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Elementary Education in
Isolated Areas - A Case of
Arunachal Pradesh

K Sujatha



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ACKNOWLEDGEMENTS

This paper is part of a monograph on Educational Development in Isolated Areas - A Case Study of Arunachal Pradesh, presented in UNESCO sponsored national workshop on 'Universal Primary Education for Disadvantaged Areas' (New Delhi, National Institute of Educational Planning and Administration, August 17-26, 1988). I have benefitted from the comments of the anonymous referee of NIEPA Occasional Paper, which helped me in improving the quality of the paper.

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ELEMENTARY EDUCATION IN ISOLATED AREAS
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ABSTRACT

The present paper examines the process of development of education particularly elementary education in an isolated predominantly tribal area - Arunachal Pradesh one of the states in north eastern region of the country. The paper takes into account the unique geographical, social and cultural aspects. The paper deals with growth of educational facilities, enrolment, teacher pupil ratio and dropout pattern in the state.

In the first part the author highlights the geographical and socio-cultural life of state Arunachal Pradesh, the metamorphical changes in the administration of the territory and the governmental efforts for the development of education. The second part presents the growth of educational facilities, accessibility and inter district disparities. This section also discuss the teacher pupil ratio. In part III the enrolment and dropout pattern for over a period of time has been examined. The fourth section attempts to analyse resource allocation and expenditure pattern on education particularly at primary stage. The final part of the paper discusses various problems that are hindering educational progress in isolated far flung area and suggests alternative strategies.

ELEMENTARY EDUCATION IN ISOLATED AREAS

A Case of Arunachal Pradesh

K. Sujatha

INTRODUCTION

The architects of Indian constitution had realised the importance of education as an indicator and tool for India's development. Towards this end the governments both at the centre and state, have been making persistent efforts to fulfil the constitutional commitment to provide free and compulsory elementary education for all children till they attain the age of 14 years. The universalisation of elementary education constitutes three components viz universal provision of facilities (accessibility) in close proximity, universal enrolment of potential age group population and universal retention. The goal of universal elementary education was targetted to be reached by 1960 but it is unfortunate that the target date has been revised several times. The National Policy on Education (1986) set 1990 as target year to achieve universal primary education and 1995 for universal elementary education. The extent of universalisation of primary education is at different levels in different states. While a few states and union territories have already achieved universal provision of facilities and enrolment, some other states have optimistic plans and targets to achieve in near future. But there are also still some states not only lagging far behind but also seem that they will take considerably long time even for universal provision of facilities and to cover school going age population. One such state is Arunachal Pradesh although it has been formed only recently.

In view of the geographical location, demographic features and tribal concentration in the state, for realistic educational planning

and to have suitable strategies of operation to achieve universalisation of elementary education, it is important to understand the extent of educational progress and the constraints that are impeding the progress of education, both at macro and micro levels in the state.

The state of Arunachal Pradesh occupies a strategic position being situated at international borders ; it also, in some respects; unique geographical location with high altitude, hill ranges and difficult terrains in an isolated far flung area in north eastern region of the country. More than 80 per cent of its population belong to different tribal groups. Therefore it would be interesting to examine the educational development with special reference to primary education in this state which has most of the attributes of isolated areas. The present paper makes an attempt to examine the educational policies adopted by the state, the growth and distribution pattern of educational facilities, including provision of teachers, enrolment of 6-11 years age population and dropout rate with reference to primary stage. It also highlights the inter district disparities with regard to the availability of facilities. Additionally, the resource allocation and expenditure pattern on education particularly at primary sector is also examined. Lastly, some important and unique educational problems in the state are discussed alongwith some alternative strategies.

The first part of the paper gives brief introduction of the state Arunachal Pradesh followed by an account of the growth and distribution of educational facilities and teacher pupil ratio. The third section presents the extent of enrolment and future targets and dropout rate at primary level in the state. The final section

underlines some of the unique educational problems in the state Arunachal Pradesh and offers certain alternative strategies.

1. BACKGROUND OF THE STATE

Geographically, Arunachal Pradesh lies in the outer Himalayas and Patkoi ranges. It is bounded by Tibet on the north, Assam on the south, Burma on the east and Bhutan on the west. The entire territory is characterised by small hill ridges and deep valleys.

Arunachal Pradesh has undergone metamorphical changes in administration. Before the advent of British rule in India, this territory and its people were hardly known to outsiders. Prior to 1947, different regions of present Arunachal Pradesh state were included in the districts of Assam. In 1947, these areas were made into separate 'tracts' called 'North East-Frontier 'Tracts' by Government of India. Later on in 1954, some portions of the 'Frontier Tracts' were merged in Assam and the remaining portion was called North East Frontier Agency (NEFA). This agency became a Union Territory in 1972 and was renamed as Arunachal Pradesh. In 1987, this territory was accorded the status of state hood.

The state has a population of 6,32 lakhs (1981 census) spread over an area of 83,743 sq. km with a density of 7.5 persons per sq.km. People live in scattered habitations on hill slopes. Habitations are small in size with few households. Till today the transport and communication facilities are scanty. There are nine districts which are divided into 11 educational districts. The state has the lowest literacy rate in the country (20.79 per cent, 1981 census)

Arunachal Pradesh with its people of diverse races, habit and culture presents a picture of great variety. The geographical

location of the territory in a far-flung region makes its people exclusive and they have developed economic, social, cultural and political characteristics of their own. The tribes are tradition minded and apathetic to accepting changes in behavioural norms (Mohanta, 1984) as is the case with all other close and exclusive groups. Inter tribal feuds and slavery was part of cultural life.

Prof. Haimendorf (1980) who visited some of the Arunachal Pradesh tribes after 30 years of his earlier stay noted various changes and developments that took place after independence as a result of governmental efforts. Some of the tribes like Apathanis, though numerically small in size exploited various benefits and became more advanced and articulate. The religious institutions i.e. Buddhist monasteries, Christian churches and Hindu temples hardly took interest in educating the tribes which is evident from the fact that at the time of independence the literacy rate among the inhabitants in then called NEPA was zero. However, at individual level the Buddhist monasteries are very powerful in influencing the life and culture of people. Unlike other parts of north-eastern region Arunachal Pradesh did not come in contact with Christian missionaries and other voluntary organisations. Due to inaccessibility, mountains intercepted by rivers not only the people of Arunachal remained cut off from outside world but also inter settlement interaction was remote.

Institution of youth dormitory with education and training function is a unique characteristic common to many tribal societies in India and tribes of Arunachal Pradesh are no exception. Like many of the traditional tribal institutions and values, the dormitories also seem to be in a state of decay among some of the tribes in the state.

The uneven surface of the land being a problem the economic life of the tribes is mostly 'Jhum'-- shifting cultivation - which require labour contribution from all the members of the family. In recent past the government has introduced horticulture as a part of development programmes. Weaving and handicraft work of bamboo is common activity.

2.1 Development of Educational Facilities:

Prior to India's Independence , the territory had no education policy. In 1947, the literacy among the natives of the territory was found to be zero. Later two primary schools were opened with an enrolment of 30 children. The territory followed the national policy on education issued by the Central Government. There was slow growth of primary schools from 1947 till 1960 and finding many schools running with nonviable number of children during 1957-58, a scheme of inter-Village schools was initiated as a new experiment. Ineffective primary schools were grouped together to form inter village residential schools. Hostels were attached to them and the students were provided with free education and ration facilities. Later on basing on Developmental philosophy for NEPA, apart from other developmental programmes, educational facilities in the form of primary schools were provided besides inter - village residential schools. After the territory became a Union Territory in 1972, alongwith changes in administrative structure, renewed emphasis has laid on educational development both quantitatively and qualitatively. As a result, opening up of primary schools started in a full swing in order to provide educational facilities in inaccessible difficult terrains.

From 1971-72 the Directorate of Public Instruction switched over to English as the medium of instruction at all stages of school education. The schools in the state were affiliated to the Central Board of Secondary Education and followed the course of studies prescribed by the Board. The text books prepared by NCERT were followed for all the classes.

The growth of schooling facilities in the territory from 1973 onwards is presented in table 1. It shows that during 1973-74, there were 547 primary schools with an enrolment of 34,125 children and 45 middle schools with 2,874 children.

Within a decade since 1973, the number of primary schools increased to 973 and 135 primary schools were upgraded to middle stage. However, during 1984-85 the number of primary schools decreased (945) while the middle and secondary schools increased slightly. One of the reasons for the decrease in number could be due to upgrading of primary to middle and middle to secondary stages. But in 1985-86, there was considerable expansion of facilities at primary stage in the state (1268). According to latest data available (1987) there were 1,272 primary and 271 middle schools in the state.

2.2 INTER-DISTRICT VARIATION

There is a wide variation among different districts of the state in respect of distribution pattern of primary schools, the average number of villages and size of population served by a primary school (Table No.2). The highest number of primary schools is found in Tirap district which has the largest population in the state, where on an average one school serves 557 persons covering more than one village. In this district, 61.4 percent of the villages have primary schools. In the district Lower Subansiri which has the highest number of

villages (770) in the state, one primary school on an average serves 4 villages and covers 599 persons which forms the highest average population size and villages among all the districts. In fact in this district only 24.4 percent of villages have primary schools.

In 5 districts in the state, on an average each school serves a population of 421 to 486. The district of East Siang with lowest number of villages (143) in the state has 145 primary schools and on an average one school in this district serves 486 persons. In four out of nine districts, the percentage of villages having schooling facility varies between 24.4 to 28.7 percent. There is only one district where slightly more than fifty percent of villages have schools. In the state as a whole, only 38.9 percent of villages have primary schools and the average population size covered by a school is 498. Thus the first step of universalisation of primary education i.e. universal provision of facilities itself is far from adequate. The picture shows that schools are scattered and the catchment area of the school is very wide having many habitations and villages.

2.3 FACILITIES AVAILABLE IN PRIMARY SCHOOLS

Meare opening of a school does not guarantee its effective functioning as it depends on other inputs provided to the school like quality of teachers, physical facilities, teaching aids, etc.

TEACHERS

Teacher is not only the most critical factor in the educational process, but is also the most important input in the educational system. This is more so in the context of tribal culture and isolated areas. Due to lack of educational facilities in the territory in pre-independent period, there were no educated people in the state to

work as teachers when schools were opened after 1947. At the same time trained people from outside were not always ready to work in such remote, inaccessible and unkind climatic conditions like in Arunachal Pradesh. Therefore, the state had a policy of appointing both trained and untrained persons from outside and providing inservice training in course of time through Buniyad Sikhsha Centre. During 1970-71 there were only 34.42 percent of trained teachers at primary stage whereas at the middle level, trained teachers constituted 53.82 percent (Table 3). However, within the next decade, the number of trained teachers, increased (1970-71 to 1980-81) to 44.8 percent at primary stage. But at the middle stage the proportion of trained teachers had gone down from 53.82 to 26.21 percent. As already mentioned, during this period, the number of middle schools has increased faster than primary schools. By 1987-88, the trained teachers at elementary level (Primary and Middle) constitute only 39 percent.

2.4 TEACHER-PUPIL RATIO

One of the important inputs for the quality of education at elementary stage is the low teacher pupil ratio. Table 5 shows the teacher pupil ratio at primary and middle levels at different points of time. In Arunachal Pradesh during 1977-78, the teacher pupil ratio was 1:24 and 1:10 at the primary and middle levels respectively. In a period of five years from 1978 to 1983 the proportion of students to one teacher in primary stage has almost doubled from 1:24 to 1:47. At middle stage the proportion has increased to 1:16. However from 1984 onwards the proportion has slowly reduced to 1:32 at primary stage but at the middle level it has further increased to 1:23. The increase in teacher strength could not keep pace with the growth of enrolment and also the decision that not to appoint many teachers from outside the

state might have contributed for increased teacher pupil ratio due to lack of manpower in the state. However the teacher pupil ratio in Arunachal is much lower than national average ratio.

Table No. 4 gives the picture of inter district variation in teacher pupil ratio at primary stage in the state. The highest average teacher pupil ratio 1:61 is found in Upper-subansiri district. In three districts the teacher pupil ratio is below 1:30 (East Siang, West Siang & Tawang) whereas the lowest ratio of 1:24 is found in West Kameng. Thus there is wide variation among the districts in teacher pupil ratio.

The variation in teacher pupil ratio among different districts is not necessarily due to differential enrolment but it depends on the number of teachers in a particular district. For instance, Upper Subansiri district where the teacher pupil ratio is as high as 1:61 has only 5796 children enrolled in primary stage. Whereas in East Siang district there are 8443 children enrolled but the teacher pupil ratio is only 1:29.

2.5 INCENTIVES

At primary stage (Class I-V) out of total students 50.70 percent are beneficiaries of mid-space, 46.05 percent get free Uniform and 48.47 percent are supplied free text books. (Fifth All India Education Survey 1986) But the norms of education department shows free supply text books and uniforms to all students.

3.1 ENROLMENT AND DROP OUT PATTERN

The enrolment of all 6-11 years age group children is an important component of Universalisation of Primary Education. Thus, it is against the background of existing facilities and incentives

that the extent of enrolment of children of school going age needs to be examined.

Table No. 6 shows that during 1977-78 the gross enrolment ratio of 6-11 years age group population was 70.5 percent, and by 1984, the same has gone upto 96.3 per cent. Between 1978 and 1984 the enrolment ratio among girls has increased. The enrolment ratio among boys and girls was 97.6 and 43.1 percent respectively. By the year 1983-84 the gross enrolment ratio of 6-11 years age children has gone up to 96.3 percent. The enrolment ratio of girls (72.8 percent) has more than doubled between 1978 and 1984. Similarly the enrolment ratio of boys has gone up to 119.3 percent. Though there was slight increase in the enrolment ratio among boys and girls during 1984-85 (121.8 and 77 respectively), in 1986-87 the enrolment ratio among both boys and girls has decreased. Thus in 1986-87 the total enrolment ratio in the state was 84.87 percent. Among the boys the ratio was 106.76, where as among the girls it has gone down to 62.51 percent.

Unlike in primary stage, there is gradual increase in enrolment ratio in the middle stage from 1977-78 onwards (Table No.6). During 1977-78, the net enrolment ratio was found to be 17.3 percent. The enrolment ratio among boys and girls was 25.9 and 8.9 percent respectively. During 1983-84, the net enrolment ratio among boys was 49.8 where as among girls it was 23.1. The net enrolment ratio in the year 1983-84 was 36.4 compared to the 1983-84, there was slight increase in the net enrolment ratios among boys and girls as 50.6 and 26.2 respectively. During the year 1986-87 the net enrolment ratio in middle stage has gone up to 41.92 percent.

The future planned targets for universalisation in the state of Arunachal Pradesh can be seen from table No.7. During 1986-87 the

enrolment figures for Classes I-V was 91,482. The state proposes to raise the enrolment targets of 6-11 years children to 104000 by 1989-90, and further to 122,000 during Eighth plan. According to the state's future perspective of enrolment targets, the gross enrolment ratio of 6-11 years age group will be 99.14 percent by 1989-90 which will further increase to 105.05 percent by 1994-95. Here one important factor is that the gross enrolment ratio comprises of both overage and under age population which is usually estimated about 22 percent of the total enrolment. Thus the net enrolment of 6-11 years age group by 1994-95 will be 95.05 percent. If we consider the speed with which the state is expected to progress from 1990 to 1995 it would take another 15 years for achieving universal primary education which again depends on current population growth.

Quite surprisingly while the National Education Policy (1986) envisages universalisation of primary education by 1990, the state proposes to postpone it to 1995 to achieve 85 percent and then another one decade for 100 percent. Though the state is realistic in its future perspective, it is far away from the national objective.

3.2 DROPOUT PATTERN

One of the important components of universalisation of primary education is universal retention and completion. Enrolment ensures quantitative coverage whereas efficiency of the system can be measured from retention rate and successful completion of given stage of education. Opening up of schools and providing facilities are one of the dimensions of providing opportunities. But actually, how many of those enrolled are able to retain within the system is only indicates how by effectively are these facilities availed.

The dropout rate has been calculated for a cohort of students who entered in Class I and how many had dropped out before reaching class V (Table No.8). From the cohort of students who entered Class I during 1964-65 and studied till 1968-69, the dropout rate was found 23 percent. The dropout rate has sharply increased to 84 percent for the cohort of 1965-70 which is in fact the all time highest dropout rate in the state. Basing on Cohort the dropout rate varies between 69 percent to 82 percent.

Classwise dropout pattern for 1974-75, 1977-78 and 1981-82 is given in table No. 9. The highest dropout rate is found in Class I in all the three years which varies between 37.83 percent to 42.83 percent. The lowest dropout rate is found in Class V which is 9.03 percent. The class II and IV have the same dropout rate and comparatively higher than in Class III.

According to Fifth All India Education Survey (1986) the number of students in class V constitutes 30 percent to enrolment in Class I, though this is crude method of calculating the dropout rate but certainly the high variation shows the extent of dropouts.

From the above discussion it is clearly evident that Arunachal Pradesh lags much behind in achieving universalisation of elementary education. In this context, it would be useful to examine how much importance has been accorded to elementary education in terms of resource allocation. Equally important is the extent of expenditure on primary education vis-a-vis total expenditure on education.

4.1 RESOURCES AND EXPENDITURE ON EDUCATION

The total development plan of the state Arunachal Pradesh is considered as tribal sub-plan. The resource allocation pattern shows continuous increase in all successive Five Year plans (Table No.10)

During the First Five Year Plan the allocation was only 3.00 crores for the total development of the then NEFA. There was three fold increase in the budget allocation between third and fourth five year plans. We can see the quantum increase in the resource allocation ever since the territory has been formed as Union Territory and sub-plan approach for tribal development has been adopted (from Fifth Five Year Plan). During Seventh Five Year Plan the allocation has gone up to 400 crores (Table No.10).

Out of the total budget of the state, the percentage of expenditure on education varies between 10.9 percent to 11 percent during 1983-84 to 1985-86. Among all the states in the country Arunachal Pradesh has the lowest percentage of expenditure on education to total expenditure (Table No.11).

4.2 EXPENDITURE ON ELEMENTARY EDUCATION

Out of the total budgeted expenditure on education the share of elementary education was 52.3 percent (1981-82). From 1982 onwards the percentage of expenditure on elementary education has come down considerably to 48.3 percent with a slight increase in 1983 and to 51.42 percent in 1983-84 (Table No.12).

The expenditure on primary education varies between 45.7 percent to 48.6 percent between 1983-84 to 1985-86 (Table No.13). Even as such, Arunachal Pradesh is having a slightly higher expenditure on primary education as compared to all India average expenditure (47.8 percent) on primary education in 1985-86.

Table No. 14 shows expenditure incurred on primary and middle educational institutions from 1984-85 to 1985-86. It is evident that the net expenditure incurred on both these levels, has declined from

62.90 percent (1984-85) to 60.01 percent (1985-86). The net expenditure incurred on primary schools in the state has reduced from 37.13 percent (1984-85) to 33.16 percent (1985-86) whereas the expenditure incurred on middle schools has gone up from 25.78 percent (1984-85) to 26.85 percent (1985-86).

5. EDUCATIONAL PROBLEMS AND ALTERNATIVE STRATEGIES

No doubt Arunachal Pradesh has made a significant progress in education as compared to 1947. However taking into account the size of population and attention paid for all these four decades, the educational progress is very slow with low enrolment, high dropout rate and wastage. Its unique geographical location, difficult terrains, lack of transport and communication facilities in the region have hindered the progress in all fronts particularly education.

The extent of facilities and distribution pattern shows that schools are scattered and their catchment area is spread over in many villages and numerous habitations. This may be because the villages are thinly populated with small habitations and are scattered on hill slopes. Provision of a school in each habitation or the village under the present routine norms are ill suited to the topographical situation of the state. In a geographical situation like Arunachal Pradesh, the distance between the villages and the habitations should not be counted on the basis of physical distance alone as the hills and other ecological barriers account much more than the distance measured in terms of miles. The growth and distribution pattern of educational facilities in the state shows that there is lack of accessibility to education for majority of population and disparities between districts is quite conspicuous. Thus the first step of universalisation of primary education i.e. universal provision of

facilities itself is far from adequate. One has to workout an alternative route to provide educational opportunities for the disadvantaged population in interior inaccessible and high altitude areas through distance learning method. Shifting cultivation is the major occupation and the agricultural plots are usually on hill slopes and away from the permanent habitations. Therefore the dwellings are shifted to fields during cropping season in order to keep watch on crops from wild animals. Due to this life pattern, neither the parents nor children have interest in school. How can a child walk through the forests and hill slopes to attend the school when the family shifts to fields? This is a peculiar problem in the context of shifting cultivation, perhaps found in many tribal areas in the country. One needs to think of alternative way of organising education in this type of situation. The routine norms for opening school and or teacher pupil ratio, may not be useful. Providing of feeding and residential facility if not for the whole year at least when the parents move to fields will help to retain children in the school. There are already small number of intervillage residential schools in vogue since long time but they are very insignificant in number. In many other states Ashram Schools have been planned for scattered tribal habitations where opening a normal primary school is not viable and they have proved to a large extent successful in many states (Sujatha, 1987). Therefore opening of Ashram Schools should be given serious thought in Arunachal Pradesh.

The parental poverty coupled with unkind climatic condition constrains the educability of children. Lack of suitably trained and qualified teachers to work in interior tribal areas is another

important problem. It is not that easy to get well qualified teachers from outside the state to work in interior, high altitude areas. As a result preference has been given to local youth by relaxing qualifications. This is a welcoming measure. The tribal youth have better and right understanding of the local culture and values and they do not feel alienated. But in this case the untrained and underqualified people could not cope up to teach the text books prescribed by NCEERT, consequently schools are not attractive to pupils and their holding power is very meagre. The government of Arunachal Pradesh has recently adopted a policy of appointing teachers from local youth by relaxing the required qualifications. This policy has led to inflating the number of untrained and underqualified teachers. In spite of the fact that there was considerable growth in number of teachers and schools, there was no improvement in training facilities except one teacher training centre with an intake capacity of 100 students for one year training programme. Even though the state has a scheme of sending teachers to other states like, Bihar, Uttar Pradesh for inservice training, it covers only a small segment compared to total teacher population. On the one hand the state had adopted CBSE syllabus on the other hand the teachers are not equipped in teaching methodology.

In many newly independent third world countries lack of trained personnel for teaching has been a major problem in education. These countries successfully tackled the problem by training the untrained teachers through distance education method. Similarly many developed and developing countries have adopted open learning method for inservice training. Media and other educational technology methods were also extensively used for training and retraining the teachers.

Considering the importance of training and quantum of untrained teachers in Arunachal Pradesh, a non conventional alternative route needs to be adopted. Making use of distance education open learning method for training will help to cover large numbers with scale of economies in a short period. Perhaps this method will be more cost effective. Since most of the teachers are untrained, they lack knowledge of teaching technology and appropriate instructional methods. Curriculum guides with teaching-learning guides may be provided apart from organising inservice teacher training through direct or distance education.

Another important problem is the medium of instruction. Unlike many other states where regional language is the medium of instruction in tribal areas, in Arunachal Pradesh, English was chosen as the medium of instruction. Right from Class I, English is the medium of Instruction but the children enter Class I with very little or no background of English. Similarly even most of the teachers had no education in English medium. They are neither competent nor capable to teach various concepts of social studies, environmental studies etc. which affects the quality of both teaching and learning. Once again this problem can be tackled through the use of appropriate educational technology.

Many of the studies on problems of tribal education pointed that the present content, curriculum and text books do not reflect the local culture, environment and life of tribal people. The text books which are addressed to majority have little or no relevance to isolated population in Arunachal Pradesh. Neither in social studies nor science the books did include the known local examples. Therefore there

is an urgent need to review the text books and to make them loco specific.

One of the common problems is the lack of adequate and timely supply of books. Though this problem is universal, it might be more acute due to transport and communication problem in Arunachal Pradesh. At present text books are supplied to students through book banks. In this case usually children do not have an opportunity of having new books as they are already in torn condition. Similarly though supply of free uniforms is the policy of state government, at primary stage only 46.05 percent were covered (Fifth All India Education Survey).

The educational supervision needs to be strengthened and should be intensive to ensure regular teacher attendance, teacher preparation, effective classroom interaction and optimum utilisation of resources. Due to inaccessibility and lack of transport facilities the regular supervision and inspection of schools is a difficult task for education officers who are of course small in number. In view of topographical situation the normal policy of number of schools to be inspected and visited by each officer needs to be viable and practical. In this context community has to be empowered for monitoring the regular functioning of school.

There is acute shortage of accommodation both for school building as well as for teachers residences. Due to difficult terrains and inaccessibility, transportation of construction materials to different places is a very difficult task. Also many times nobody comes forward to take contract of the construction work. Perhaps one of the alternatives lies in involving the community. Community members can be entrusted with the construction work but they can build like their own house style. Secondly among many tribes in Arunachal there is an

institution of youth dormitory. This institution provides spacious and strong building and remains unused during day time. If the village elders are approached and convinced they may agree to let the building to be used for school. But a degree of caution is needed. In villages where education has not become popular yet, the people may show resistance to the idea of sharing the dormitory.

The social history of Arunachal shows that instance of violence, inter and intra tribal feuds, kidnapping/slavery, murders and head hunting, etc are things of past now, but the temper remains. Now the tribesmen demand every thing as a matter of right and dependency culture is slowly creeping into tribal life. Similarly with the erosion of authority of adults, the roles of the old and the young men are being reversed. In a traditional society the knowledge and authority passes vertically from old to the young, now they are passing horizontally from the educated and informed young men to the uneducated uninformed old men. There is an apparent conflict between the traditional and emergent cultural values. Many traditional values having social, political and supernatural sanctions are being given a go-by now. For instance polyandry is an established social custom among the Gallongs and people do not see any thing wrong in this custom but an educated girl raises her voice against the custom. Educated youth may slowly move away from their different cultural activities which in turn affects the older generation to have correct perception of education. Therefore it is quite essential to have a cultural policy for education. Otherwise education will benefit only the articulate and more dominant tribes in and near the power centre. This, in fact , is already evident in Arunachal where some numerically

small but articulate tribes are fast developing and alienating themselves as elites.

While the government was successful in removing some of the social evils like slavery with the help and involvement of traditional village councils, very little has been done to explore these village traditional councils for educating the tribals. Though elementary education is compulsory it is far from sight to achieve the same in near future. Traditional councils have total social control. If these councils are once convinced and entrusted with the responsibilities, there is every possibility of achieving universalisation of elementary education in accelerated pace.

The religious tradition of sending one son to monastery by Buddhist tribes hinders enrolling even other child. There is a need to work with religious heads to find religious places to play an educating role.

Considering the importance of mother tongue as medium of instruction particularly in case of first generation learners, at least for the first two years, tribal dialects should be made as medium of instruction. Though there may be problem to get teachers and primers to teach tribal dialects, one has to search for non conventional solutions. The fast developing technology particularly big modular media can be used to teach children in their dialects. For example the state Andhra Pradesh has introduced video lessons for class I & II basing on school curriculum which can simultaneously take care of teacher's quality, tribal dialects, local relevance etc.

While discussing the educational problems of a particular state or group, it would be interesting to examine how some other states inspite of similar geographical and demographic pattern are able to

progress in educational development. In case of Arunachal, one may be curious to know how the other north-eastern tribal states like Mizoram and Nagaland have achieved high literacy rate and universalisation of elementary education. In this context, it is important to understand the internal dynamics of a state rather than to see external features like geographical or tribal concentration. The state of Mizoram has different historical development in its social, educational and political contexts. Coming under the British rule Mizoram coincided with the arrival of the Christian missionaries, apart from propagating their faith, these Christian missionaries spread education among tribes. The missionary zeal and their voluntary efforts led them to reach out to people in interior and inaccessible areas. The credit goes to Christian missionaries and the church for creating urge for education and to create motivation and awareness among Mizoram tribes even before independence. In case of Arunachal to some extent tribals were influenced by Buddhism but very rarely came in contact with christian missionaries. The Buddhist Monastries have influence on religious life and seldom took interest in formal education. Another significant factor which led to educational progress in Mizoram is development of common lingua-franca of Mizoram, the dialect of the Lushai sub-tribe which is written in Roman script introduced by the missionaries. Tribals in Arunachal Pradesh do not have a common language as they speak different dialects many without script. As a result, English has been chosen as a medium of instruction even at primary stage. Another noteworthy feature is the mutual interaction between the school and the community. The tradition of Parent Teacher Association helped to

facilitate the academic and non-academic activities of the school. Mizos have a tradition of 'huaflang' that is work done free of labour charge in constructing school building etc. The traditional village councils were entrusted with responsibility of motivating people for formal education. Apart from missionary efforts to enhance literacy and impart quality education at the primary level, the awareness of the community about the economic benefits derived from education is largely responsible for the sudden rise in the demand for education (Jayshree, 1988).

Among the internal factors is the relatively homogenous socio-economic and political character of the state, brought about by Christianity, the unified language policy and twenty years of insurgency movement, all of which have given the Mizos an awareness of their own identity despite the ethnic diversity of the numerous tribes (Jayshree, 1988). Being small in size, the administrative mechanism has advantage for constant monitoring and coordinating the educational programmes and institutions which are mostly run by missionaries.

The expansion of centrally sponsored schemes for the development of north-eastern region from the sixties onwards helped Mizos to take advantage of such schemes and started small scale business with other parts of the region. English being the common language spoken in the region, education was directly linked up with Mizoram's need to establish a relationship with it's neighbours.

There are some external factors that contributed for pace of progress of universalisation of elementary education in Mizoram. Mizoram had an opportunity of having some innovative projects like CAPE and other UNICEF aided projects in the sphere of primary education. The effective role played by state's Department of

Education and State Council of Educational Research and Training through various innovations towards universalisation of elementary education is very significant.

However like any other hill state, Mizoram also faces problems such as lack of transport and communication, shifting cultivation, scattered habitations, delay in supplying teaching-learning materials, untrained teacher etc. Despite all these common problems, education is progressing in the state. Basing on the experiences of Mizoram one can draw few lessons. Despite ecological constraints, education has percolated due to voluntary efforts and missionary zeal. Community involvement helped to a large extent in bringing awareness and raising the motivation. Due to interaction with neighbouring states consciousness of need for English education developed among people. Above all having a common lingua franca with Roman script played a crucial role to bind together different tribal groups with different dialects and culture.

The experience of Arunachal Pradesh has proved that isolated areas and groups can be brought into mainstream without disturbing their culture and life and development in various spheres has proved successful. Therefore universalisation elementary education may not be very difficult task if attention is paid to improve the quality of teachers and teaching process and take appropriate steps to meet the educational problems in the state. In view of topographical situation non conventional approaches need to be adopted. Use of media and appropriate technological aids will certainly have ample potential to achieve universal elementary education. Encouraging and supporting voluntary organisations to take up educational programmes will

certainly help to accelerate the progress of education. Community involvement through village councils is another measure which needs to be given emphasis.

TABLE NO. 1

GROWTH OF EDUCATIONAL FACILITIES
IN ARUNACHAL PRADESH

YEAR	NO. OF PRIMARY SCHOOLS	NO. OF MIDDLE SCHOOLS
1947*	2.00	0.00
1972-73	547.00	45.00
1983-84	973.00	134.00
1984-85	945.00	140.00
1985-86	1268.00	154.00
1986-87	1272.00	271.00

SOURCE : Selected Educational Statistics,
Ministry of Education.

* SOURCE : Educational Administration in
Arunachal Pradesh a Survey Report, NIEPA

TABLE NO: 2

DISTRICT WISE NUMBER OF VILLAGES, PRIMARY SCHOOLS AND
POPULATION IN ARUNACHAL PRADESH

S. No.	Name of the District	No. of Villages	No. of Primary Schools	Average No. of villages served by one school	Population	Size of population service by one school
1	Lohit	456	131	3.4	69498	531
2	Diban Valley	232	61	3.8	30978	508
3	East Siang	143	145	1.01	70451	486
4	West Siang	364	176	2.1	74164	421
5	West Kameng Tawang	280	150	1.8	63302	422
6	Lower Subansiri	770	188	4.0	112650	599
7	Tirap	376	231	1.62	128650	557
8	Upper Subansiri	361	92	3.9	39410	428
9	East Kameng	275	91	3.0	42736	470
	ARUNACHAL- PRADESH	3257	1268	2.5	631839	498

TABLE NO:3

EXTENT OF TRAINED TEACHER IN ARUNACHAL PRADESH

PERCENTAGE OF TRAINED TEACHERS			
YEAR	PRIMARY SCHOOLS	PRIMARY AND MIDDLE	MIDDLE SCHOOLS
1970-71	34.42		53.82
1980-81	44.85		26.21
1987-88		39.00	

SOURCE: Selected Educational Statistics.

TABLE :4

YEAR WISE TEACHER PUPIL RATIO

YEAR	TEACHER PUPIL RATIO	
	PRIMARY SCHOOLS	MIDDLE SCHOOLS
1977-78	1:24	1:10
1982-83	1:45	1:15
1983-84	1:47	1:16
1984-85	1:32	1:21
1985-86	1:32	1:23

Source : Directorate of Public Instructions,
Arunachal Pradesh

TABLE NO:5

DISTRICT WISE TEACHERS PUPIL RATIO IN ARUNACHAL PRADESH

S. No.	District	No.of children enrolled in primary schools	No.of Teachers	Teacher pupil ratio
1	Lohit	7239	200	36.19
2	Dibang Valley	2928	93	31.48
3	East Siang	8443	283	29.83
4	West Siang	10957	311	35.23
5	West Kameng	3546	144	24.63
	Tawang	1766	64	27.59
6	Lower Subansiri	7942	244	32.55
7	Tirap	11107	263	42.23
8	Upper Subansiri	5796	95	61.01
9	East Kameng	4104	79	51.95
	ARUNACHAL PRADESH	63828	7761	35.94

TABLE NO: 6

ENROLMENT RATIO OF 6-11 & 11-14 YEARS AGE GROUP CHILDREN
IN ARUNACHAL PRADESH

YEAR	PRIMARY LEVEL			MIDDLE LEVEL		
	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL
1977-78	97.6	43.1	70.5	25.9	8.9	17.3
1980-81						
1981-82	114.8	62.3	88.9	39.3	16.9	28.0
1982-83	120.3	66.9	93.9	43.9	21.8	32.8
1983-84	119.3	72.8	96.3	49.8	23.1	36.4
1984-85	121.8	76.7	99.5	50.6	26.2	38.4
1985-86						
1986-87	106.7	62.5	84.8			41.9
1989-90			99.1			
1994-95**			105.05			

Source : * Selected Educational Statistics, Ministry of Education, Govt. of India.

** Report of Proposed/Contemplated Eighth Plan Target. Directorate of Public Instruction, Government of Arunachal Pradesh 1988.

TABLE NO:7

PROPOSED/CONTEMPLATED ENROLMENT TRENDS IN
ARUNACHAL PRADESH

YEAR	ENROLMENT IN SCHOOLS (I-V)	LEARNERS IN NPE SYSTEM	GROSS ENROLMENT RATIO (in percentages)	
			6-11 Years	6-14 Years
1986-87	91,482	2160	96.37	77.36
1989-90 (7th plan target)	104,000	4000	99.14	83.04
1994-95 (proposed/ Contemplated 8th plan targets)	122,000	9000	105.05	90.02

SOURCE: Report of Proposed /contemplated Eighth plan Target, Directorate of Public Instruction Government of Arunachal Pradesh.1988.

TABLE : 8

DROPOUT RATE AT PRIMARY STAGE IN
ARUNACHAL PRADESH

YEAR	DROPOUT RATE
1964-65 TO 68-69	23.00
1965-66 TO 69-70	84.00
1966-67 TO 70-71	40.00
1967-68 TO 71-72	82.00
1968-69 TO 72-73	78.00
1969-70 To 73-74	73.00
1970-71 To 74-75	69.00
1971-72 To 75-76	82.00
1972-73 To 76-77	80.00
1973-74 To 77-78	78.00
1974-75 To 78-79	78.00
1975-76 To 79-80	78.00

SOURCE: Basic Educational Data, NIEPA,
1988, (Memo)

TABLE NO : 9

DROPOUT RATE IN ARUNACHAL PRADESH

S.No.	Year	Class I	Class II	Class III	Class IV	Class V
1	1974-75	38.51	18.82	18.98	6.14	7.20
2	1977-78	37.83	16.62	17.61	10.37	10.06
3	1981-82	42.83	20.80	16.94	20.26	9.03

Source :Directorate of Public Instructions, Arunachal Pradesh

TABLE NO: 10

BUDGET ALLOCATION TO STATE ARUNACHAL PRADESH FROM
FIRST FIVE YEAR PLAN TO SEVENTH FIVE YEAR PLAN

	BUDGET ALLOCATION (in Rs. crores)
First Five year plan	3.00
Second Five year plan	5.00
Third Five year plan	7.15
Fourth Five year plan	17.00
Fifth Five year plan	63.00
Sixth Five year plan	222.00
Seventh Five year plan	400.00

TABLE NO: 11

YEAR WISE RECURRING EXPENDITURE ON EDUCATION

YEAR	TOTAL EXPENDITURE State Budget	PERCENTAGE OF EXPENDITURE ON EDUCATION
1983-84	1,102,865	10.09
1984-85	1,416,264	10.00
1985-86	1,510,921	11.00

SOURCE : MHRD, A Hand Book of Education and Allied
Statistics, New Delhi, Govt. of India 1987

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TABLE NO : 12

YEAR WISE PERCENTAGE OF BUDGET EXPENDITURE
ON ELEMENTARY EDUCATION

YEAR	PERCENTAGE OF EXPENDITURE
1981-82	52.30
1982-83	48.30
1983-84	51.40

SOURCE : A Hand Book of Education and Allied Statistics, 1987 Govt. of India, New Delhi

TABLE NO: 13

EXPENDITURE ON PRIMARY EDUCATION
IN ARUNACHAL PRADESH

	1983-84 (Actual)	1984-85 (Revised estimated)	1985-86 (Budget Estimates)
Arunachal Pradesh	49,869 (45.7)	58,752 (46.1)	73,028 (48.6)
All India	(48.1)	(47.9)	(47.8)

Figures in Parenthesis indicates percentag of expenditure on primary Education to total Expenditure on Education

Source : MHRD, A Hand book of Education and Allied Statistics, New Delhi, Government of India, 1987.

TABLE NO: 14

PERCENTAGE OF EXPENDITURE ON PRIMARY AND MIDDLE EDUCATIONAL INSTITUTIONS IN ARUNACHAL PRADESH

YEAR	PERCENTAGE OF EXPENDITURE INCURRED ON		
	PRIMARY EDUCATIONAL INSTITUTION	MIDDLE EDUCATIONAL INSTITUTION	TOTAL EXPENDITURE ON PRIMARY + MIDDLE EDUCATIONAL INSTITUTION
1984-85	37.13	25.78	62.90
1985-86	33.16	26.85	60.01

OC17TAB

Reference

1. Furer Haimendorf. C.Von, Highlanders of Arunachal Pradesh Anthropological Research in North East India, Vikas Publishing House, N.Delhi, 1987.
2. Government of Arunachal Pradesh Statistical Abstracts 1984-86 Directorate of Economics and Statistics, Shillong, 1987.
3. Government of Arunachal Pradesh (1988) Project proposal for Establishing District Institute of Education And Training Institute in Arunachal Pradesh, Directorate of Public Instruction, Vaharilagun, 1988.
4. Government of India A Handbook of Educational And Allied Statistics, Ministry of Human Resource Development N.Delhi, 1987.
5. Government of India, Selected Educational Statistics Ministry of Education (HRD) N.Delhi 1978 to 1987.
6. Government of India, Ministry of Education Working group on Universalisation of Elementary Education Interim Report New Delhi, 1978.
7. Jalali Jayashree, Universalisation of Elementary Education Development in Isolated Areas - A Case of Mizoram, NIEPA, 1988 (Memio).
8. Mohanta, Bijan Administrative Development of Arunachal Pradesh 1875-1975 Uppal Publishing House, N.Delhi, 1984.
9. Nair P.T, Tribes of Arunachal Pradesh, Spectrum Publications, Guwahati, 1985.
10. NCERT, Report of the Study Team on Educational Structure of Arunachal Pradesh (memio) N.Delhi, 1982.
11. NCERT, Fifth All India Education Survey, N.Delhi, 1989.
12. NIEPA, Educational Administration in Arunachal Pradesh(A) survey report, N.Delhi.
13. NIEPA Basic Educational Data, N.Delhi, 1988.
14. Sujatha.K, Ashram Schools for Tribal children, New-Frontiers in Education, Vol.XVII No.4, 1987.
15. Sujatha.K, Education in Ashram Schools (Memio) NIEPA, 1988.
16. Sujatha.K, Education of the Forgotten Children of the Forests, Konark Publishers, N.Delhi, 1987.
17. Young Michael, Hilary Ferraton and others, Distance Teaching for the Third World, Routedgekegen Paul, London, 1980.

18. Perraton, Hilary (ed.), Alternative Routes to Formal Education, Distance Teaching for School Equivalency, The Johns Hopkins University Press, London 1982.

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