CHAPTER I

Introduction

Section I: Preliminary Remarks:

The economic development of a country depends on its natural resources, working force, capital and the State of technology. Working force, commonly known in economic jargon as Labour is the active factor and the utilization of other factors responsible for economic growth depends on the participation and efficiency of labour. The extent to which the labour contributes towards economic development depends on both its quantity and quality. Both these characteristics are, however, dependent on the State of economic growth of a particular country. It is for this reason that the functional relationship of development of human resources and economic development has recently been realized by all policy makers. The National Economic Planning system has always to keep in view the development of human resources.

Human resource development is the prime concern of manpower planning and manpower planning in its turn the concern of economic planning. One can, therefore, see the interdependence of economic planning and manpower planning. Emphasizing on this interdependence of economic planning and manpower planning, Correa has said, "The equilibrium values of the economic system, that is, the value for which unemployment is zero, can be obtained only if educational system grows at the rhythm determined by the economic or if
the economy grows at the rythm by the output of the educational system".1

Let us clarify the meaning of the term 'human resource development' which has been used in the preceding paragraphs. "Human resource development" may be taken to stand for the process of increasing the knowledge, the skills and the capacities of all the people in a society in general and of the working force in particular. In economic terminology it could be described as the accumulation of human capital and its effective investment in the development of an economy.

Human resources are developed in many ways. The most obvious is by formal education. Human resources are also developed on the job through systematic or informal training programmes in employing institutions; in adults education programmes; through memberships in various political, social, religious, cultural and philanthropic groups. A third process is that of self development. Two other process of human resource development are: improvement in the health of working population through better medical and public health programme and improvement in nutrition.

Economists have long been aware of the importance of human resource development. Adam Smith, for example, stressed the importance of education at various places in the

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"Wealth of Nations" and he especially included "The acquired and useful abilities of all the inhabitants or members of society"\(^2\) in his concept of fixed capital.

Alfred Marshall emphasized the importance of Education, "As a national investment" and in his view, "the most valuable of all capital is that invested in human beings".\(^3\)

John Vaizey,\(^4\) in the "Economics of Education," has summarized the views of English economists and Karl Marx on the economic importance of education. He shows that how all of them realized the importance of investment in education for an accelerated rate of economic growth.

The discovery of importance of human resources by Schultz and others had led to more recent efforts to incorporate investment in education into the main stream of economic analysis. Prof. Svennilson, Edding and Elvin have established interesting correlation between the Gross National Product (G.N.P.) and the quantum of education. The work of these professors was done for the "Organisation for Economic Cooperation and Development (O.E.C.D.). These correlations are most striking at the higher age groups and the authors


conclude: "........... it is obvious that a country with a low GNP per capita cannot afford to have most of its young people between 15 and 19 in full time education and thus withheld from gainful employment. On the other hand a highly industrialized country with a high GNP per capita can hardly afford to break off the education of most of its people at the age of 14. Moreover, in a rich country there is a high demand for education as current consumption and the margin of income available to satisfy this demand is large.............".5

Generally speaking the income level as expressed by GNP per capita seems to set the lower limit of educational effort. But above that limit there is a wide margin for choice, whether it be determined by private consumer preference or by political decisions to invest heavily in education in order to accelerate economic development.

Harbison, F. and Myers6 in their book "Strategies of Human Resource Development," observe: "The goals of modern society as we have already stressed are political, cultural and social as well as economic. Human resource development is a necessary condition for achieving all of them. A country needs educated political leaders, managers, artists, writers, craftsmen and journalists to spur its development. In an advanced


economy the capacities of men are extensively developed, in a primitive country they are for the most part undeveloped. If a country is unable to develop its human resources it cannot develop much else, whether it be a modern, political and social structure, a sense of national unity or higher standard of material welfare.

Adam Curle says, "Countries are underdeveloped because most of their people are underdeveloped having had no opportunity of expanding their potential capacities in the services or society".  

Progress is therefore, basically the result of human efforts. It takes human agents to mobilize capital to exploit natural resources, to create market and to carry on trades. The builders of economy are elites for various kinds who organise and had reward towards progress. Economic progress, in short, is directly dependent on human resource development.

We see that human resource development is primarily concerned with the two fold objective of building knowledge and skills (essentially the development of man's brainpower) at providing employment and broader opportunities for utilized or underutilized manpower. The importance of these two objectives in the priority skill is the order in which they are stated here. The development of man's brainpower is of

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primary importance and only when this objective is achieved the efforts for the achievement of the second objective have to be made.\footnote{For further reference see Frederick Harbison and Charles, A. Myer's, Education, Manpower and Economic Growth, "Strategies of Human Resource Development, McGraw-Hill Series in International Development, 1964.}

The development of man's brainpower may take place in two ways. It may develop in its natural course by the advance of time. Man learns by experience as he advances in age but the progress made and the results obtained under this process of development are very slow and of routine nature. The second way of developing man's brainpower is by subjecting it to institutional formal education and on the job training. The results of this method are not only quick and fast, but also improved. It results in new strides, inventions, innovations and better technical know-how. In short, it generates skills.

In analysing the process of generation and utilization of high labour manpower, several clusters of questions creep up. The one and the most important is related to the development of formal education and in this cluster of formal education the requirements of teachers (seed-corn resources) and what are the available choices in producing the quantity and quality of the seed-corn which is needed are of immense importance.

The study of teachers can have different facets. Teachers problem may be studied from sociological, cultural,
educational and economic points of view. While each of the aspect is important in itself the scope of the present thesis which studies "Utilization and Development of National Teaching Manpower" has to be restricted to only economic aspects. Teachers form one of the most important inputs of the education industry (education is taken as a service industry). They may also be taken as the employees of the industry – the employers being the educational institutions. Teachers are scarce and the economist has to present a solution for their most efficient utilization. The economist should also ensure that a just percentage of GNP is made available as the share to the national teaching manpower. The pattern of employment and the disparities in the wage structure of different levels of teachers should be studied with the help of economic tools. The pattern of employment and the wage fixation should rest on economic criteria.

**Section II: Concept and Definition.**

The term "teacher" in the present study includes all persons engaged in teaching as their gainful occupation. This definition excludes persons or organizations imparting teaching either voluntarily or for some philanthropic consideration. Teachers of all levels working in different types of educational institutions have been studied. Thus it includes general school education teachers, lecturers
readers and professors employed for teaching in institutions of higher education like colleges, universities and research institutions.

Section III: Sources of Data and Their Limitations.

Important sources providing data on the stock, distribution and other aspects of utilization and development of national teaching manpower were identified. The main sources of data on teachers are:

1. Directorate General of Employment & Training,
2. Census,
3. University Grants Commission,
4. Ministry of Education, and
5. Others.

1. Biennial Returns of the D.G.E. & T.

The DGE & T have, under their programme for collection of Employment-Market Information, also been collecting the information regarding occupational pattern of employees in the public and private sectors. These returns are collected at biennial intervals. The public and the private sectors are covered alternatively. Information under the above programme is collected from all establishments in the public-sector and all private employers engaged in non-agricultural activities and employing 25 and more persons under the Employment Exchanges (Compulsory Notification of Vacancies) Act 1959. In addition similar data are also obtained from smaller establishments in the private sector employing 10 to 24
persons in selected employment market areas on a voluntary basis. The DGE & T has published its first report in 1958-59 latest published report on the public sector is for the year 1962. This report shows the occupational pattern of employees in the public sector as on 30th September, 1962. There is only one published report on the occupational pattern of employees in the private sector. This report presents the occupational pattern of employees in the private sector as on 30th September, 1961. We shall first study in brief the Report on the Occupational Pattern of Employees in the Private Sector in India, 1961 and then will take up the Report on Public Sector, 1962.

**Report on Occupational Pattern of Employees in the Private Sector in India 1961:** This study is based on the data contained in the occupational returns collected from 20,300 bigger establishments in the private sector throughout the country and similar information in the private sector collected from 70,340 smaller establishments on voluntary basis in 159 areas.

Nomenclature of occupations and industries used in this report refers to the National Classification of Occupation and Industrial Classification prepared by the DGE & T. Under these classifications the employment of teaching manpower falls under the first occupational division which is given "0" code number and is described as "Professional, Technical and Related Workers". The
sub-division 05 contains the information regarding teachers at 2 digit level. Further details are available at three digit classification. The whole classification pertaining to teachers at 3 digit level is reproduced here:

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Professional Technical, and Related Workers</td>
</tr>
<tr>
<td>05</td>
<td>Teachers</td>
</tr>
<tr>
<td>050</td>
<td>Teachers (University)</td>
</tr>
<tr>
<td>051</td>
<td>Teachers (Higher Secondary Schools)</td>
</tr>
<tr>
<td>052</td>
<td>Teachers (Middle &amp; Primary Schools)</td>
</tr>
<tr>
<td>053</td>
<td>Teachers (Nursery Schools)</td>
</tr>
<tr>
<td>059</td>
<td>Teachers (not elsewhere classified)</td>
</tr>
</tbody>
</table>

The industrial classification has the following eight "Industry Divisions".

<table>
<thead>
<tr>
<th>Industry Division</th>
<th>Description of Industry Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Div 0</td>
<td>Plantation, Live Stock, Fishing etc.</td>
</tr>
<tr>
<td>Div 1</td>
<td>Mining and Quarrying</td>
</tr>
<tr>
<td>Div 2 &amp; 3</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Div 4</td>
<td>Construction</td>
</tr>
<tr>
<td>Div 5</td>
<td>Electricity, Gas, Water &amp; Sanitary Services</td>
</tr>
<tr>
<td>Div 6</td>
<td>Trade and Commerce</td>
</tr>
<tr>
<td>Div 7</td>
<td>Transport, Storage and Communications</td>
</tr>
<tr>
<td>Div 8</td>
<td>Services</td>
</tr>
</tbody>
</table>

The above system of occupational and industrial classification is uniformly applied to both the private sector as well as to public sector returns.
The following statement shows the distribution of teaching manpower employed in the private sector separately for bigger and smaller establishments in India as on 30th September, 1961.

<table>
<thead>
<tr>
<th>Occupational Code</th>
<th>Description of Teaching</th>
<th>Number of Bigger Establishments</th>
<th>Number of Smaller Establishments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>050</td>
<td>Teachers (University)</td>
<td>18,608</td>
<td>2,269</td>
<td>20,877</td>
</tr>
<tr>
<td>051</td>
<td>Teachers (Secondary Schools)</td>
<td>66,101</td>
<td>41,228</td>
<td>107,329</td>
</tr>
<tr>
<td>052</td>
<td>Teachers (Middle &amp; Primary Schools)</td>
<td>19,836</td>
<td>52,162</td>
<td>71,998</td>
</tr>
<tr>
<td>053</td>
<td>Teachers (Nursery)</td>
<td>263</td>
<td>666</td>
<td>929</td>
</tr>
<tr>
<td>059</td>
<td>Teachers n.e.c.</td>
<td>4,730</td>
<td>4,066</td>
<td>8,796</td>
</tr>
<tr>
<td>05</td>
<td>Teachers (Total)</td>
<td>1,09,538</td>
<td>1,00,391</td>
<td>2,09,929</td>
</tr>
</tbody>
</table>

**Bigger Establishments:** The information regarding bigger establishments is tabulated only for 20300 establishments although such returns were expected from 25394 establishments. Thus the information is only for about 80% of bigger establishments.

**Smaller Establishments:** Smaller establishments covered by the report only represent 15% selected areas in the country where intensive studies under the Employment Market Information programme were in progress.

**Limitations:** The biennial returns of the DGE & T suffer from the following defects:

i) The coverage is not complete as indicated above.
ii) The private and public sectors are covered in alternative years. The figures, therefore, cannot be added. Hence, a picture of the total stock of teaching manpower cannot be had for a particular point of time.

iii) It only gives the employment, pattern and other details like salary, etc., are not provided for.

2. Census:

Census of India, 1961 had collected useful data on different economic aspects of the population. It presents the population by occupational classification. The data on the number of teachers and their distribution are published in Part II - B(ii) General Economic Tables of the Census of India, 1961, Volume I. The data are separately given for rural and urban India. They are classified by the National Occupational Classification of the DGE & T for the Census. The Occupational Classification is given at 3 digits. The description is as follows:

a. Teachers in Universities
b. Teachers in Secondary Schools
c. Teachers in Middle and Primary Schools
d. Teachers in Nursery, Kindergarten Schools, and
e. Teachers not elsewhere classified.

The census data are provided for India as a whole without the details of Industrial Categories in the following statement.
Census Count of Teachers in India, 1961.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description of the Categories</th>
<th>Number of Teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>050</td>
<td>Teachers in University</td>
<td>52,967 (4.18)</td>
<td>8,782 (2.8)</td>
</tr>
<tr>
<td>051</td>
<td>Teachers in High/Higher Secondary Schools</td>
<td>2,12,792 (16.8)</td>
<td>62,441 (19.7)</td>
</tr>
<tr>
<td>052</td>
<td>Teachers in Middle and Primary Schools</td>
<td>7,73,953 (61.2)</td>
<td>1,89,263 (59.7)</td>
</tr>
<tr>
<td>053</td>
<td>Teachers in Nursery</td>
<td>12,456 (0.9)</td>
<td>8,342 (2.6)</td>
</tr>
<tr>
<td>059</td>
<td>Teachers n.e.c.</td>
<td>2,12,529 (16.8)</td>
<td>48,179 (15.2)</td>
</tr>
<tr>
<td>05</td>
<td>Teachers (Total)*</td>
<td>12,64,697</td>
<td>3,17,007</td>
</tr>
</tbody>
</table>

Notes: 1. The distribution of total number of teachers by Industrial Classification at 3 digit Occupational Classification for all India is given in table 1.1.

2. Figures in brackets are percentages.

*Source: Census of India, 1961 Volume I. India Part II-B(ii) General Economic Tables.

It will be seen that the number of teachers enumerated by the census is on higher side as compared to the number of teachers enumerated by the Ministry of Education. A few possible reasons are:

a. The Census Count may be for all types of teachers, i.e. those gainfully employed or not so employed.

b. The Census Count may also be on the higher side because it lists persons engaged in teaching profession but not employed in educational institutions.

c. Some persons might have reported teaching as their occupation for they were working as teachers in the past although now they may be enjoying a retired life.
Limitations of the Census Data

The Census only presents a distribution of the stock of the teachers and suffers from the following limitations:

a. It only gives a decennial picture and hence, annual variations cannot be studied.
b. It does not throw light on the wage structure of the teachers, and
c. It does not show the employment pattern into different types of educational institutions.


The University Grants Commission publishers data regarding the employment of teachers in Universities and Colleges affiliated to them. These data are annually published in their publication entitled "University Development".

It is clear that this source of data is strictly restricted as no information is available regarding the number and pattern of employment of school teachers. The universities and colleges employ only a fraction of the total national teaching manpower. The level and qualifications of the teachers employed in colleges and universities are also entirely different from those of the school teachers. It is for these limitations that this source has not been used in the present study.

4. Ministry of Education:

The Ministry of Education publish information on various aspects of teaching manpower. They cover all types of teachers.
The employment of teachers is provided by sex, by institutions, and by rural and urban sectors. The salary structure, proportion of salaries to total expenditure and teacher-pupil ratios are also provided. Besides the institutional classification the teaching manpower is also classified according to educational standards and type of training. The teachers are also distributed for different type of education.

The Ministry of Education publish above information in their three annual publications, viz.:

1. Education in India
2. Education in the States, and
3. Education in the Universities in India.

There is a regular system of obtaining data direct from educational institutions. The coverage of data is excellent and it does not suffer from such limitations as the other three sources enumerated above suffer. The only drawback of the data is that they do not count those persons who are engaged in teaching as their gainful occupation but are not employed by educational institutions. This is no doubt a limitation but as the number of such teachers is very small bearing insignificant proportion of the total teaching manpower, their omission is not likely to vitiate the finding of the study.
Education in India and Education in States have more or less similar information. The education in India is, however, a detailed publication and it gives both at all India and State level a more comprehensive picture than education in the States. The education in the States is a summary type of report giving educational statistics for individual states. The Education in Universities in India provides educational statistics about individual universities. It may be compared with the U.G.C.'s publication viz. University Development in India.

5. Other Sources:

There is no other regular source of information on teaching manpower. Under other sources we have a few ad-hoc studies and reports. Mention may be made here of\textsuperscript{x} the Sergant Plan, Radha Krishnan Report, The First and Second year Books of Education of the National Council of Educational Research and Training (NCER&T), The Report of the Committee on Teaching Personnel, Five Year Plans and the Education Commission's Report.

Although the major analysis in the present thesis will be based on the published data contained in Education in India and Education in the States, references will also be made to other sources wherever necessary.
Section IV: Scope and Coverage:

In this study an attempt has been made to enumerate all teachers employed in educational institutions. The period under study is from 1950-51 to 1965-66. The period covers three Five Year Plans of India and also enables to assess the trends at five year intervals. All categories of teachers have been included, viz., primary school teachers, middle school teachers high and higher secondary school teachers, vocational and technical school teachers and college university teachers. The statistics have been provided for the two sexes separately. In some cases the inter-state comparisions have also been attempted.