EDUCATIONAL DYNAMISM IN THE SOCIAL PERSPECTIVE OF PURULIA A TYPICAL UNDERDEVELOPED DISTRICT IN WEST BENGAL
CHAPTER - I

THE PROBLEM OF EDUCATION IN PURULIA AND FACTORS CONTRIBUTING TO THE PROBLEM AND THE PLAN FOR REPORTING

INTRODUCTION

Background Information of Purulia:

Purulia, the Western-most district of the State of West Bengal, originally belonging to former Manbhum District of Bihar, was merged with West Bengal in November, 1956 on the recommendation of States' Re-organization Committee. "The splitting of the erstwhile Manbhum District in Bihar in November, 1956 tore its unified economic sphere almost exclusively to the disadvantage of the newly created Purulia District. The relatively prosperous and developed areas of the underdeveloped Manbhum District were not included in Purulia." The district, thereafter, lost its potential resources around the coal mines of Jharia and Chaas.

The newly formed district of the State of West Bengal is surrounded by Bihar on its three sides. The entire Western part and the major parts of the Northern and Southern portions are encompassed by Bihar. Purulia touches a part of Burdwan District on the North-East and Midnapore District on the South-East; while its major Eastern boundary coincides with the boundary line of Bankura District.

The area of the newly formed district is 6,259.0 Sq. Km. (or Square Kilometres) of which 6,204.0 Sq. Km. cover the rural areas and 55.0 Sq. Km. cover the urban areas. It ranks 5th in order of size among


the sixteen districts of the State of West Bengal and occupies 7.13 per cent of the total area of the State.\(^1\)

The region is socio-economically backward; and there is but little change in the traditional ways of life. In other words, there is no dynamism in the socio-economic life of the people. They are mentally slothful; and they have a little demand for modern culture and education. Obviously, there is no educational dynamism. This means that the growth, in the bulk of volume of education, or more precisely, in the quantitative dimension of education, is inadequate. The growth, in the qualitative aspects of education, is also discouraging. Obviously, there is no growth of education in the quantitative and also in the qualitative aspects. So, there is no educational dynamism in a traditional society. The rate of social progress, in such a society, is very slow. So, it remains backward or underdeveloped.

**Economic Backwardness:**

It is widely accepted that Purulia, the district under the present investigation, is an underdeveloped region. The following statements are very significant in this respect:

(a) "Recently eight districts of West Bengal have been declared backward areas"... Purulia is one of these eight districts.\(^2\)

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(b) "Purulia continues to rank among the economically less
developed districts of the country in spite of its rich endowment over the years".¹

(c) "The district is also backward in industry".²

(d) "From the angle of exploitation of resources, industrial ventures started so far in the district, literacy, urbanization and the contribution of income from the secondary and tertiary sectors the district has been categorized as a backward one".³

(e) "The backward state of industry in the district is also reflected in the absence of large scale industrial units, little urbanization and low contribution (15%) of industry to district's income".⁴

(f) "The district is one of the backward regions in India where avenues of income and occupations are almost closed and education is at moribund state; and people live from hand to mouth".⁵

(g) "The poor infrastructural development in the district reflects the low level of economic activities obtained in it".⁶

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(h) "Latest CMPO* reports - one of the most neglected areas in the State of West Bengal is the District of Purulia".¹

From the above it follows that Purulia is a typical underdeveloped region in West Bengal. In other words, the region is economically and socio-culturally backward.

Social Backwardness:

This region is socially less advanced. An analysis of the population of this region clarifies the fact.

Population Resources:

(a) Size of Population: The total population of the district as per the 1971 census is 1,602,875 of which the male population is 816,544 and the female population is 786,331. It accounts for 3.62 percent of the total population of the State of West Bengal. The sex ratio, that is, the number of females per one thousand males is higher than that of the State of West Bengal taken as a whole. A glance at the data supplied by the District Census Handbook, Purulia District, makes the picture clear.

ANNEXURE - I

Size of population of the State of West Bengal and the District of Purulia (1971)

<table>
<thead>
<tr>
<th></th>
<th>West Bengal</th>
<th>Purulia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>Total</td>
<td>44,312,011</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>23,435,987</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>20,876,024</td>
</tr>
</tbody>
</table>


* Calcutta Metropolitan Planning Organization.
(b) **Rural Population**

More than 91 per cent of the population reside in rural areas. About 79% of the population are engaged in agricultural pursuit.

(c) **Ethnic Population**

<table>
<thead>
<tr>
<th>Social groups</th>
<th>Percentage to total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Aboriginal races, (or tribal people)</td>
<td>19.58%</td>
</tr>
<tr>
<td>(ii) The offshoots of the aboriginal races, and the socially under-privileged or backward classes. (During the pre-independence stage they were socially untouchable and neglected).</td>
<td>15.00%</td>
</tr>
</tbody>
</table>

(d) **Population by Religion**

<table>
<thead>
<tr>
<th>Social groups</th>
<th>Percentage to total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) The Muslims</td>
<td>5.99%</td>
</tr>
<tr>
<td>(ii) The Christians plus the Jains</td>
<td>0.88%</td>
</tr>
<tr>
<td>(iii) The Hindus (other than the under-privileged classes)</td>
<td>58.55%</td>
</tr>
</tbody>
</table>

It appears that the region is inhabited by a large number of backward, under-privileged and minority social groups. The female-group, as a whole, which is the weaker section of people in India, is also a weaker section in Purulia. Most of the Hindus of Purulia are also rural people and they depend on agriculture. These social groups reflect the social perspective of the region.

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The National Government has been aware of the need for socio-economic and educational development of the underdeveloped areas of the country. In some of the regions the efforts are not far-reaching, Sri M.K. Premi observes, "In spite of the increasing awareness of the need to deal with the problems of regional disparities, very little effort has gone into analysing the regional patterns of distribution of activity." No priority to education has been given for many of these backward regions for their real development. Consequently, regional problems pertaining to backwardness are the prevalent conditions in many of the districts of the country, and illiteracy exists side by side with economic backwardness.

The district of Purulia, in the State of West Bengal, where the investigation has been carried out, has innumerable problems pertaining to its underdeveloped economy. In the first place, there is a paucity of resources for developing suitable schooling facilities. Secondly, the need for social demand for education has not been properly realised by all classes of people. Mass illiteracy is, therefore, one of the glaring problems amongst the various socio-economic and socio-cultural maladies. The most striking problem centres round mass illiteracy in general and female illiteracy in particular, especially in rural communities. But the problems of illiteracy, in socially under-privileged classes, tribal people and minority-religion groups, are no less important. Very many guardians are unconcerned.

about schooling of their wards. Hence, parental education, for educational care of their wards, is a challenging problem. In the context of these socio-economic and socio-cultural problems, the percentage of literacy is low; and it is lowest for the female. The percentage of literacy for the whole district was 18.3%, and for the rural communities it was 17% in 1961. These rose to 21.50% and 19.22% respectively in 1971. The percentage of female literacy in 1961 was 5% for the district as a whole and this rose to 8.25% for the whole district and 5.98% for the rural communities during 1971.

The annexure gives a clear picture of percentages of literacy at Purulia and in West Bengal as a whole.

ANNEXURE - II

<table>
<thead>
<tr>
<th>Total</th>
<th>West Bengal</th>
<th>Purulia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person</td>
<td>33.20%</td>
<td>21.50%</td>
</tr>
<tr>
<td>Male</td>
<td>42.81%</td>
<td>34.27%</td>
</tr>
<tr>
<td>Female</td>
<td>22.42%</td>
<td>8.25%</td>
</tr>
<tr>
<td>(Urban) Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person</td>
<td>55.83%</td>
<td>46.85%</td>
</tr>
<tr>
<td>Male</td>
<td>62.01%</td>
<td>57.78%</td>
</tr>
<tr>
<td>Female</td>
<td>47.84%</td>
<td>34.59%</td>
</tr>
<tr>
<td>(Rural) Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person</td>
<td>25.72%</td>
<td>19.22%</td>
</tr>
<tr>
<td>Male</td>
<td>35.80%</td>
<td>32.06%</td>
</tr>
<tr>
<td>Female</td>
<td>15.02%</td>
<td>5.98%</td>
</tr>
</tbody>
</table>

It becomes clear from the above that the percentage of literacy is 21.5% at Purulia, when two decades of 'Indicative Planning' have elapsed. The percentage of female literacy is the lowest of all other districts in West Bengal.

Lack of educational dynamism (or growth) and the corresponding educational wastage, (both in manpower and material resources), are serious problems in the context of its socio-economic backwardness.

The Crux of the Problem:

In the consideration of mass ignorance of backward regions, the need for mass literacy or universal education is no doubt immense. However, it is very difficult to achieve, because the quantitative dimension of education, (which is technically termed as volume of education), is determined by the dynamics of education, that is, its demand and supply. "The actual educational volume is the result of interaction between factors on the demand and supply side of education".1 S. Panitchpakdi quotes Pierre N.V. Tu (1969) who remarks that "Education is the most peculiar commodity bought and sold in a peculiar market".2 The demand for education is not primarily determined by its price. If the price of elementary education becomes nil, even then, its demand may not change, especially when the region is a backward area. In modern countries, usually the public authorities are the suppliers of education; and the demanders are the students and their parents who are supposed to be the real consumers. The supply situation in the elementary stage of education is governed by certain declared public policies.

1. S. Panitchpakdi, Educational Growth in Developing Countries, Erasmus University, Rotterdam, 1974. p. 2.
2. Ibid., p. 1.
and these are expected to be more or less uniform. The total supply situation is dependent on these declared policies. When the supply of education falls short of the demand for the total potential student population (say for the age-group 5+ to 14+), there is a possibility of manpower wastage. If this supply is greater than the actual social demand for elementary education, a part of material resources will be wasted. In a capital-poor region, any type of wastage is inimical to progress. Again, "the total demand for education at the primary or elementary stage, at a given point of time, is reflected by the number of children going to school as a proportion of the total population of children of the appropriate age-group".¹ In underdeveloped countries, or in backward regions within developing countries, all parents and students belonging to different social status groups are not equally concerned and adaptive to the needs of education even at the minimum level of elementary stage; and the public authorities, in spite of being aware of the prime importance of mass education are not capable of facilitating prodigal financial resources. Within these two stringencies, the growth in the volume of education or educational dynamism is very slow and discouraging. There is a little change in the quantitative aspects of education or in the volume of education, because, there is no dynamism or a positive change in the determinants of the volume of education, that is, in the demand and supply conditions of education. In such an economy there is but a little growth of schooling facilities, and flow of student population from different social strata of the community to school or from lower school grades to the upper level.

¹ Agricultural Economics Research Centre, Primary Education in Rural India, Participation and Wastage, Delhi University, New Delhi, 1971, p.23.
The problem becomes acute in rural situations, especially in demographic and cultural context. Innumerable socio-economic and socio-cultural problems of underdeveloped regions act as hindrances to the flow of student population from community to formal schools. These are poverty, ill-health, occupational attachment, ignorance, social habits and the like. The number of boys and girls goes on increasing every year due to new birth. But there is no proportionate growth either in the flow of student population from different social strata to school, or in the supply-flow of elementary education (or schooling facilities). Again, the existing formal or non-formal schools are not always suitable for various socio-economic groups of the region. The traditional working hours of the existing schools may not be suitable for most of the children. Co-education and distance of the upper-elementary school may also affect the social demand for education. Boys and girls are generally utilized for parental occupations or domestic work around the age of nine or ten. So, the regional educational needs are not totally fulfilled by the existing formal or non-formal schools. In very many cases, guardians are unconcerned about schooling of their wards. Obviously, many of the children, (in the age-group 5+ to 14+), drop out or do not get any type of schooling. In any case, they are non-participants, as they are not being schooled. This is educational wastage. The nature and extent of this educational wastage is perhaps, different in different ethnic, religion, caste or occupational groups. This educational wastage is also different in different sex-groups, age-groups (below 10+ and above 10+) and educational groups. Wastage is, perhaps, greater in the non-literate home background. Obviously, educational growth or dynamism is thwarted by this educational wastage. When there is a sufficient growth in the quantitative aspect
of education, or in the volume of education, it is only then, wastage can be minimised.

It is learnt from the preceding discussions that the quantitative dimension or the volume of education is regulated by the demand and supply forces of education. So, we need to understand the nature and extent of demand and supply conditions of elementary education. As educational dynamism is hindered by educational wastage, we need to understand the extent of educational dynamism and the corresponding educational wastage in different socio-economic and socio-cultural groups. We also need to understand the socio-economic and socio-cultural factors that influence the demand and supply forces of education of a typical backward region. Unless these social determinants are properly studied, it is not possible to prescribe appropriate measures for the improvement of educational dynamism.

STATEMENT OF THE PROBLEM:

In the context of the preceding discussions, the researcher feels it worthwhile to investigate some aspects of "Educational Dynamism in the Social Perspective of Purulia, a Typical Under-developed District in West Bengal". To be more precise, the researcher intends to investigate the following:

1. The nature and extent of educational dynamism and the corresponding wastage of human resources in the community, that is to say, the nature and extent of the flow of student population from different social strata of the village community to schools, (upto fourteen years of age as desired by Article 45 of Indian Constitution), and the nature of factors that hinder this student-flow.
2. The nature and extent of the growth of school education upto class VIII standard within the ethnic, caste and religion groups of the community and the nature of supply of various schooling facilities and educational opportunities for these groups in terms of their sex differences; and also the nature and extent of wastage of school resources in terms of finance, goods and services.

SIGNIFICANCE OF THE STUDY:

The present investigation determines significance of the constitutional provisions enumerated in part IV of the Constitution in the Articles - 45 and 46. This study pays special attention to the problems pertaining to quantitative expansion of elementary education for the age-group ranging from 5 plus to 14 plus; and thoroughly scrutinizes the nature and extent of the problem in the underprivileged classes, weaker sections and minority groups of the community. In this sense, this investigation is of prime national importance.

It has also significance in the context of the recent educational policy of the National Government for the mass-scale literacy programmes in rural areas.

The study intends to answer some of the basic questions of underdeveloped economy and its related educational problems. Naturally, it assumes significance in the context of rural educational planning, e.g., leisure hour activity, and fixation of school hours, non-formal educational programmes etc.
MAJOR OBJECTIVES:

I. To what extent the manpower and limited material resources of education of the community and of the existing schools are being wasted in a backward region at the elementary stage of education.

II. To understand the nature of relations between various social stratifications and demand for elementary education.

III. To understand the nature of supply facilities of elementary education in the region under study.

IV. To understand the nature of the supply of non-formal and informal agencies of education at the elementary level in a backward society.

V. To determine the various socio-economic and socio-cultural problems hindering educational dynamism in a backward society.

VI. To understand the nature of relations between occupation and demand for education, and also the literacy background of the guardians and demand for elementary education.
II. FACTORS CONTRIBUTING TO THE PROBLEM:

The present study deals with the problem of educational dynamism in the social perspective of a particular underdeveloped region in West Bengal. The problem is specific for a backward society and, therefore, is not confronted with general educational problems of a developed society. The research problem is, thus, concerned with two broad concepts. These are - (a) Social Perspective, and (b) Educational Dynamism. As these two concepts determine the theme of the present research problem, the significance of each concept, first of all, needs clarification before considering any other factors.

(a) Social Perspective:

Social scientists have endeavoured to explore every possible facets of fundamental importance in the social web. "Among the numerous and diverse aspects of society that have come under their scrutiny, the phenomenon of enculturation, socialization, or education has received increasing attention". ¹ Eminent social scientists in the field of Sociology, Anthropology, Social Psychology, Economics and Political Philosophy have extended their scholarly searchlight for the illumination of education during the period followed by WORLD WAR II. Scholars of other social sciences too investigate education as a social reality, process, structure, theory and entity in other respects. So, social perspective of education has acquired, according

to Harold L. Hodgkinson, multidimensionality. "The multidimensional view, which allows and even forces us to see the complexities behind obvious similarities in behaviour, is of tremendous importance for our time, as increasingly we shall have to be aware of differences in other social and cultural systems, even though their peoples seem to behave as we do." However, he goes on to say that there is a tendency "among teachers and researchers to argue from one or two factors to the totality". It is customary, therefore, to consider a few factors of social perspectives from the multidimensionality for research studies. As a natural corollary, the present research takes into account a few factors from multidimensional social perspectives of a typically backward region, Purulia, in the context of its educational dynamism. The following are the factors for consideration:

(I) At the first instance which seems to be very important, in this context, is the social stratification prevalent in the region under study. It takes into consideration the ascribed status based on religion, caste and ethnic division and on the other, the quasi-ascribed stratification of underdeveloped region depending on occupation and livelihood of the region and also the achieved status acquired through education. In all the cases, ranking by sex differences has been given due considerations. Unreal stratification based on age has not been lost sight of; because, universal elementary education is, somehow or other, relevant to age. The social

2. Ibid., p. 208.
bearing of all these factors in educational dynamism seems to be very important. The importance of universal education is supposed to be different in these different socio-economic groups. The growth of education and student-flow from the community to school is dependent on these socio-economic stratifications, as some research studies suggest that status variations are somehow related to variations in student-flow.1 This is one of the aspects of educational dynamism in the social perspective.

(II) Secondly, the researcher thinks that it is very difficult to probe into the problems of education of a typically underdeveloped society without examining the cultural background of the community. "Children are born with a biological heritage; they are born into a social heritage".2 "A cultural system operates as a mould, a melting-pot which gives the members of a group its own characteristics".3 Social habits, attitudes and behaviour pattern are shaped by cultural systems. "In certain cultures, non-materialist pre-occupations can sometimes supersede the need for increasing material well-being. The economic urge for profit and the urge for money, which play a determining role in the West, may not necessarily have the same power in all cultures".4 It was experienced in two of the experimental projects of community education in Viet-Nam, that motives of spiritual order unrelated to any idea of technical progress, served very efficiently as a motivation for a programme of social change. The liking

4. Ibid., p. 122.
and disliking for or indifference to education are also expressions of culture of a group. Thus, educational dynamism is the manifestation of a culture-system that governs the ways of life. In the present study the researcher considers 'social stratification' and 'culture of the locality' as the two main bearings of social perspectives. The nature of the problems of educational dynamism is explored in the context of these social perspectives of Purulia, an underdeveloped district in West Bengal.

(b) Educational Dynamism

Dynamism is "the process or mechanism responsible for the development or motion of a system". It is, therefore, opposite to stagnancy or static condition. The American Heritage Dictionary maintains, "Dynamism (Dynam + ism) is the quality of being energetic, vigorous." So, the idea of change and progress has been ingrained in it.

A typically underdeveloped society maintains inertia of semi-stagnancy in its economy, social systems, habits and attitudes, cultural life and in educational systems. In such a society the rate of social change is very slow. Naturally, traditional ways of life contradict modern ways, and social progress is almost motionless. Some social forces are, therefore, necessary for tending to produce a continuous flow or motion needed for a change. Education is conceived as one of the social forces to produce such a flow or motion needed for a change. Education "provides the most powerful and encouraging

influence to stimulate people to accept and adopt changes which contribute to their progress.\textsuperscript{1} Education, as a force, is "capable not only of transforming illiteracy into countless competences required for development but also of transforming society."\textsuperscript{2} Professor Schultze states, "Primary schools ... may be more decisive for India's economic development than steel plants."\textsuperscript{3} It is, therefore, widely accepted that the quantitative growth of education has influence on socio-cultural components of a society; so also it produces vigorous forces for socio-economic transformation. Educational growth stimulates social change, especially in a backward society. This is the impact of education on society, or the eventual aspect of educational growth.

Educational dynamism, therefore, implies two things:

(1) In the first place, educational dynamism refers to the change in the social systems, consequent upon the growth in the volume of education. This is the wider meaning of educational dynamism; since, social progress is the goal of education. This is understood, in the present study, as eventual educational dynamism.

(2) Secondly, educational dynamism refers to the growth, or a positive change in the volume of education. This is understood as volumetric educational dynamism; and this is a restricted meaning of educational dynamism. It characterises the growth of education itself.

\begin{itemize}
\item[3.] K.G. Saidain, \textit{Facets of Indian Education}, NCERT, New Delhi, 1970.
\end{itemize}
Unless there is a sufficient growth in volume of education, social transformation of a semi-stagnant society cannot be stimulated. It is for this reason, the present study is mainly concerned with volumetric educational dynamism. It does not study the impacts of education. But it deals with those factors that govern the volume of education. The term volume needs clarification. Volume of education is a term which has been coined by S. Panitch Pakdi, J. Tinbergen and others who deal with Economics of Education. Volume of education usually represents the quantitative dimension of education. However, the quantitative aspect of education cannot be totally separated from the qualitative aspect. For example, when we say that we want more primary schools, it is implied that the quality of these schools should not be inferior to the quality of the existing schools. It may therefore, be accepted that volume represents both the qualitative and quantitative aspects of education. But usually, it quantifies educational growth. It expresses both the quantitative and qualitative sides of education, only when, the determinants of volume of education are critically examined. Volume of education for a period of time, (for one year or so), is determined by the demand for and the supply of education during that period. "The actual educational volume is the result of interaction between factors on the demand and supply sides of education". If the factors influencing the supply-flow and the demand-flow of education remain unchanged for a certain period, (say for one year), there will be no change in the volume of education during that period. On the contrary, if there is an appreciable growth in the factors of demand-flow, there

1. S. Panitch Pakdi - op.cit., p. 2.
will be a positive change in the volume of education during that period, provided the supply flow reacts with the changing demand conditions. This means that the supply-flow must be elastic, so that, it may not fall behind the actual total demand for education. It follows from the above that volume of education is not an ambiguous term. It has a precise meaning. Its determinants are fixed and easily identifiable; and its measurement criteria are definite. So, we can easily determine the nature and extent of educational growth by examining the factors that determine the volume of education in an underdeveloped region.

Determinants of Volumetric Educational Dynamism:

It has been pointed out earlier that the volume of education, in the ultimate analysis, is determined by the realised demand for and supply of education. The supply-flow and demand-flow of education, therefore, require to be examined.

Supply-Flow: In modern democratic countries the public authorities mainly facilitate the flow of supply of education with the expectations that people will demand for it and consume it. John Vaizey has clarified the factors influencing the supply of education in the following words: "By supply of education we mean, the facilities provided by the education authorities in terms of school buildings, equipments, school buses and teachers which together result in the places available in schools."¹

Vaizey maintains that expansion of education gives rise to two fundamental problems. One is concerned with supply of teachers and the other with supply of finance. "A major item, in public expenditure on education, is the recurrent expenditure on teachers' salaries".¹ Public expenditure is also needed towards facilitating school building, equipment, learning materials and all other financial implications required for quantitative and qualitative improvement of education.

In an underdeveloped region the private source of educational investment is practically insignificant. The state aid is the main source of educational expenditure.

Public authorities supply education (i.e., teachers and finance) so as to have volumetric educational dynamism both in quantitative and qualitative terms. (a) The quantitative supply is, dependent on the nature of public pressure or the social demand for education which, in turn, depends upon the flow of student population from various social strata of the community; and at a given point of time, this tends to react with the participation ratio, or the total actual demand for elementary or primary education.² (b) While, the quality of education, being an impressionistic term with no direct empirical correlate is dependent on a fairly large number of indices.

On the basis of the Report of the Second All-India Education Survey and a Project Report on the Cost of Education (in rural areas), prepared by National Council of Educational Research and Studies, New Delhi, the following indices deserve mention:³

1. Ibid., p. 75.
2. Primary Education In Rural India, op.cit., p. 23.
3. Ibid., pp. 41-52.
(A) Educational expenditure per head.

(B) Primary school expenditure per head (for elementary education - elementary school expenditure per head).

(C) Average annual cost per pupil in primary schools.

(D) Student to teacher ratio in primary schools in rural areas only.

(E) Number of available schools per lakh of population.

(F) Number of schools with play-ground facilities, as a proportion of the total number of primary schools in rural area.

(G) Percentage of rural population served with primary school facilities within walking distance of one mile in rural areas only.

(H) Number of trained teachers in rural areas.

However, other factors like facilities of mid-day meals, dress, learning aids like lantern etc., learning materials like books, papers, part-time tutorial facilities etc., are also required to be considered. All these imply qualitative supply of education. However, in many cases it becomes difficult to differentiate qualitative supply with quantitative aspects. Improvement in one direction contributes to the other, owing to an inter-play of dynamic forces. In any case, qualitative education is intended to be facilitated along with quantitative supply for the growth in the volume of education.
It is expected that these types of improvements guarantee high rates of school performances and achievements, thereby accelerating the flow of achievers from one level to next higher level or from one terminal stage to the next higher stage. However, this dynamism influences those population who are enrolled in some types of academic institutions, and continue schooling. But it hardly affects the flow of population who are not enrolled in any school. This is a problem typical for a backward society.

Naturally, supply facility of education requires to be interpreted from two angles:

(1) Facility can be defined per potential pupil (assuming that all children of the relevant age-group go to school).1

(2) Again, facility can be defined per actual pupil (i.e., actual number of school-going children as a proportion of the number of children of the relevant schooling age).2

From the above we get two indices of educational cost—one relating to educational expenditure per potential pupil; and the other relating to educational expenditure per actual pupil.

If educational volume is purely determined by supply factors, the former is more appropriate. In that case, it is assumed that all children in the age-group 5+ to 14+ go to school. Educational facilities are required for this potential pupil. But in actual situation the

1 & 2. Primary Education in Rural India, op.cit., p. 58.
educational volume is not solely determined by supply. The demand factors do react with the situation. Education is supplied because the forces of demand will influence it. The greater the demand forces, the greater the supply. This is natural in a democratic society; because, educational investment is susceptible to public accountability. There cannot be an unlimited supply of education in a limited demand situation of a backward society. Naturally, the demand-flow of education requires to be examined. Unless there is a positive change in demand forces, volume of education cannot change, supply tends to react with the demand; but it can do very little on its own accord. This means that supply alone is not capable of stimulating educational dynamism in a backward region. The demand-flow is the vital factor in determining volume of education. Educational supply becomes meaningless apart from its demand. The demand-flow of education is, therefore, considered.

Demand-Flow: The demand forces or the demand-flow of education of backward regions are difficult to study; because, the nature of demand forces are not only different in different social strata, but also different in different school grades or levels. The demand forces of education are expressed through the actual flow of student population (i) from lower school levels to upper school levels or (ii) from various socio-economic groups of the community to formal or non-formal schools meant for elementary education. The flow of student population, therefore, characterises the demand-flow.

This flow of students originates from different social strata of the community, and it is expressed as an inner-flow of students from lower school-levels to upper school-levels or school-grades. The nature
of demand for education can be determined by studying the demand-flow of different social strata and also of different school-levels.

The flow of students from lower levels is found to be a very important factor influencing demand. Some authors designate it as inner dynamics of educational systems. "The inner dynamic force, as an essential aspect of educational system, thus, creates an impulse on both demand and supply sides. To shed some light on the manner in which educational volume is determined, it is necessary ... to take both demand and supply sides into account simultaneously". In absence of inner dynamism, wastage (in the form of drop-outs and stagnation) will cause a fall in demand and so also a fall in the volume of education.

This inner-flow expresses the demand for education at different school grades or stages, that is, the primary stage, the upper-elementary stage and so on; whereas, the flow of students from the community represents the demand for education for different socio-economic groups.

From some strata demand-flow is quite appreciable; whereas in others it is too feeble. The rise and fall of the demand for education explain the nature and extent of its growth and tendencies and forces of the society. In underdeveloped regions the expected consumers of education do not obey the principles of economic rationality. When public funds and facilities are made available within the limited resources of backward or developing societies, for the cause of education, the ignorant underprivileged social groups belonging to different

ethnic, religion or caste groups of these isolated village-communities do not take advantage of the educational facilities to the expected level and mostly remain un­concerned habitually and traditionally for the education of their wards. Educational aspirations and achievement-motivations needed for modernization are remarkably deficient in these backward people. The deficiency in this respect is alarming for education of girls in almost all the social groups. All these socio-cultural factors necessarily lead to wastage of resources, both human and material, and hinder educational dynamism so also desired social advancement; and backwardness relatively stands still.

Educational dynamism is, therefore, accompanied by corresponding educational wastage. The term wastage is, therefore, explained.

Wastage:

The obvious question, in this connection, is - What is being wasted? According to M.A. Brimer and L. Pauli it is "Wastage of human learning, school buildings and equipment, the labour of teachers".¹ William J. Platt refers to "Wastage of talent, wastage of content and method, wastage of organization and wastage of future".² To be precise it is wastage of available financial resources (which is very dear in a capital-poor region), and of potentiality of man-power for whom all development programmes are resorted to in a democracy. In a resource-poor area, any type of wastage is inimical to broad-


based development; and hence, inimical to dynamism. The greater the wastage, the lesser the dynamism. Educational dynamism tends to change illiteracy into countless competences so as to minimise wastage at all sectors.

Who are actually wasted? This is the next question to answer.

(a) In the first place, those who do not receive any type of formal or non-formal schooling are the victims of educational wastage. These are unschooled-population at the relevant-age-group and in all other age-groups.

(b) Secondly, those that discontinue schooling without completing standard IV or four years of effective schooling are wasted. The term effective schooling signifies that the pupils being enrolled at school continue school activities throughout the four years, more or less, regularly. On the basis of empirical evidence, it is usually claimed that children who do not complete standard IV and drop out earlier than this period "lapse into illiteracy". This IV standard generally assumed/the minimum standard for having permanent literacy or functional literacy. Gadgil and Dandekar have shown that at least four years of schooling is necessary for every child to ensure the retention of effective literacy in later life.¹

(c) In the third place, wastage is to be treated from the constitutional objectives. Those who do not continue education till the attainment of fourteen years of age are also wasted either apparently

or really. The Constitution of India (Art. 45)\(^1\) explicitly mentions that there shall be free and compulsory education up to the age of 14, which cover the entire elementary educational stage, i.e., education up to grade VIII. So, it is the directive of Indian Constitution that education up to fourteen years of age is compulsory for all children. This is expected to be the minimum essential for becoming an effective member of a democratic institution. In the Fifth Plan elementary education (covering age-group 6 - 14) has been given a very high priority.\(^2\) The language runs thus, "Apart from being a constitutional obligation, the provision of universal elementary education is crucial for spreading mass literacy, which is a basic requirement for economic development, modernization of social structure and the effective functioning of democratic institution".\(^3\) The level of mass literacy would be such as would ensure the effective working of the basic institutions on which economic and social well-being of the country depend. So, mass education tends to create a well-informed and educated citizenry.\(^4\) It is natural that seven or eight years of schooling is at a minimum, essential to fulfil the above objectives.

It follows, therefore, that boys and girls (belonging to the age-group 6+ to 14+) are expected to be enrolled at school. So, anyone in this age-range, not participating at schools of any type, i.e., Primary, Middle or Junior High or in part-time non-formal centres etc.,

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2. The Draft Fifth Plan op.cit., p. 194.
3. Ibid., p. 191.
4. Ibid., p. 191.
are victims of educational wastage. These non-participants may be totally unschooled or pushed-out at any stage of primary or middle school. They are for some reason or other, unable to complete elementary education up to class VIII standard. This is wastage - total or partial. Their educable potentialities and also the available limited resources are, thus being wholly or partially wasted. This is educational wastage of resources, both human and material. This is the educational wastage of the community; because, the community becomes the ultimate victims of such wastage. This concept is, somehow, different from the traditional concept of wastage which is commonly expressed in terms of drop-outs or stagnation etc. Traditional wastage is only concerned with the population that comes under the purview of the school; but it remains unconcerned about the unschooled children. The present study is much concerned about this group, as it considers the educational wastage of the community. Unless this wastage is minimised, the demand-flow of education does not increase. In many cases, demand is not influenced by supply or price. It also happens, when extra incentives (in the form of tutorial aid or free food and lodging), for backward sections of population are facilitated, the rise in demand condition is not appreciable; although, the number of population in the school-going-age goes on increasing. There is no corresponding student-flow from various social strata to the formal schools. So, dynamism in the form of demand-flow from the community does not counterbalance the population growth. The actual total demand is, therefore, less than the total potential demand relevant to elementary-education-age-group (or E.A.G.). Hence, the demand-flow of education, (say at the elementary stage), at a given point of time, is to be considered from two aspects:

(a) The number of children going to school as a proportion of the total population of children of the appropriate age-group.
(b) The structure of demand for elementary education relating only to school-going-age must indicate how the school-going children are distributed in the various levels or school grades of elementary education.

The former, that is, (a) gives the indication of wastage in the community in the form of 'non-participation to school'; and the latter, that is, (b) gives the indication of wastage in school in the form of drop-outs and stagnation. The former is exclusively the wastage of the community while the latter is a wastage of both the school and the community; because, the community becomes the ultimate victim of such wastage. The above discussions clarify the nature of demand-flow and wastage of education relevant to volumetric educational dynamism in a backward society.

In the foregoing sections, the researcher has explained the nature and properties of the determinants of volume of education. The key factors influencing these determinants have been explained next.
IIA. KEY FACTORS INFLUENCING THE SUPPLY OF AND DEMAND FOR ELEMENTARY EDUCATION IN AN UNDERDEVELOPED REGION

As the study is concerned with the volumetric educational dynamism of an underdeveloped region, it intends to examine the key factors that influence the supply of and demand for education at the elementary stage.

(I) Key Factors Influencing Supply:

There are two main sources of supply of elementary education for rural areas of West Bengal. The first source is the State Department of Education, or the public source; and the second source comprises private individuals. As the contribution of the second source is insignificant in the region under this investigation, the present study considers only the first source, that is, the state aid to education, and this is the main source influencing the supply. The State Government facilitates agencies of education for the growth of elementary education. These agencies are of two types:

(i) Formal schools for primary and upper-elementary education.

(ii) Non-formal education centres for the unschooled or drop-out population. This also includes the informal agencies of education like the mass-media etc.

The present study intends to explore as to what extent these formal and non-formal agencies of education afford educational opportunities to different age-groups, sex-groups, caste-groups,
occupational groups and so on. For the thorough examination of all these aspects, the supply of education is to be considered from two different angles:

(A) Input capacity of schools or quantitative aspects of supply of schooling for the elementary education.

(B) Quality of educational facilities in terms of their utility to the community.

These are the two key factors which determine the effectiveness of the supply conditions of education. Unless the input capacity of schools is increased in accordance with the population growth and the schools become useful or purposeful to the community, the growth in supply (only in terms of finance) will not be in a position to raise the volume of education. Financial investment in education becomes effective only when a large number of student-population is enrolled and accommodated in schools; and these students continue schooling.

Again, investment in education for its qualitative improvement must be purposeful to the community. Let us examine the case with an illustration. Suppose that the State Government invests a lot of money for the construction of boys' schools at the upper-elementary stage. Let us also suppose that these are all good schools, and at the same time, purposeful to some boys. But are these schools purposeful to girls? The answer is - no. Let us again consider that these schools sit at 8 A.M. By the morning time boys, in the age-group (11+ to 14+), generally assist their parents in agricultural activities or domestic work. So, the material necessities of
traditional communities do not allow the children to go to school at 8 A.M. A good school may be at hand, but supply of this type of schooling is not purposeful to the community. That is why quality of educational facilities should be judged in terms of their utility to the community.

The above two factors, that is, the input capacity of schools and the quality of educational facilities have been examined in the present study in several aspects. These have been, first of all, considered for the formal schools.

(A) Quantitative supply of schooling facilities and the input capacity of formal schools have been considered from the following directions:

(a) Average number of schools per inhabited village or, school-village ratio,

(b) School-teacher ratio or, number of teachers per school,

(c) Accommodation in the school in terms of class units,

(d) Optimum capacity of intake of pupils (in an average), in terms of number of existing teachers. This is teacher-student ratio,

(e) Optimum capacity of intake of pupils in accordance with the number of class units and accommodation available,

(f) Potential total student population per village in an average and intake capacity of school in an average.
(B) The quality of educational facilities (in the formal schools), in terms of their utility to the community has been examined in the following aspects:

(a) Average distance of the school from houses of pupils,
(b) Amount of tuition fees,
(c) Money needed for buying text books,
(d) Supply of learning materials,
(e) Supply of mid-day meals or tiffin,
(f) Working hours in the school.

Non-formal and Informal Schooling Facilities:

The supply of non-formal and informal agencies of education has mainly been considered in their quantitative and functional aspects, as their numbers are insignificant in the community under study.

The key factors influencing supply conditions of the formal, non-formal or, informal schooling are intended to be examined in the context of both the potential and actual student population in the age-group 5 plus to 14 plus.
Key Factors Influencing Demand:

The demand for education is determined by a number of factors. Some of these factors have been given by S. Panitch Pakdi in the following manner:

1. The degree of utilisation of educating capacity.
2. Income growth.
3. The increase in population.
4. The attitude towards education.

It is certain that everyone is endowed with the right to have education; and as such, he or she may receive primary or elementary schooling. But in the higher stages, the individual may or may not have necessary qualities to demand a certain kind of education. This factor not only influences the demand condition in underdeveloped and developing countries but also in advanced countries too. So, this factor is not very important for the present study.

The income factor, as is generally believed, is an important consideration for demand analysis. Increase in income may lead to rise in demand for education. The well-to-do people have the capacity to consume it. This argument is quite appropriate for higher education and also at the secondary stage of education, where education incurs private cost. But at the primary stage income variable may
not have direct relationship with schooling, which can be received without any private cost. But occupation, as another indicator of income, may affect demand for education. In some occupational groups children are directly utilised for parental occupations, and thus, these occupational groups may not demand education for their children. (In this context D.V. Chickermane's study on wastage is relevant).

More important is the population growth. Growth of population creates additional demand for education. This is quite obvious. Addition in the quantity of child-population demands for additional educational facilities. But in underdeveloped regions it cannot be expected that every child will participate in schools. The flow of student population from different social strata is quite different. Naturally, population growth in some strata may lead to rise in demand; while in some other strata it may not influence the demand condition proportionately with the population growth. Thus, the flow of student population from community to school is not reasonably sensitive to population growth. The flow is affected by a number of complex socio-cultural factors. This is the demand condition in a backward society.

Different socio-economic and socio-cultural groups foster different attitudes toward education or more appropriately to the existing formal or non-formal schooling. So, demand for education is governed by a number of complex variables; and these are manifestations of social stratifications of underdeveloped societies.

The flow of student population from some social strata is quite appreciable; but the flow, from some other strata, is too feeble. It is, therefore, necessary to consider the social stratification of the region under this study along with other social factors that influence the demand for education in an underdeveloped region. All these social determinants of the demand-flow have been classified under six (6) broad groups. These have been explained below:

(i) **Age of the Learner**: Elementary education is demanded for a specific age-group. The age-range of this group generally varies from (5+ to 14+). So, the demand for education will be examined for the age-group (5+ to 14+). Sri J.P. Naik maintains that in a traditional society children are involved in domestic work after the age of 9+. Naturally the demand for elementary education requires to be studied separately for the lower-elementary stage (age-group 5+ to 10+), and the upper-elementary stage (age-group 11+ to 14+). The demand for education is dependent on the age of the learner. This is an important factor for demand analysis.

(ii) **Sex of the Learner**: Sex is an important factor that determines the demand for education in an underdeveloped region. As the literacy rate is very poor for the female in the region under the investigation, the demand for education is discouraging for girls belonging to different ethnic, caste, religion and occupational groups. So, the demand for education is to be studied separately for the two sex groups.

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(iii) **Ascribed Social Strata:** The demand for education is different in different ascribed social strata. The obvious question is - what constitutes this ascribed social stratum? S.C. Dube\(^1\) maintains that religion and caste are more or less fixed and permanent factors of stratification in a traditional society, and in many cases ethnic factors determine stratification to a great extent. A basis of permanent social stratification can also be revealed from the Constitution of India. The Constitution of India maintains a number of schedules for the protection of social rights of all the aboriginal races or tribal people and underprivileged or socially backward castes of India. The fifth and the sixth schedules are very significant in this respect. That is why, these scheduled tribal people are constitutionally known as Scheduled Tribes; and the socially backward castes (who have been scheduled in Indian Constitution), are known as Scheduled Castes. Before the commencement of the Constitution of India they were socially treated as unclean castes, since they were untouchables. The clean castes or the higher Hindu castes hated them. These scheduled tribal groups and caste groups, now, enjoy constitutional privileges, in order that, they may get their social status at par with other Hindu castes.

Articles 15(4), 29, 30(2) and 46 of Indian Constitution\(^2\) are significant in this respect. Again, articles 25, 26 and 30 protect the interest of minority religion-groups. The Christians, Muslims, Sikhs etc., belong to this category.

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In the region under study, the percentages of Scheduled Tribes and Scheduled Castes are respectively 19.58% and 14.99%. The minority-religion-groups, (Muslims, Sikhs, Christians etc.) constitute 6.87% of the population. The rest 58.56% of the population belong to the higher Hindu caste-group. These four-fold classifications represent the total population into easily identifiable ascribed status groups of the region. So, the demand for education is to be determined for these four ascribed status groups; because the demand-flow of education is greatly influenced by these status groups. These groups are -

(a) Scheduled Tribes or the S.T. group,
(b) Scheduled Castes of the S.C. group,
(c) Minority religion-population or the M.R. group, and
(d) All other Hindus or the A.O.H. group.

These abbreviations that is, S.T., S.C. M.R. and A.O.H. have been used throughout this study.

(IV) Occupational Factor: The demand for education is different in different occupational groups. P.A. Sorokin maintains that occupational factors are the determinants of dynamic aspects of social stratification. Robin M. Williams Jr. maintains, "As far the easiest component to single out as a rank determinant is the occupational; it is both identifiable and subject to a relatively high degree of consensus concerning prestige attached to different occupational levels." 

However, a perfectly mobile stratification does not really exist in a traditional society. Occupational activities are mostly handed down from one generation to another. In such a society occupational groups can be treated as quasi-ascribed social strata. So, the present study, places occupational groups in the quasi-ascribed strata.

About 79 per cent of the people are engaged in agricultural activities and 21 per cent in non-agricultural activities in the region under consideration. Thus, the occupational influence on the demand-flow of education has been considered from two aspects. These are -

(a) The influence of the agro-occupational group on the demand-flow of education; and

(b) The influence of the non-agro-occupational group on the demand-flow of education.

(v) It is generally believed that educated guardians send their children to formal school. Education is, therefore, demanded by literate guardians. What about the non-literate and semi-literate guardians? How many of them send their children to school? The exact answer is not known. So, it requires an investigation. For this purpose the demand for education in different groups of guardians, (that is, literate group, non-literate group etc.,) has been designed to be studied. Guardians have been classified into four broad groups on the basis of their educational qualifications so as to understand the relationship between the educational levels of guardians and the demand for
elementary education for each group. Guardians belonging to different educational groups have been shown below:

(a) Non-literate guardians,
(b) Semi-literate guardians with primary level of schooling.
(c) Literate guardians with middle school or upper elementary education.
(d) Educated guardians who have passed the Secondary School Final Examination or above.

(vi) Factors that Resist the Demand-flow: Various socio-economic and socio-cultural factors come under this head.

Prof. Hoselitz maintains that there is lack of universalism, rationality and high levels of work discipline, punctuality and achievement motivation among the people\(^1\) of a traditional society. Gunnar Myrdal characterizes such a society with inefficient facilities for vocational and professional instruction and for training of all levels, and more generally, inefficient educational and cultural facilities of all sorts.\(^2\) According to Father Alain Birou a traditionalist looks back to the past and to the standards

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set by myths, which he must strive to reproduce. Leisure is the aim of existence. Work is merely an evil necessary to make rest possible again. Adam Curle maintains that people of backward societies have tolerance and liking for status quo; but they are not amenable to change. "The commonest form of resistance is probably inertia. It is inertia of ignorance and despair." All these cultural influences and folkways and mores of different sub-culture groups are inimical to educational dynamism. The demand-flow is influenced by the cultural inertia, social habits and value systems and the practices of a traditional society. So, the researcher intends to find out the most formidable socio-cultural factors that affect the flow of student population from the various groups of the community to elementary schools. The various groups refer to the various social strata which have already been discussed; and the socio-cultural factors signify the socio-economic and cultural aspects of the region. The aspects of the socio-economic and cultural factors that are intended to be investigated, in view of the resistances to the school participation are the following:

1. Economic condition of parents and its influence on school participation;

2. Financial requirements towards elementary education of wards;

1. Father Alain Eirou, quoted from Social Research and Problems of Rural Development, op. cit., p. 54.

(3) Employment of child population;
(4) Involvement of children in parental occupation;
(5) Lack of facility to study at home;
(6) Death of parents;
(7) Marriageable age of wards;
(8) Prejudice of co-education in elementary level of education;
(9) Caste and communal sentiments;
(10) Willingness of guardians and pupils to get education;
(11) Involvement of children in domestic work;
(12) Prevailing social habits towards school participation;
(13) Value of elementary schooling to guardians;
(14) Ignorance of guardians with regard to schooling facilities;
(15) Leisure hours for children and suitable working hours for schooling; and
(16) Nature of school-community relations.

All these socio-economic and cultural aspects of the region are designed to be studied so as to identify the formidable factors hindering the demand-flow in education.

In the foregoing section, the researcher has dealt with the key factors influencing the problem. Next, the researcher deals with the plan for reporting the study.
III. PLAN FOR REPORTING AND DESIGN OF STUDY

The plan for reporting consists of the following:

(1) Sample - its size and nature, and technique of selection.

(2) Strategic schemes for dealing with the field work.

(3) Approaches to study educational growth and treatment of factors contributing to educational dynamism.

(4) Mode of analysis of educational dynamism and socio-economic factors hindering educational dynamism.

Sample: Eight villages are selected for the study. All the schools providing primary and secondary schooling facilities and other non-formal and informal agencies within these villages, and a few more secondary schools (2 to 4 schools), located outside these villages are designed to be selected. For studying the community, twenty per cent (20%) households of each village have been included in the sample. These represent the different purposive characters needed for probing into the nature of educational dynamism and the corresponding educational wastage. The selection of villages, households and schools involves both stratified and random sampling techniques. The base year is 1974.

Strategy for Field Work: Twenty per cent households of the selected eight villages and all the primary and secondary schools, (facilitating upper-elementary education), located in these villages are intended to be studied. In this position, the researcher feels
that it will be a difficult task to collect data and conduct necessary field work of such a large sample by his individual capacity. The researcher, therefore, organises a team of voluntary social workers by associating a number of local persons who are interested in education. They are expected to assist the researcher at the time of collection of data from these unknown village communities. The researcher also contrives to form a school-complex with the sample schools where the teachers of these schools and the social workers will meet together from time to time. This will be a centre for seminar discussions, cultural activities and exchange of academic ideas. The teachers and social workers will be oriented to the same programme of activities in connection with the present research. This strategic arrangement will help the investigator to contact the village communities and collect relevant data systematically.

Approaches to Study Educational Growth: The approaches to study educational growth are based on educational objectives, since there are different approaches for studying different objectives.

The social demand approach is followed when the objective is educational demand oriented and educational input is emphasised. If the objective is labour demand oriented and educational output is emphasised, the manpower requirements approach should be followed. There are, also, other approaches relevant to some other educational objectives. Various approaches for studying different educational objectives have, therefore, been given below in a tabular form.
TABLE SHOWING DIFFERENT APPROACHES FOR STUDYING DIFFERENT EDUCATIONAL OBJECTIVES

<table>
<thead>
<tr>
<th>Approach</th>
<th>Characteristics</th>
<th>Mode of analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Social demand</td>
<td>Educational demand oriented, emphasis on educational input</td>
<td>Student flow model, educational input-output</td>
</tr>
<tr>
<td>2. Manpower requirements</td>
<td>Labour demand oriented, emphasis on educational output</td>
<td>National input-output, production function education occupation relationships</td>
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<tr>
<td>3. Social cost benefit</td>
<td>Cost and earnings oriented, emphasis on labour market</td>
<td>Age-education-income profile, calculation of internal rate of return</td>
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<tr>
<td>4. Optimum allocation of resources</td>
<td>Diversified objectives, combined into social welfare function, emphasis on limited resources</td>
<td>General programming methods</td>
</tr>
</tbody>
</table>

The present study is mainly confronted with analysing the forces of educational demand within the various prevalent social strata and the nature of educational input at the lower and upper levels of elementary education consequent upon growth of population and schooling facilities of the underdeveloped region in consideration. The social demand approach, to a large extent, is supposed to be convenient for this purpose. S. Panitch Pakdi observes, that this approach bases its objectives on demand trends, and it starts from the natural increase in population, the flow of primary-education, income, and so on. When educational planning first

1. S. Panitch Pakdi, op. cit., p. 3.
came into existence, this approach was recommended as a major alternative to the manpower requirements approach. This approach strikes a balance between cultural and economic values of education. The social demand approach is widely used as a guide line to determine the following:

1. Determination of prospective demographic developments,
2. Analysis of past and current trends of enrolments, including enrolment ratios, attrition rates, graduation rates etc.,
3. Determination of the desired trends of enrolment such as, increase of enrolment, fixing target for arriving at universalization of elementary education and so on.

It follows from the above that, social demand approach is suitable for examining volumetric educational dynamism as conceived in the present study. This approach utilises student-flow model and takes for granted that education is mainly social demand oriented. The approach is simple and has been in extensive use. The approach can be followed, with certain modification in accordance with requirements of this particular investigation. However, the fourth approach, that is, optimum allocation of resources, is also appropriate for dealing with problems of wastage. This approach is concerned with optimum allocation of resources, it puts emphasis on social welfare and proper utilisation of limited resources. The

1. Ibid., pp. 6-7.
present study, therefore, makes use of two approaches, viz., social demand approach and optimum allocation of resources.

Treatment of Factors Contributing to Educational Dynamism:

The social demand approach involves treatment of demand and supply forces in accordance with demographic change, student-flow from community, and the changing growth trends of enrolment or educational input. And the other approach, that is, the optimum allocation of resources, puts emphasis on social welfare function and limited resources. Factors contributing to educational dynamism have, therefore, been designed to be treated in accordance with these two approaches. These have been represented below:

(i) TREATMENT OF DEMOGRAPHIC CHANGE:

(a) "The study of population involves not only their numbers, but also their age, sex and other important characteristics which differentiate one population from another".¹ So, the growth of population has been considered for boys and girls for the age-group (5 plus to 14 plus).

(b) The growth of population for a specific period is determined by "births, deaths, movement of people into or out of the geographical area; composition of the population as to age and sex and other variables."²

². Ibid., p. 206.
Naturally, the growth of boy and girl population for a specific period of time (year) in the various social strata at the specific age-range (5+ to 14+) will be given by:

- Boys' and girls' population of the previous year in the age-range (5+ to 14+);
- New population attaining the age, 5 plus (which is consequent upon birth);
- Emigration (if any);
- Previous population crossing the age-limit, 14 plus;
- Death and migration (if any).

This amounts to the growth of population (age-range 5+ to 14+), for a particular period of time (say the year of the investigation).

Therefore, growth of population is the expression of the differences between the actual number of population of two successive periods (viz., years or decades) at the specific age-range and other characteristics under consideration. Demographic changes are characterised by the changes in growth rates of various population over a period.

The rate of growth of population (in terms of percentage) is simply expressed by:

\[
\frac{\text{actual increase in population}}{\text{actual population of the base year}} \times 100
\]
It follows that the demographic changes can be computed with the help of the above device.

(ii) TREATMENT OF STUDENT-FLOW FROM THE COMMUNITY

(a) The potential total student population is the total number of boy and girl population in various social strata of the community at the specific age-range during the base year 1974. Similarly, the potential total student population, at a specific point of time after the base year, is equal to population at the base year plus growth of population during the interval.

(b) However, in a backward society, the actual total student population is less than the potential total student population. This is the nature of thing. The actual total student population is regulated by the flow of student population from the community. It is obvious that actual total demand for education at a specific point of time is equal to actual flow of student population from various social strata of the community.

Therefore, potential total demand for education (for age-group 5+ to 14+) at a given point of time is given by:

Actual total demand + unrealised demand. The actual total demand is equal to the student-flow from the community; and the unrealised demand signifies the educational wastage.
The participation ratio (for the age-group 5+ to 14+) for a period of time is expressed by:

\[
\text{Number of actual school participants} \quad \text{Potential total student population}
\]

So, the rate of enrolment = participation ratio \times 100.

This may also be expressed as the percentage of enrolment or the rate of educational dynamism. So, the unrealised demand, expressed in percentage, represents the corresponding rate of educational wastage.

In the above treatments, it has been assumed that the actual total demand plus unrealised demand is the reflection of the potential total student population. The ultimate objective of universal elementary education is that the total social demand for education will be equal to the potential total student population (age-group 5+ to 14+). In this condition supply will have to be raised so as to meet the social demand for universal elementary education. This is the ultimate objective. But in the actual situation of a capital-poor country, the supply of education does not necessarily go ahead of actual demand. This, in reality, is mostly influenced by the private demand.

The unrealised social demand is the reflection of various socio-cultural resistances hindering the demand-flow. The causes of non-participation to school are ingrained in these resistances. The causes may be numerous. But they are different for different
groups - viz., boys, girls, occupational groups and so on. The causes are intended to be expressed by the opinion of the community members.

(iii) **TREATMENT OF CHANGING GROWTH TRENDS OF ENROLMENT**

The changing growth-trends of enrolment characterise the differences in the number of actual total enrolment of school population over a period of time. The period of time may be represented by two successive academic sessions or by two academic years. It also indicates the differences in the number of population belonging to different age-groups, sex groups, caste groups, occupational groups etc., of the community, computed over two successive intervals of time or years. These differences may result in either positive or negative changes in growth trends. The differences will be computed in numerical terms.

**TREATMENT OF SUPPLY FACILITIES**

In a democratic country, supply of elementary education is not governed by profit motive. National welfare is the basic consideration that determines supply of elementary education. Supply of education has, therefore, been treated from two aspects.

(A) Supply of schooling facilities or academic institutions, in quantitative aspects;

(B) Quality of educational facilities in terms of their utility to the community.
1. The determinants of supply of (A), that is, schooling facilities, are the number of schools and their optimum intake capacity which characterise the number of teachers, material resources and students' accommodation in schools, in terms of number of class units.

(a) In a backward region, actual supply of education is much lower than the potential total demand for the prevalence of unrealised demand. Schooling facilities have, therefore, been judged in the context of unrealised limited resources. This unrealised resources result in wastage.

(b) Secondly, schooling facilities have also been judged in the context of unrealised human resources that are being wasted owing to their non-participation to formal schools. A part of teaching services rendered by teachers, and material resources and accommodation available in the school remain unutilized or underutilized.

These unrealized limited resources are expressed in numerical terms which can be converted into percentages so as to determine the rates of wastage.

(c) Finally, the unrealized human resources are also to be examined in view of the universal elementary education, in the context of limited supply of formal and non-formal schooling facilities. The unrealized human resources of the community will be computed by the differences between the potential total need
or demand and the actual intake capacity of the non-formal schools in the community.

The numerical differences will be converted into percentages so as to express the rates of wastage.

2. The determinants of supply of (E), that is, educational opportunity or the quality of educational facilities in terms of their utility to the community, characterize the distance of the school from the houses of pupils, amount of school fees, supply of text books, learning materials including pen, pencil, paper, school uniform, tiffin etc., and working hours of the school. All these educational facilities will be calculated and expressed in descriptive and quantitative terms.

Mode of Analysis:

I. Incidence of Educational Dynamism and Estimation of the Rates of Dynamism and Wastage in the School and the Community

The rates of educational dynamism and the corresponding rates of educational wastage at the elementary stage of education (from classes I to VIII) are contrived to be estimated for boys and girls of S.T., S.C., M.R., and A.O.H. population (Age-range 5+ to 14+), under consideration for the years, 1974 and 1975. The growth rates of population and the growth rates of education in the community are also contrived to be estimated for this age-group. These will also be separately studied for primary stage
(age-range 5+ to 10+), and upper-elementary stage (age-range 11+ to 14+). The differences between the rates of educational dynamism of 1974 and 1975 characterise the growth rate, and this is designed to be subjected to statistical inferences for each stage of elementary education. As the growth rates are susceptible to be expressed in percentages, the changes in the rates of educational dynamism and population growth, shown by the differences between the rates of 1974 and 1975, have been decided to be interpreted by the significance of the difference between two percents. The true difference between the percentages will be treated significant at both the .05 and .01 levels of confidence. The demand-flow and the corresponding unrealized demand or wastage are susceptible to be examined in the context of both the out-group and in-group relationship.

The rates of educational dynamism estimated from the community and school situation, will be compared so as to ascertain the nature of consistencies between these two results.

2. Schooling Facilities in the Community and Educational Opportunities in the Existing Schools.

(A) Schooling facilities in terms of optimum capacity of intake of pupils and corresponding wastage of resources in the primary and upper elementary levels are separately dealt with for 1974 and 1975. The growth of schooling facilities and resources of education during the period are designed to be estimated by the differences between the optimum capacity of intake of pupils for 1974 and 1975. The differences between the
rates of wastage of 1974 and 1975 represent the nature of change in the rates of wastage of teaching services and material resources. The results will be interpreted by the significance of the difference between the two percents which will be treated significant at .05 levels of confidence.

(B) Educational opportunities, in terms of their utility to the community, have been considered to be separately treated for primary and upper-elementary education for the years 1974 and 1975. The results are to be expressed either numerically or, descriptively, befitting the nature of each item that characterises educational opportunity.

(C) Schooling facilities in the non-formal and informal agencies have also been designed to be separately dealt with for age-groups (5 plus to 10 plus) and (11 plus to 14 plus). The results will be expressed descriptively for the years 1974, 1975 and 1976 so as to compare the growth trends of non-formal education during these years.

The analysis of demand and supply situation gives the picture of the changing growth trends of education at the primary and upper-elementary stages. But this does not reflect the causes of non-participation consequent upon regional cultural forces and dynamic factors of social stratification. The causes of non-participation are, therefore, separately dealt with.
3. **Analysis of Causes of Non-Participation to School**

(i) The causes of non-participation to school for boys and girls in the age-group (5 plus to 14 plus) are to be explored from three sources - (A) school teachers of the locality who are directly concerned with elementary education, (B) social workers who have face to face relationship with guardians of the community and (C) the guardians who do not send all their wards or a few of their wards (in the age-group 5 plus to 14 plus) to elementary school. Causes are designed to be identified with the aid of a checklist containing both the close and open form of responses. The causes of non-participation will be probed for boys and girls separately. The number of frequencies for the responses of each variable will be converted into percentile scores in order to determine the rank position of each variable towards identification of more-formidable and less-formidable causes. More-formidable causes are the common expressions of teachers, social workers and guardians. When a variable scores high percentage of frequencies by these three groups, the particular variable represents more-formidable cause. When the percentile score is 50 per cent and above, (the entire right half of the normal curve), it will be treated as a high score; when it is 33 percent to 49.99 percent, it will be treated less formidable. A variable may represent formidable cause of non-participation for boys and girls both when the scores are high for both the sexes. Similarly, a variable may represent a less-formidable cause for boys and girls both when scores represent 33% to 49.99% of frequency scores. 1975 is the year of investigation for the causes of non-participation.
(ii) Finally, the relationship between the occupational background of guardians and demand for education, and also the literacy levels of guardians and demand for education will be separately analysed for boys and girls of each status-group in order to examine the influence of the occupational and educational background of guardians on educational dynamism. The percentage of school going children (age-range 5+ to 14+) of the agro-occupational and non-agro-occupational groups, and also of the different educational backgrounds of guardians will be separately estimated for S.T., S.C., M.R., and A.C.H. population. The rates of educational dynamism and the corresponding rates of educational wastage will be determined for the years, 1974 and 1975 for each status group. For different educational backgrounds, these rates, will be determined only for 1974.

**HYPOTHESES:**

It has been mentioned in the preceding discussions that the investigator intends to investigate educational dynamism in the social perspective of Purulia, a typical backward district in West Bengal. With the above ends in view, the researcher frames the following hypotheses:

1. (a) The student-flow from the community to the school in the elementary stage of education, as a whole (age-group 5 plus to 14 plus), in the region under the study, is either remaining constant in the form of a plateau or declining; and the corresponding rate of educational wastage is not decreasing in all the ascribed strata both in their 'in-group' and 'out-group' relations.
(b) The changing rates of demand-flow are greater for boys than that for girls in all the ascribed status groups in the age-range 5 plus to 14 plus.

(c) The rates of demand-flow vary in different ascribed status groups; and the declining rate of demand-flow is greater for S.T. population than that for all other ascribed status groups in the age-range 5 plus to 14 plus.

2. The rates of educational dynamism are insignificantly increasing at the primary school going age-group (5 to 10) and significantly decreasing at the upper-elementary school going age-group (11 plus to 14 plus) for all the ascribed status groups.

3. (a) The growth rate of population is greater than the growth rate of education in the community for the age-group 5 plus to 14 plus.

(b) The growth rate of population and the growth rate of education are greater in the lower-elementary level in the age-group 5 plus to 10 plus than that are in the upper-elementary level in the age-group 11 plus to 14 plus.
4. (a) The volume of education is decreasing or remaining constant at the entire elementary school situation (school-grades I to VIII), in all the ascribed status groups of the community.

(b) The rates of educational dynamism are insignificantly increasing at the primary school and significantly declining at the upper-elementary school situations for boys and girls both.

5. (a) The supply of schooling facilities, in the primary level are increasing in terms of growth of teaching services, but decreasing in terms of growth of material resources.

(b) The supply of schooling facilities, in the upper-elementary level are increasing in terms of growth of teaching services and also in terms of growth of material resources.

(c) The supply situation of elementary education is increasing every year; but there is no proportionate increase in the demand situation in any social stratum.

(d) Educational opportunities, in both the primary and upper-elementary levels, are not supplied in accordance with the potential requirements of the community.
(e) Educational facilities in the formal and informal agencies are not supplied in accordance with the requirements of the population in the age-groups (5 plus to 10 plus) and (11 plus to 14 plus).

6. Social habits, ignorance and occupation of guardians are the formidable causes of non-participation to school.

7. (a) The slower rates of educational dynamism are more affected by the quasi-ascribed stratification like agricultural occupation; that is, educational dynamism is lower in agricultural occupational groups than that in non-agricultural occupational groups.

(b) The slower rates in educational dynamism are the consequences of lower literacy level of the guardians in all the real strata. That is, the lower the educational level of the guardian, the lower the rate of student-flow or school-participation.