures in parentheses are t-values)

It may be argued that these figures highlight the nature of association, between higher education and development, and not the cause and effect relationships. Nevertheless, despite some such familiar limitations, these results do show that higher education is positively related to economic growth and inversely to poverty; and it is likely that higher education influences positively economic growth. After all, higher education is widely recognised as an important investment in human capital, necessary for economic growth. It is higher education that may be single most important

⁴ The number of observations in both cases is 28 (states/union territories in India); if all union territories are also considered, (n = 32), the coefficient of correlation between higher education and poverty increases marginally to – 0.537.

⁵ These are only crude estimates. Note that the variables are not properly defined: it would be more meaningful if a time lag is allowed for the HREDPOP to influence economic growth. Also better production function models could be used.

factor that makes the difference between the developed countries and the developing countries.

In addition, higher education is also a *public good* – at least a *quasi-public good*, benefits from which are not confined to the individuals who go to colleges, but also others and the society at large are benefited considerably. The externalities of education, including the dynamic externalities of higher education are indeed immense, and they have profound positive effect on economic growth.

The importance of higher education further increases in the era of international competition and globalisation. International experience also shows that it is only those countries that had built up high quality human capital stocks, through good higher education systems, could reap the benefits of globalisation (e.g., East Asian economies), and countries that do not have stocks of quality human capital suffered the most from the policies of globalisation and structural adjustment (e.g., countries in sub-Saharan Africa).

Given all this, it is imperative that societies pay adequate attention to higher education. This is more important, if societies would like to transform themselves into prosperous economic tigers.

Has Higher Education System in Kerala Over Expanded?

There are some who strongly believe that higher education systems in developing countries have over expanded. The Ashok Mitra Commission on Kerala Education⁶ also seemed to be under a similar impression that

⁶*Report of the Kerala Education Commission* (Chairman: Dr Ashok Mitra). Kochi: Kerala Sastra Sahitya Parishad, 1999.

higher education in the state has expanded well, when it observed, “the higher education system in Kerala has extensive reach” (p. 84). It also observed that 10 per cent of those who enter primary school enroll for degree courses; and also that the total number of students entering higher education every year accounts for about 15 per cent of the relevant age group.

It may be valuable to carefully examine these and related figures, as they have very serious implications for policies and approaches of the government relating to higher education.

The enrolments in higher education in Kerala in 1998-99 were of the order of 1.7 lakhs.⁷ A rough estimate of population of the age-group 18-24 (relevant age group population for higher education) is around 46.2 lakhs in 1998 (14.5 per cent of the total population of 3.17 crores)⁸. Thus the enrolments hardly form 3.7 per cent of the relevant age-group population. The enrolment ratio is nowhere near 15 per cent, an impression that the Ashok Mitra Committee might create. Though latest data on this indicator are not available for all states, at all-India level, it, the gross enrolment ratio in higher education, is reported to be around six per cent. Thus the ratio in Kerala forms a very low ratio.

⁷They include enrolment in first (Bachelors’) and second (Masters’) degree course and Doctoral including M.Phil and D.Phil, D.Sc.) studies in general and professional courses. Source: *Selected Educational Statistics* (Ministry of Human Resource Development, Government of India. These figures do not include enrolment in unrecognized institutions, including parallel colleges.

⁸ These are based on the *Population Projections for India and States 1996-2016*. RegistrarGeneral, Government of India. (*Statistic Since Independence*, Dept of Economics & Statistics, Government of Kerala, 1998).

Second, it is clear from Table 2, that over the years, say between 1972-73 and 1986-87, this ratio has come down in quite a few states, and Kerala is one of those very few states. The trend in Kerala should be taken more seriously than in case of other states. While there is no rigid norm about the ratio, one expects the ratio to be higher in Kerala than the national average and many other states, as the enrolment ratio in Kerala is near 100 per cent in primary and upper primary education and the enrolment ratio at secondary level is reasonably high for the last several years. Naturally one expects this to result in rapid growth in higher education, and accordingly a higher enrolment ratio in higher education.

The Ashok Mitra Education Commission also observed that in Kerala around 10 per cent of those who enter primary schools enroll in degree courses of various kinds. While no detailed data are available for precise measurement of how many children enter Grade I and of whom how many enter the first degree courses (in a framework of proper cohort analysis), the ratio of enrolment in first-degree courses (general and professional) to enrolment in primary education at a given point of time may indicate to some extent the dimensions that the Commission refers to. Estimates of such a ratio do not show any better performance of Kerala over the national situation. For example, in 1998-99, such a ratio is estimated to be 5.6 per cent in Kerala, compared to 5.9 per cent in the country as a whole on average.

Several other indicators also confirm that in comparison with many states, Kerala compares unfavourably with respect to the growth in higher education.

Currently, there are nine universities, 186 colleges for general education, and 65 colleges for professional education, including 19 colleges

for teacher education (1998-99). But per every one lakh population on average, there are only 80 institutions of higher education, including universities and colleges) in Kerala, while the corresponding number is 99 at the all-India level. This 'degree of availability of higher education institutions' has always been less in Kerala than the national average.⁹

Second, the enrolments in higher education have grown at a rate of growth of 2.6 per cent per annum in Kerala between 1970-71 and 1998-99, compared to 4.8 per cent in the country as a whole. The difference seems to be larger if we consider a more recent period, 1980-81 to 1998-99. The corresponding rates of growth in the later period are 2.7 per cent and 6.1 per cent respectively.

Further, the share of Kerala in enrolment in higher education in India has declined from 4.4 per cent in 1980-81 to 4.1 per cent in 1990-91 and then steeply to 2.4 per cent in 1998-99. Similarly, the share of Kerala in the country's higher education institutions declined from 3.7 per cent to 2.8 per cent and then to 2.6 per cent respectively during the same period.

While education and literacy have expanded considerably in the state, among the literates, higher educated population constitutes a very small proportion in the state. This proportion, which may reflect the quality of literacy, was 3.2 per cent in 1981 in Kerala, compared to 4.4 per cent in the country as a whole (Kuttykrishnana, 1994). According the NSSO (1998) data, in 1995-96, higher educated population constitutes only 3.9 per cent of the total population in the state, which is less than the national average of 4.2

⁹ Without comparing with other states, George and Kumar (1997, p. 38) observed that the state has elaborate infrastructure facilities for post-secondary education.

and also as many as 15 states and union territories are ahead of Kerala in this regard. Interestingly, the proportion in Kerala is no better than that of Uttar Pradesh.

Other indicators such as enrolments in higher education as a proportion of enrolment in higher secondary education also confirm the relatively unfavorable position of the state of Kerala in higher education. George and Kumar (1999; also George (1999, p. 117) found that Kerala ranks 24th from above among the major states in India in this regard (1997-98).

In short, if there is a general impression that Kerala has expanded its higher education system considerably, if not over-expanded, I strongly feel that this is not necessarily true. On the other hand, Kerala's higher education system has not expanded as much as one expects in a state where elementary education is nearly universal and secondary education has expanded reasonably well.

Public Expenditure on Higher Education

In the era of liberalisation, privatisation and globalisation, several reforms are being proposed on financing higher education. Such reforms are argued to be necessary due to dwindling resource base relating to state finances. Kerala is also influenced by these reform policies. Before some of the proposals on reforms are discussed, let us briefly note the trends in public expenditures on higher education in Kerala.

Though Kerala has been spending on education sector, as a proportion of the total government expenditure (budget), quite high compared to many other states and the national average, the level of expenditure on higher education in Kerala is not particularly high. In 1998-

99 according to the available budget estimates, 14 per cent of the government budget on education was allocated to university and higher education in the state. The proportion is more or less the same at all-India level.¹⁰ Between 1980-81 and 1996-97, the real growth in public expenditure on higher education in the state was seven per cent, as against 6.8 per cent in the country as a whole.

Plan assistance to higher education has been very minimum during the 1990s. The major chunk of the expenditure (more than 90 per cent) is accounted for by non-plan expenditure, i.e., for maintenance of the system. As a result, development programmes are given very little attention, though there has been some improvement in the recent years, as reflected by the allocations to plan expenditure, compared to the non-plan expenditure (Table 11).

Understandably, as the private aided colleges are large in number, they account for a large part -- nearly two thirds -- of the higher education budget. Expenditure on government colleges has declined in relative terms. While 21 per cent of the total higher education budget went to government colleges in 1991-92, the corresponding proportion was only 14 per cent in 1996-97. Scholarships, an important indicator of egalitarian policies of the government, receive a negligible proportion of the total and there was a decline too in the small proportion from 0.7 per cent in 1990-91 to 0.2 per cent in 1996-97.

Quite importantly, it appears that budgets for libraries and laboratories that have an important effect on the quality of education, have been

¹⁰ For a few years, however, it appears, Kerala could allocate a higher proportion than the national average to higher education

dismal. As Dr Ashok Mitra Committee noted, universities and colleges in the state spend infinitesimally small amounts on libraries and laboratories. The M G University was found to have allocated a petty 3.8 per cent of its budget for libraries and laboratories in 1993-94, the University of Kerala three per cent and the University of Calicut 1.3 per cent. In fact, the grants to colleges – government and private – are sufficient largely to meet only salaries and nothing else.¹¹

Financing Higher Education

Higher education everywhere is financed by the state to a substantial extent. On the whole, India is no exception to this. But recent efforts are towards reducing the role of the state in financing higher education. The Ashok Mitra Commission also observes that the dependence of the universities in Kerala on state support has increased. Compared to international experience, and also many universities in India, state support to universities in Kerala is on a lower side. In general quite a few universities in Kerala receive 40-70 per cent of their total revenues from government in the form of grants. The rest is contributed by students in the form of fees, and other internal sources, including donations and endowments. So even if there has been an increase on reliance of the universities in the state on public exchequer, I still feel, the increased levels could be less than the national average. Hence there is no need to be alarmed about it.

¹¹ See also Mathew (1991) for a detailed account of private colleges in the state.

'Free' Higher Education

There is also a general impression that higher education in India is provided rather free, or at a very low level of fees, to students. In fact, the Ashok Mitra Commission observes that “education up to the collegiate level is free in the state, though at all levels there are fee-levying private institutions.... At present fees at the collegiate level constitutes an extremely low proportion of the costs of education” (p. 130).

First, it has to be noted that there is nothing like free higher education. Students do pay sizeable amounts to acquire higher education. As Salim (1992) reported, students pay a fees of Rs.521 per year in government degree colleges in general education (arts, science) in (1989-90), which increases by nearly 50 per cent when the student goes to government post-graduate colleges. In addition, students also spend a lot of money on acquiring higher education. Ignoring opportunity costs, students in government degree colleges had to spend nearly Rs.4000 per annum per head in government colleges, which seems to be higher than the SDP per capita of the state.¹² The fee alone forms about 13 per cent of the SDP per capita.¹³ So the general impression that fees in college education in Kerala is negligible or low is not altogether correct.

Let us look at one more dimension of fees in higher education.

¹² In 1989-90, the SDP per capita was Rs.3718.

¹³The Ashok Mitra Committee suggested that this ratio should be about 20 per cent, stating that it has come down from 50 per cent in 1950-51 to about ten per cent currently.

Share of Fees in Higher Education

The universities in Kerala are found to be generating somewhat a sizeable part of their expenditures from the students in the form of various fees. Though there has been some decline in the recent years, universities like the University of Kerala and the University of Calicut are found to be generating more than 25 per cent of their revenues in the form of fees. This is a reasonably high proportion, compared to many other universities in the country on the one hand, and the recommendation made by Dr Justice Punnyya Committee, which recommended generation of resources through fees and other internal sources to the extent of about 20 per cent. In the University of Calicut, student fees and other internal sources account for 45 per cent of the total revenues, and student fee alone forms 30 per cent in 1997-98 (Tilak and Rani, 2000).

Unfortunately no detailed accounts are available on college finances. Dr Ashok Mitra Commission reported that arts and science colleges generated 4.4 per cent of the expenditure from students' tuition fees alone and professional colleges 5.9 per cent. It is now well known that students pay not only tuition fees, but also many other types of fees, which are generally found to be 3-10 times higher than the tuition fees in many cases. Hence, if all types of fees are taken into consideration, it is possible that college students in Kerala also meet, through fees, a sizeable part of the total costs of their education – may be equivalent to the recommendation of Dr Punnyya Committee. This is important to note, as the impression that students pay only 4.4 to 5.9 per cent of the costs of higher education might lead to recommendation of steep revision of fee structures. After all, a steep revision of fee structure may be highly regressive, and this may also be counter productive in terms of revenue generation.

Others Sources of Resource Generation

Universities also began generating revenues through various methods, some of which are not necessarily efficient and equitable. Some such measures include introduction of new self-financing courses, and raising resources from industry and community. While the scope for the later is found to be restricted, many universities began introducing several types of self-financing courses – mainly to generate resources, many a time more than the costs of running those specific courses. These courses in the universities are in addition to running of schools of correspondence courses, which are also found to be generating surplus revenues. Introduction of self-financing courses, mainly with an idea of generating revenues, may jeopardize the genuine academic interests of the universities, creating imbalances between different disciplines of study.

All methods of generation of non-governmental resources have weaknesses. The measures include increase in fees, generation of resources from industry and the community, introduction of self-financing (or surplus generating) courses etc. How far are they desirable and if desirable, how far are they feasible? Generation of high levels of internal resources could seriously affect the quality of education, equity in education and balanced nature of education (between different disciplines – general and professional, and layers – under graduate, post graduate and doctoral -- of study). Hence it is necessary to note the limits of such measures.

In this context, the Ashok Mitra Commission refers to the situation prevalent in some of the universities in Kerala: “it is estimated that the Kerala, Calicut and the M.G. Universities generated own resources amount to about Rs.45 crores *which does not cover even half the total expenditure*

for the period” (p. 129; emphasis added). This statement sounds as if it is desirable to generate about half the total expenditure of the university through internal sources.¹⁴ The premise under which the Commission made its observation is clear, when it notes, “it is declared that universities should become self-supporting” (p. 129). But to my knowledge, no explicit policy statement was made to the extent that universities should become self-supporting; or that half the expenditures of the universities should be generated through internal sources, even though the government may be happy if the universities do it.

Now a couple of other aspects relating to higher education in Kerala.

Private Colleges

The college education scene in Kerala is characterised with three important features:

- (a) the role of the government in college education is limited, as government colleges are small in number – 37 out of 210 in 1997 – hardly 18 per cent.
- (b) a dominance of the private sector, with more than 80 per cent of the colleges being run by private management, most of which are financed by the state, they being ‘aided’ private colleges, and
- (c) recent growth of self financing or private unaided colleges. There were 25 such colleges in 1997.

The growth of the private colleges in the state is largely attributed to the favourable policy of the state government on the one hand, and the presence

¹⁴ Long ago, even the Sarkar Committee on IITs could only suggest that only about one-third of the revenues could be generated through such sources.

of voluntary and philanthropic organisations on the other. It is only now money making private colleges are coming up in the name of self financing or unaided colleges. As the Dr Ashok Mitra Commission noted, they are primarily commercial institutions, educational considerations are not important at all, and it is only incidental that they meet 'the felt needs' of the people. At best they provide cheap 'training,' and skills that can be quickly marketed and not necessarily 'education.' Emergence of self-financing institutions within the university systems also creates various kinds of problems.

Since most part of the budget of the private aided colleges is met by the state, they are only privately managed, but government financed colleges. In this sense, the contribution of the private sector to financing of college education in the state is not significant. One might argue that the private unaided colleges relieve the financial burden on the state; but the problems associated with such colleges are well known. Any way, they are very few in Kerala. But there is another kind of private colleges in Kerala, popularly known as parallel colleges.

Parallel Colleges

While the emergence and growth of unaided colleges is a recent phenomenon, Kerala has a unique system of parallel colleges, floated by private enterprise more by commercial considerations, than guided by educational or philanthropic reasons. The demand for higher education, when not met by proper supply of higher education by the government, this is met by the parallel colleges. This phenomenon of parallel colleges is helped by the fact that students can appear for any examination as a private candidate, without ever going to any formal recognised college. These are in

fact, tutorial institutions, offering tuition to students to prepare them for examinations as 'private' candidates.

Low paid and low quality teachers, high fees, 'improper' education,¹⁵ and quick profits are the general characteristic features of the parallel colleges. By following several questionable methods, these colleges, largely contributed to lowering of standards and quality of higher education in the state.¹⁶ In a sense, they contributed to the production of cheap quality graduates, adding to the problem of educated unemployment. What is interesting is, despite the awareness of every one about the weaknesses of these colleges, government does not seem to be considering any proposals to regulate them.

Graduate Unemployment

Educated unemployment is also regarded as an important problem in Kerala. The higher education system is viewed as the main source of the problem. Oversupply of arts and science graduates, heavy subsidisation of education, preference for white collar work, preference for public sector jobs etc., are regarded as the most important factors for growth in educated unemployment (Mathew, 1995). Though data provided by the Employment Exchanges are not considered highly reliable, in the absence of any better source, this does provide some important insights into the nature of the

¹⁵ The examination scores of the students of these colleges could be still be high, as the focus of the colleges is exclusively on examinations, and not even the whole syllabi, not to mention integrated education, development of overall personality of the students etc..

¹⁶ See Nair and Ajit (1984) and Sivasankaran and Krishnan (1999) for interesting details on these colleges.

problem and trends therein. These data reveal that among the educated unemployed, the higher the layer of education the lower is the rate of unemployment, the ratio reaching the peak among the SSLC graduates – showing a typical inverted U-shaped unemployment curve by educational levels. This explains why people demand higher education, even when there is a high rate of educated unemployment. Secondly, among the several types of professional graduates, engineering diploma holders – not engineering graduates, constitute the bulk. The rate of growth of unemployed engineering diploma holders is also high – six per cent per annum between 1990 and 1997 (and nine per cent between 1980 and 1997). Though small in absolute numbers, the rate of growth of unemployed agricultural graduates is the highest. Thirdly, among the Engineering graduates, the rate of growth of unemployment is the highest among electronics engineers, though they are also small in absolute number. Paradoxically, the demand for electronics engineering degree courses is also increasing rapidly.

Employment in public sector has remained more or less constant since the introduction of new economic reform policies in the country, precisely since 1990, and at the same time not very surprisingly, the growth in employment in private sector has been very modest. Despite high rates of unemployment, people demand higher education, as higher education is associated with higher earnings on the one hand, and lesser waiting period for job on the other (Mathew, 1995). This is from the individual point of view.

Some tend to argue from society's point of view, that higher education should not be expanded as it adds to unemployment. But it is important to note that higher education does not create unemployment; it

can, in fact, create employment.¹⁷ After all, it transforms low quality human capital into high quality human capital..

Concluding Observations

Increased need to universalise elementary education has resulted in serious focus on elementary education and at the same time rather total neglect of higher education. A few countries or states could succeed in providing universal elementary education by ignoring higher education, giving an impression to the educational planners that universalisation of elementary education is possible only if one ignores higher education. The experience of Kerala also tends to show the same. But such a dichotomous approach to education, of placing one sector of education against another may not lead to proper development of education and the societies. After all, there are strong inter-dependencies of various sub sectors of education on the one hand, and strong interdependencies between higher education and economic development sectors. As Surenderanath Banerjee stated in the Congress Presidential Address, Poona, 1895, “they act and react upon each other. They are part and parcel of a common and indissoluble system.”¹⁸

This short note presented a cursory look at the higher education scene in Kerala, focusing on a highly select set of issues. Though Kerala made impressive progress in literacy and elementary education, it is shown

¹⁷ Some argue that it reduced unemployment, as it takes the youth from the labour market to colleges.

¹⁸He made is clear: "we are not in favour of High Education vs. Primary Education. We are in favour of all education, high and low." Quoted by D M Desai, p. 57.

here that it has largely neglected higher education; and that Kerala compares very poorly with other states in India with respect to several indicators of development of higher education. This neglect of higher education, *inter alia*, may be the most important bottleneck in the rapid economic growth of the state.

The paper has also briefly reviewed some general presumptions about higher education– higher education – development relationship, the level of expansion of higher education in Kerala, and the policy reforms being attempted in financing higher education. It has been strongly argued here that Kerala has to enhance its priority for higher education.

While there is a strong case for rapid expansion of higher education in Kerala, it is important to see that new universities or colleges are set up after careful consideration of the needs on the one hand, and on the other hand and more importantly after ensuring adequate resource support. The expansion should help in improving the quality of higher education, than in leading to deterioration in quality.

Secondly, financing policies in higher education have to help in (a) quantitative expansion, (b) safe guarding of equity consideration and (c) promotion of quality of education. The State has an important role in financing higher education and any sizeable degree of reliance on private sector for finances may be counter productive. On the whole, the role of the private sector in the development of higher education cannot be expected to be significant.

High levels of graduate of unemployment might question the validity of the argument in favour of expansion of higher education. But part of the problem of educated unemployment could be due to the cheap quality of higher education, particularly provided by the vast sector of parallel

colleges. The rapidly emerging unaided colleges might add further to the problem in the state.¹⁹ Second, given the limited natural resources, and limited scope for rapid industrial development, the state has to emphasise on development of service sector – ‘knowledge based’ industries. Here lies the importance of higher education in particular. The growth of tertiary sector is very modest, in addition to its secondary sector being weak and small in size.²⁰ The nature and type of expansion of higher education should be such as to help in promoting rapid expansion of the tertiary sector in general, and the knowledge based industries in particular, in the state.

¹⁹ As recently Prof C.N.R. Rao observed in case of the contribution of private, more particularly non-recognised IT education imparting institutions, these institutions produce what can be called IT coolies and not IT professionals.

²⁰ See Eapen (1994) and Pillai (1995).

Table 1: Higher Education and Development			
	% of Population with Higher	Poverty,	SDP/pc
Andhra Pradesh	4.0	22.19	9274
Arunachal Pradesh	2.3	39.25	11303
Assam	2.8	40.86	6624
Bihar	2.9	54.96	3533
Goa	8.9	12.92	20141
Gujarat	4.6	24.21	12914
Haryana	4.5	25.05	13573
Himachal Pradesh	2.1	28.44	8747
J & K	4.6	25.17	6231
Karnataka	3.2	33.16	9359
Kerala	3.9	25.43	9004
Madhya Pradesh	3.7	42.52	6775
Maharashtra	5.2	36.86	15770
Manipur	6.7	33.76	6914
Meghalaya	2.9	37.92	7862
Mizoram	1.8	25.66	9570
Nagaland	3.4	37.92	9758
Orissa	3.0	48.56	6236
Punjab	5.8	11.77	16053
Rajasthan	3.0	27.41	7523
Sikkim	2.7	41.43	9472
Tamil Nadu	3.4	35.03	10222
Tripura	4.4	39.01	5083
Uttar Pradesh	3.9	40.85	5872
West Bengal	4.7	35.66	8491
Delhi	20.6	14.69	21830
Pondicherry	4.9	37.40	11512
Andaman & Nicobar	4.3	34.47	10911
Lakshadweep	0.2	25.04	
Chandigarh	15.0	11.35	
Dadra & Nagar Haveli	1.0	50.84	
Daman & Diu	4.0	15.80	
All-India	4.2	35.97	

Source: Education: NSSO (1998); Poverty: Planning Commission (1999); SDP/pc:

Table 2: Gross Enrolment Ratios in Higher Education in India (General Education)		
Year	1972-73	1986-87
Andhra Pradesh	3.80	4.36
Assam	3.70	2.99
Bihar	3.30	3.39
Gujarat	2.80	4.92
Haryana	5.50	3.08
Himachal	3.20	3.98
Jammu & Kashmir	4.00	3.46
Karnataka	5.00	6.59
Kerala	5.90	4.52
Madhya Pradesh	2.10	4.27
Maharashtra	4.20	6.66
Orissa	2.00	2.95
Punjab	6.60	5.62
Rajasthan	1.90	4.09
Tamil Nadu	3.90	4.33
Uttar Pradesh	6.60	3.78
West Bengal	4.90	4.49
Delhi	11.70	12.41
All India	4.30	4.54

Source: *Education in India* (MHRD)

Table 3: Growth in Higher Educational Institutions in Kerala						
Year	Universities	General	Engineering	Medical	Teacher	Total
1970-71	4	86	6	4	19	119
1980-81	4	126	6	4	19	159
1990-91	6	133	7	5	19	170
1995-96	8	173	8	12	19	220
1998-99	9	186	25	21	19	260

Source: *Selected Educational Statistics*, MHRD

Table 4: Number Higher Educational Institutions per One Million Population		
Year	Kerala	All India
1970-71	5.57	6.17
1980-81	6.25	6.34
1990-91	5.84	7.07
1995-96	7.10	8.79
1998-99	7.96	9.87

Source: *Selected Educational Statistics*, MHRD

Table 5: Number of Higher Educational Institutions per One Million Population						
Year	Universities	Colleges				Total
		General	Engineering	Medical	Teacher	
<i>Kerala</i>						
1970-71	0.187	4.029	0.281	0.187	0.890	5.575
1980-81	0.157	4.950	0.236	0.157	0.746	6.247
1990-91	0.206	4.571	0.241	0.172	0.653	5.842
1995-96	0.258	5.587	0.258	0.388	0.614	7.105
1998-99	0.276	5.696	0.766	0.643	0.582	7.962
<i>All-India</i>						
1970-71	0.197	4.876	0.204	0.376	0.516	6.170
1980-81	0.262	5.012	0.170	0.162	0.732	6.338
1990-91	0.275	5.745	0.333	0.154	0.560	7.067
1995-96	0.310	7.032	0.393	0.379	0.678	8.791
1998-99	0.307	7.460	0.538	0.752	0.814	9.870

Source: Based on *Selected Educational Statistics*, MHRD

Year	Ph.D.	General PG & UG	Professional			Total
			Engineering	Medical	Teacher	
1970-71	144	74669	3514	3007	2440	83774
1980-81	684	94306	5962	4028	2646	107626
1990-91	1319	136894	20853	4018	4291	167375
1995-96	1526	145273	13110	3367	3688	166964
1998-99	2611	144711	16874	6626	2373	173195

Source: *Selected Educational Statistics*, MHRD

Years	Ph.D.	PG & UG	Engineering	Medical	Teacher	Total
<i>Kerala</i>						
1970-71 to 1998-99	10.90	2.39	5.76	2.86	-0.10	2.63
1980-81 to 1998-99	7.73	2.41	5.95	2.80	-0.60	2.68
<i>All-India</i>						
1970-71 to 1998-99	4.44	4.91	4.79	1.78	2.60	4.75
1980-81 to 1998-99	3.32	6.25	6.35	4.25	2.90	6.11

Source: Based on *Education in India* and *Selected Educational Statistics*, MHRD

Year	Enrolments in Higher Education as a % Ratio of			
	Enrolments in Higher Secondary Education		Total Population	
	Kerala	All India	Kerala	All India
1970-71			0.39	0.35
1980-81	73.03	59.02	0.42	0.36
1990-91	78.23	64.34	0.58	0.48
1995-96	65.07	68.75	0.54	0.60
1998-99	67.42	76.22	0.53	0.71

Source: Based on *Selected Educational Statistics*, MHRD

Table 9: Budget Expenditure on Higher Education as Percentage of Total Budget Expenditure on Education		
Year	Kerala	All India
1980-81	10.6	12.2
1981-82	11.2	13.2
1982-83	12.1	12.4
1989-90	13.16	12.7
1990-91	12.23	11.8
1991-92	14.98	11.40
1992-93	17.21	12.89
1993-94	18.47	13.26
1994-95	15.75	12.95
1995-96	15.62	12.28
1996-97	15.95	11.79
1997-98RE	14.72	11.91
1998-99BE	13.92	13.48

Source: *Analysis of Budget Expenditure on Education* (MHRD)

Table 10: Budget Expenditure on Higher Education (Rs in Crores)				
	Kerala	All India	Kerala	All India
Year	Current Prices		Constant (1980-81) Prices	
1980-81	22.4	384.9	22.4	384.9
1990-91	93.1	1836.4	40.2	818.9
1991-92	123.0	1948.2	43.7	756.3
1992-93	154.4	2699.9	51.7	967.2
1993-94	208.0	3103.7	67.4	1008.1
1994-95	209.3	3525.3	59.8	1037.6
1995-96	253.6	3871.3	69.0	1054.2
1996-97	252.6	4287.9	65.8	1099.3
1997-98RE	232.7	5047.1		
1998-99BE	304.9	6771.2		
Growth Rates (%)				
1980-81-1996-97	16.34	16.26	6.96	6.78
1990-91-1996-97	18.09	15.18	8.55	5.03

Source: *Analysis of Budget Expenditure on Education* (MHRD)

	Plan	Non-Plan	Total
1990-91	3.70	96.31	100
1991-92	2.10	97.90	100
1992-93	3.47	96.53	100
1993-94	3.62	96.38	100
1994-95	6.20	93.80	100
1995-96	5.79	94.21	100
1996-97	6.00	94.00	100
1997-98R	7.10	92.90	100
1998-99B	7.53	92.47	100
Source: <i>Analysis of Budget Expenditure on Education</i> (MHRD)			

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98R	1998-99B
Direction and Administration	1.48	1.3	1.0	0.9	1.0	1.0	1.1	1.1	1.2
Universities	14.81	16.3	14.8	14.9	18.1	15.4	18.9	19.7	24.0
Government Colleges	17.19	21.4	20.2	13.6	14.8	14.9	14.4	16.0	16.9
Assistance to Private Colleges	64.18	59.5	63.0	69.4	64.6	67.1	64.1	61.6	55.9
Scholarships	0.66	0.5	0.3	0.2	0.2	0.3	0.2	0.3	0.3
Others	1.67	1.1	0.8	1.0	1.3	1.4	1.3	1.4	1.8
Total	100	100	100	100	100	100	100	100	100
Source: <i>Analysis of Budget Expenditure on Education</i> (MHRD)									

Table 13: Gross and Net Private Cost of Higher Education in Kerala				
Level of Education	Academic	Incidental	Total (Gross)	Net
<i>Government Colleges</i>				
Degree	1784	2323	4107	3802
Post Graduation	1456	2554	4010	3848
Total	1671	2404	4075	3822
<i>Private Colleges</i>				
Degree	2037	3203	5240	5026
Post Graduation	1570	2733	4303	4141
Total	1888	3035	4923	4728
<i>All Colleges</i>				
Degree	2021	2948	4969	4750
Post Graduation	1478	2644	4122	3954
Total	1813	2832	4645	4445
Note: Academic cost include pre-admission, college fee, private tuition, books, stationary, study tours, others. Incidental costs include hostel, clothing, subscriptions, travel entertainment, donations, others. Net private costs is net of subsidies (scholarships) received by students.				
Source: Salim (1992).				

Table 14: Sources of Finances of Universities: University of Calicut					
	Government Grants*	Student Fees	Other Internal	Others	Total
1990-91	52.0	38.6	8.2	2.00	100
1994-95	58.8	27.1	14.3	0.06	100
1995-96	60.6	26.3	13.1	0.04	100
1996-97	59.0	24.5	16.5	0.02	100
1997-98	54.5	27.0	18.5	0.10	100
Note: * includes project grants from public bodies such as UGC, ICSSR..					
Source: Tilak and Rani (2000).					

	Government	Private	Private Unaided	Total
1968-69	11	104	..	115
1996-97	37	148	25	210

Source: *Statistics Since Independence*. Thiruvananthapuram

Year	Below SSLC		SSLC		PDC		Degree		Post Graduate		SSLC & Above		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1966	70.9	45.1	79.3	50.4	2.9	1.8	3.6	2.3	0.4	0.29	86.2	54.9	157.2	100
1990	227.4	37.0	1655.5	49.9	273.8	8.2	135.2	4.1	28.3	0.85	2092.7	63.0	3320.0	100
1991	1318.5	36.2	1885.3	51.8	257.2	7.1	150.0	4.1	27.8	0.76	2320.3	63.8	3638.8	100
1992	1345.3	35.0	2027.6	52.7	283.6	7.3	161.6	4.2	29.1	0.75	2501.8	65.0	3847.0	100
1993	1412.9	34.0	2210.3	53.2	317.7	7.6	181.6	4.4	34.3	0.83	2744.0	66.0	4156.9	100
1994	1377.8	33.1	2238.2	53.7	325.8	7.8	190.3	4.6	36.7	0.88	2790.9	67.0	4168.7	100
1995	929.0	28.8	1857.1	57.6	260.5	8.1	154.2	4.8	25.5	0.79	2297.4	71.2	3326.3	100
1996	822.2	25.0	1984.2	60.4	287.8	8.9	162.0	4.9	31.4	0.96	2465.3	75.0	3287.5	100
1997	854.4	24.3	2122.5	60.3	321.4	9.1	184.6	5.3	36.2	1.03	2664.8	75.7	3519.2	100
Growth Rates (%)														
1990-97	20.82		3.61		2.32		4.55		3.59		3.51		0.84	
1966-97	8.36		11.19		16.37		13.56		15.25		11.70		10.55	

Source: Government of Kerala, Department of Economics and Statistics: *Statistics Since Independence, 1998*

Table 17: Number of Professional and Technical Work Seekers in Kerala							
Year	Medical Graduates	Engineering Graduates	Engineering Diploma	ITI Certificate Holders	Agricultural Graduates	Veterinary Graduates	Total
1966	19	417
1970	281	1852	3547	8380	133	70	14263
1975	809	1850	3990	20113	32	117	26911
1980	871	1505	6833	29973	106	17	39305
1985	1143	2917	11257	53237	149	25	68728
1990	1806	6507	20154	87069	368	128	116032
1991	2588	7762	22399	75898	363	13	109023
1992	3123	9286	25810	89616	219	83	128137
1993	3318	9549	34680	87962	451	110	136073
1994	3494	10420	30720	80757	1001	214	129606
1995	1974	7553	26403	82030	1305	148	11943
1996	1976	7274	28565	89847	1265	32	128959
1997	2100	7452	30359	93693	1303	22	134929
Growth Rates							
1970-97	7.73	5.29	8.28	9.35	8.82	-4.20	8.68
1980-97	5.31	9.87	9.17	6.93	15.90	1.53	7.52
1990-97	2.18	1.96	6.03	1.05	19.80	-22.24	2.18

Year	Civil	Chemical	Electrical	Electronics	Mechanical	All Engineers
1992	401	21	198	50	153	819
1993	611	31	109	72	257	1211
1994	590	29	31	46	252	1357
1995	568	30	30	47	252	1061
1996	608	44	54	50	300	1153
1997	262	36	304	129	180	1069
Growth Rate 1992-97	-8.16	11.38	8.95	20.87	3.30	5.47

Source: *Fact book on Manpower (IAMR)*

Year	Central Govt	State Govt	Quasi-Govt	Local Bodies	Sub-Total (All Public Sector)		Private Sector		Total	
						%		%		%
1961	33.6	149.6	23.2	8.8	215.1	39.5	330.1	60.5	545.2	100
1990	95.8	278.7	226.7	24.6	625.7	55.9	492.8	44.1	1118.4	100
1991	97.8	279.1	229.1	25.1	631.2	55.0	516.7	45.0	1147.9	100
1992	98.4	282.0	244.6	26.0	651.0	55.2	528.6	44.8	1179.6	100
1993	94.3	278.3	246.7	27.1	646.4	54.5	539.1	45.5	1185.4	100
1994	94.9	281.3	249.9	25.9	652.0	54.4	546.9	45.6	1198.9	100
1995	97.0	275.2	223.9	24.4	620.4	52.8	554.0	47.2	1174.4	100
1996	98.9	277.2	224.7	23.8	624.5	53.0	554.1	47.0	1178.6	100
Growth Rates										
1961-96	3.13	1.78	6.71	2.89	3.09		1.49		2.23	
1990-96	0.53	-0.09	-0.14	-0.51	-0.03		1.97		0.88	

Source: *Statistics Since Independence.*

References

- Cherunilam, Francis (1995) Kerala Economy: Problems and Prospects, in P.J. Gandhi (ed.) *Indian Economic Issues* (part II) Jaipur: Pointer Publishers, pp.445-56.
- Dasgupta, Dipankar, P. Maiti, R. Mukherjee, S. Sarkar, S. Chakrabarti (2000) Growth and Interstate Disparities in India: Statistical Analysis, *Economic and Political Weekly* 35 (27) (July 107): 2413-22.
- Eapen, M. (1994) The Changing Structure of the Workforce in Kerala, in B.A. Prakash (ed.) *Kerala's Economy: Performance, Problems, Prospects*. New Delhi: Sage, pp. 61-77.
- George, K.K. (1999) *Limits to Kerala Model of Development*. Thiruvananthapuram: Centre for Development Studies.
- George, K.K. and N.Ajith Kumar (1997) Kerala – The Land of Development Paradoxes. CSES Working paper no. 2. Kochi: Centre for Socio-Economic & Environmental Studies
- George, K.K. and N.Ajith Kumar (1999) What is Wrong with Kerala's Education System? CSES Working paper no. 3. Kochi: Centre for Socio-Economic & Environmental Studies.
- Government of Kerala (1998) *Statistics Since Independence*, Traivandrum: Dept of Economics & Statistics.
- International Task Force on Higher Education (2000) *Higher Education in Developing Countries*. Washington DC: World Bank.
- Kerala Sastra Sahitya Parishad (1999) *Report of the Kerala Education Commission* (Chairman: Dr Ashok Mitra). Kochi: Kerala Sastra Sahitya Parishad.
- Kuttykrishnan, A.C. (1994) Educational Development in Kerala, in B.A. Prakash (ed.) *Kerala's Economy: Performance, Problems, Prospects*. New Delhi: Sage, pp. 349-67.

- Lewis, John .P. (1997) *India's Political Economy: Governance and Reform*. Delhi: Oxford University Press.
- Mathew, E.T. (1991) *Financing Higher Education: Sources and Uses of Funds of Private Colleges in Kerala*. New Delhi: Concept.
- Mathew, E.T. (1995) Educated Unemployment in Kerala: Some Socio-Economic Aspects, *Economic and Political Weekly* 30 (6) (February 11): 325-35.
- Nair,P.R.G. and Ajit, M. (1984) Parallel Colleges in Kerala: Enrolment, Cost and Employment, *Economic and Political Weekly* (October): 20-29.
- NSSO (1998) *Attending an Educational Institution in India: Its Level, Nature and Cost* (NSS 52nd Round 1996-97) [Report no. 439]. New Delhi: Government of India.
- Pillai, G.K. (1995) The Development Experiences of Kerala Economy, in P.J. Gandhi (ed.) *Indian Economic Issues* (part II) Jaipur: Pointer Publishers, pp.457-65.
- Planning Commission (1999) *Ninth Five Year Plan (1997-2002)* [Draft]. New Delhi.
- Ramachadnran, C.M. (1987) *Problems of Higher Education in India: A Case Study*. Delhi: Mittal.
- Registrar General of India: *Population Projections for India and States 1996-2016*. New Delhi: Government of India.
- Salim, A Abdul (1992) *The Cost of Higher Education in Kerala*, Unpublished Ph.D thesis, Department of Economics, University of Kerala, Trivandrum
- Sivasankaran, P. and C. Krishnan (1999) Economics' of Parallel Colleges: A Study, *Asian Economic Review* 41 (3) (December): 499-512.
- Tilak, J.B.G., and Rani, Geetha (2000) *University Finances in India: A Profile*. New Delhi: National Institute of Educational Planning and Administration.