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Multigrade Schools in Zambian Primary Education: A Report on the Pilot Schools in Mkushi District.



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PREFACE

Zambia is a big country, as big as Sweden and Norway together, but in many areas it is sparsely populated. There has been and still is a great movement of people from the countryside to the towns.

This report is about how the government is trying to provide schooling for children in the sparsely-populated areas. What in Zambia are called multi-grade schools were common in Sweden well into this century. Zambia is trying in this way to encourage families to stay put in these remoter areas, and at the same time hopes in this way to reduce pressure on urban schools.

This report commissioned by SIDA was written by a researcher at the University of Zambia: Doctor Lungwanga visited a number of these multi-grade schools in Mkushi district.

The author gives a fine picture of these schools - their problems and their successes. In fact, pupils did about as well in their examinations as pupils in ordinary classes. Parent associations were active, and families did seem to stay on.

One problem was that the methodology of teaching in this type of school was dealt with very late in the teacher training and was not taken very seriously. Newly-qualified young teachers were not very attracted to the idea of living miles away from everything.

But the idea is catching on. There are now nearly 200 multi-grade schools and there will surely be more.


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Dr. L.M. Chizinga participated in the fieldwork although he could not take part in the analysis and write up of the report.

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SUMMARY OF THE FINDINGS

1. GENERAL

The conditions prevailing at Ketetaula, Mwape and Liteta are generally similar. The major differences among these three schools lie in the local environmental characteristics which spillover into the schools, for example, annual floods of the Mulungushi river greatly affect school attendance at Liteta. On the other hand, migration of people from Mwape is threatening the child population at the school. Ketetaula is rather stable. Kalombe is the only school among the pilot schools which is significantly different. The population within the catchment area of Kalombe has increased rapidly within a short time. Kalombe is at a point where the school should be helped to be converted into a monograde failure to reducing the school population by establishing a school at the Chisanga Resettlement Scheme.

2. TEACHERS

With the exception of Kalombe and Ketetaula, the other schools only have two teachers. The two teachers at Mwape and Liteta are more overworked because they have to handle the same number of grades and periods which are handled by three teachers in other schools. During times when one

teacher falls sick or he has to leave the school, the remaining teacher is forced to teach all the grades and this tends to be burdensome. Apart from Kalombe where both teachers had formal training in multigrade teaching, the other schools have only one teacher trained in the multigrade approach. All teachers in the schools expressed the need for multigrade training through short seminar courses and workshops.

3. TRAINING

It was the general finding of the consultant that the designated college for multigrade teaching has not integrated this mode of teaching in the teacher preparation programme. The condition at Malcolm Moffat Teacher Training College is that lectures in multigrade teaching are conducted in the last few days before students go for teaching practice. The college administration and some of the members of staff are very interested in the multigrade system. The main constraint is lack of resources. Lecturers admitted that they had a lot of interest in the multigrade system but they could not carry it out effectively while attending to their normal workload. What has not been worked out is a strategy of integrating the multigrade system of teaching into the normal teacher preparation curriculum. Because multigrade

teaching is conducted in isolation from the normal teacher preparation programme, students do not take it seriously. Students do not even want to be identified as good at multigrade teaching because they might be posted to schools in the remotest parts of the country.

4. MANAGEMENT

The District Education Officers have taken the multigrade teaching system seriously. To them, multigrade teaching is the surest means in which ungraded schools can be graded. Additionally multigrade teaching is viewed as the only possible means through which the government policy of universalizing basic education at the District level could be accomplished. The District Education Officers have embarked on a vigorous task of establishing a number of multigrade schools as a way of making basic education accessible to all children in the District and as a way of upgrading schools that are currently ungraded. Officers at the district level view multigrade teaching as the most cost effective means of providing basic education to the greatest number of children at minimum cost. The major

constraint at the district level is lack of transport in order for the officers to carry out routine inspection of multigrade schools. Liteta and Mwape primary schools have not been inspected since they were established as multigrade schools. It is in this regard that teachers in these two schools feel more isolated and neglected.

5. RESOURCES

The Mkushi District Education Office is very well stocked with education materials mainly donated by SIDA. The District Education officials were satisfied with the role of SIDA in donating resources for the schools in the district. Their concern was, however, with transporting the resources to the various schools. Because of transport difficulties in getting the educational materials transported to the remotest schools, the multigrade pilot schools have not been able to benefit adequately. Schools within the accessible areas benefit more from the resources that SIDA donates to the district than the multigrade pilot schools. In fact schools like Liteta and Mwape are in a worse situation because Mkushi district is further away and educational materials that are sent from there either reached the school very mutilated or they never arrive at all.

Teachers at Liteta and Mwape schools did not see any logic in having educational materials distributed from Mkushi when Kabwe was nearer and educational materials could be collected by the teachers themselves with little difficulties.

With the exception of Kalombe, all pilot schools visited lacked educational facilities. Most of the desks donated and shipped by SIDA to these schools are now wornout because of the poor materials they were made from. All the three schools, Katetaula, Mwape and Liteta lack teachers' handbooks, pupils' textbooks, work cards, maps, exercise books and other materials.

6. ACHIEVEMENTS

In all the schools visited, the multigrade system has been a success story. The system has succeeded in raising the progression of children from Grade IV to Grade V. The attrition rate is slowly being reduced. Pupils have a positive attitude towards education because of the possibility of advancing to Grade VII without major difficulties. All the pilot schools have competed effectively in sending children to Grade VIII. In fact the Pass rates in these schools in Grade VII examinations is highly impressive. The multigrade pilot schools competed effectively with monograde schools in

relation to the performance of pupils in the Grade VII examinations. The District education officers are extremely satisfied with the quality of teaching and learning in the multigrade schools.

7. SCHOOL - COMMUNITY RELATIONSHIP

In all the schools visited, there is a good school-community relation. The only school that has poor school-community relationship is Mwape principally because of the improvements in facilities at the neighbouring school. In all the other schools, the multigrade system has helped to maintain stability in the community. At Kalombe for example, the community increased in size since 1985. One of the factors parents attributed to increased population in the area was the availability of opportunities for upper primary education for their children. The parents at Kalombe, Ketetaula and Mwape expressed strong views towards solving the problems faced by their schools. Parents at Kalombe have in fact started donating money towards the construction of teachers' houses and classroom block. The P.T.A. (Parent Teachers Association) at these schools do recognise such socio-cultural problems affecting the schools as early marriages among girls and they are slowly working towards

solving the problem in order to minimise the attrition rates among girls especially.

8. LOCAL SOCIO-ECONOMIC AND ENVIRONMENTAL PROBLEMS

Kalombe has the least socio-economic and environmental problems. Katetaula, Mwape and Liteta have major local socio-economic and environmental problems which have implications for effective teaching and learning in the schools. All these three schools are extremely inaccessible by road. This makes it difficult for supplies to be taken to the schools. Teachers have to walk long distances for medical services and to collect their salaries. The major difficult which teachers face in the three pilot schools is getting essential supplies like food, soap and other requisities. The schools are in areas where there are no shops from where to buy any single essential item. The condition of teachers is worse in the rain season because they are unable to transport perishable commodities like mealie meal to their homes.

People in areas where the schools are located are generally very poor. Most of them live on subsistence farming from where they cannot generate enough to maintain themselves. Consequently, their capacity to sustain the schools through community self reliance is extremely low. The

only effective way in which the communities can meaningfully contribute to the well being of the of the schools is through their own labour.

9. MULTIGRADE TEACHING

All teachers in the pilot schools trained and untained are very familiar with the multigrade system. Those teachers that have been exposed to multigrade teaching have done a commendable job to provide some in-service training to others. All the methods of multigrade teaching are in practice in most of the schools with the exception of Kalombe where increased enrollments has become prohibitive to effective multigrade teaching. Teachers in pilot schools generally agree that the principle of independent learning which multigrade teaching attempts to promote is effective. Teachers in all the pilots schools are extremely committed to multigrade teaching despite enormous problems they face. While teachers are able to teach most of the subjects through the multigrade approach, homecraft and practical activities are not being taught effectively. There are two reasons for this. First, there are no female teachers in these schools who can teach such homecraft skills like needlework or cookery. Second, practical skills are not being taught because teachers do not usually

get enough time to do so. One recurring problem in all schools was that teachers were extremely overworked at the schools. They complained of not being considered for special allowances when their work was more than that of teachers getting allowances for teaching double sessions.

UNIT COSTS

It was the objective of this study that effort could be made to measure the unit costs in multigrade schools in order to ascertain the cost effectiveness of the system. However, this could not be done because resources donated for the purpose of the multigrade pilot schools have ended up in other schools. In order to ascertain the unit costs of the multigrade system, proper accounting and distribution of the resources intended for multigrade schools should be instituted.

RECOMMENDATIONS

The recommendations outlined below should be viewed from two central points. First, the multigrade system when judged from the standpoint of the pilot schools has made a number of successes within the last three years (1985-1988). The successes include: Stabilising the communities by enabling individuals to settle in the area; providing opportunities for full primary level education where none existed; reduction in attrition rates; progression to Grade VIII in areas where parents and children had no such hopes; and cost effectiveness through the provision of full primary education utilising facilities specifically meant for ungraded schools. Second, at the time of writing this report more than 120 multigrade schools had been established throughout the Republic of Zambia. This is an indication that the multigrade system has been accepted by education officials to be a viable means for delivery of basic educational facilities to certain areas of the country. The recommendations that are made here should be viewed in the light of these points.

I. ORGANISATION

What comes out of this study is that special attention ought to be given to the organisation of multigrade schools. Currently, multigrade schools are under the existing organisation structure of the Ministry of General Education, Youth and Sport. This is not satisfactory

because multigrade schools wherever they are or wherever they will be located in the country need special attention in such areas as; resource distribution, teachers' needs, pupil's needs, community needs, and so on. As such there is need to establish an institutional framework that will specifically monitor the development of multigrade schools in the country. The institution to be established could be attached to the Ministry of General Education, Youth and Sport but autonomous enough in its operations. Such an institution could be organised along the lines of SHAPE but its role should be to initiate policy, plan and monitor the development of multigrade schools in the entire country.

The areas of concern for the monitoring institution are all aspects that bring about multigrade system. Although the monitoring institution might not be a permanent feature within the Zambian system of general education, the objective should however, be to help institutionalise the multigrade system through careful planning, and co-ordination of all multigrade related activities in the country. The monitoring institution could have its own secretariat with a Director as Co-ordinator. All resources for multigrade schools could be channelled through the secretariat of the institution. Teachers in multigrade schools could also communicate directly to the secretariat on any matter. This way, the goal of equitable distribution of quality education at minimum expense will become a reality in the country.

2. DONOR AGENCY SUPPORT

SIDA which happens to be the sponsor of multigrade system in Zambia has done a commendable job so far. It has maintained a constant supply of financial and material resources to multigrade schools. The major problem as this study has indicated is the distribution of the resources from the donor agency. Multigrade schools are special needy schools and resources supplied for this purpose should reach these institutions. Mechanisms should, therefore, be worked out to ensure that educational resources supplied to multigrade schools do indeed get there. In the long term this can be done through the mechanism suggested in 1 above. However, a short term solution should be to allow the teachers together with P.T.A. members to collect whatever resources they need from either the Provincial or District Offices whichever is the nearest.

The role of SIDA should not only be confined to supplying of resources. Rather it should fully participate in all measures directed at basic educational provision through multigrade teaching. There is no sound reason for not allowing the donor agency to take active involvement in the institutionalisation of the multigrade system because the system does not propose any radical changes or departure from the existing system of education. Multigrade

teaching only strives to ensure that current educational provision is distributed efficiently and equitably to areas where basic full educational facilities are lacking or non-existent. This being the case therefore, SIDA should be accorded an opportunity to be fully involved in the rationalization of the programme at the levels of policy, planning and co-ordination.

3. TRAINING

The training of multigrade teachers at the designated college, Malcom Moffat Teacher Training College, should be rationalized and institutionalised under the current teacher preparation programme. Multigrade teaching is not all that different from the current teacher preparation curricula that it can not be integrated into the present scheme. College Lecturers at Malcolm Moffat need to find ways in which multigrade teaching can be made an integral part of the teacher preparation programme right from the time the student enters training. One way this can be done is for SIDA and the Ministry of General Education, Youth and Sport to organise workshop(s) involving educationists from the University and other institutions whose objective will be to rationalize the integration of the multigrade system of teaching in the teacher preparation programme through a critical analysis of its philosophical, sociological, psychological, economic and pedagogical dimensions. This way, college lecturers will not view multigrade teaching as an extra burden but as one of the approaches to teaching and

primary educational organisation that every student undergoing teacher training ought to know. From Malcolm Moffat, the knowledge so designed on multigrade teaching can spread to other colleges. Thereby enabling every teacher trainee to have access to it. All teacher trainees should be familiar with the concept and practice of multigrade teaching.

4. RESOURCES

The multigrade pilot schools are currently facing severe shortage of educational materials because available resources have to be shared among all the 79 schools in the district. It is recommended here that the Provincial and District education officers should ensure that resources designated for multigrade schools are distributed to such institution. SIDA should in fact stipulate which kind of schools certain resources should be distributed. For example in addition to the close DONATED BY SIDA which is currently printed on primary school textbooks, resources meant for multigrade schools should read DONATED BY SIDA FOR MULTIGRADE SCHOOLS ONLY. There should be a system of checking to find out whether such resources have reached their destinations. The checking can be done annually.

5. BURSARY SCHEMES

From the findings of this study, a number of pupils from multigrade schools who successfully passed Grade VII examinations have not been able to proceed to Grade VIII

because their families have not been able to support them. This is a waste of human resources. If the multigrade system is to continue, graduates from institutions following this system should be retained in the educational system until they complete. It is not fair to admit a child from a Luano Valley multigrade school to a day secondary school in Kabwe when such a child cannot secure any place to stay. Children from these schools should be admitted in boarding schools and Government bursaries extended to them. Teachers and parents should be informed of such opportunities.

6. EVALUATION

Multigrade teaching has only been in operation for three years in this country. The period is not long enough to make a thorough assessment of the impact of the system on the community and the individual. The evaluation of the multigrade system should therefore be a continuous process. Future evaluations should include measurements of competence in basic skills in comparative terms between monograde and multigrade schools across the country. Longitudinal studies of multigrade pupils should be conducted so that a data base is established on how well the products of these institutions are doing within the educational system. The monitoring of pupils from multigrade schools on longitudinal basis should be done by the Department of Educational Administration and Policy Studies at the University of Zambia. Additionally,

comprehensive evaluation of available resources in multigrade schools should be made in order to ascertain the quality of teaching and learning.

7. INTEGRATED DEVELOPMENT

Multigrade teaching should be considered part of the general rural development efforts in these least advantaged areas. The goal should not only be to provide basic educational facilities. Rather, the Government together with donor agencies should find ways of engaging local communities in development efforts. Such efforts would in the long run not only raise the standard of living of the people in these areas but the communities will have the capacity to manage the schools through self reliance. In short, multigrade schools should be considered as a step to rural development.

8. NATIONAL SURVEY

Zambia has accepted the multigrade system as a viable mode for educational delivery in rural areas. There is a need for a comprehensive survey on these Schools. The national evaluation should be properly co-ordinated before the actual fieldwork is undertaken. There should in fact be a committee with a co-ordinator for the national evaluation exercise. As pointed out above, the national evaluation exercise should be an ongoing process covering several years. Those pupils who are currently in secondary schools should be monitored closely for purposes of establishing a longitudinal study.

QUALITY OF EDUCATION

The objective of multigrade teaching should ultimately be to provide quality education in those areas that are least advantaged. Quality education is of great significance in areas that are served by multigrade schools. First, quality education will contribute towards the acquisition of basic skills which might contribute to agricultural and domestic development in these areas. The validity of the contribution of basic education to agricultural development has been proved empirically the world over. Second, quality education in these remote parts of the country might eventually contribute to the social mobility of children from these areas through the educational ladder. The social mobility of children from multigrade schools has potential for spillover effects socially and economically especially in terms of income distribution. Quality education in multigrade schools can contribute significant social rate of return.

In order to improve the quality of education in these schools, efforts should be made to improve the inspection of these schools. In addition to constant inspection, teachers' ~~motale~~ ^{motale} and commitment to teaching should be enhanced through special allowances and promotion prospects. To ease the hardships of the teachers and their families, multigrade schools like Katetaula, Mwape and Liteta should be allocated

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a bicycle each for the teachers' use. Equipments and tools like hoes, axes, sickles and carpentry tools should be supplied to these schools to help develop skills among the children. Multigrade schools should not be viewed in orthodox terms. The objective should be to develop human resources in these areas with a view that eventually these remote parts of the country will be developed. Mechanisms should, therefore, be worked to improve the internal and external efficiency of multigrade schools.

PART ONE
THE BACKGROUND

INTRODUCTION.

Multigrade teaching in Zambian schools is an innovation directed at alleviating the problems of educational privision at basic educational level. Like elsewhere in the subsaharan Africa, Zambia faces major economic and demographic constraints which hinder the Government's capacity to provide basic educational facilities to all children of school going age. The constraints confront the country when national policy on education demand that there should be a provision of universal basic education of nine years to every child. This goal is very well articulated in the Educational Reforms.

Basic education is envisaged to be universal because the aim is to enable each individual child have access to education. The rationale underlying the Government's aim on basic education is to afford opportunities for learning for self development to every child. The justification of this objective lies in the ideology of Humanism which requires that all institutions in the country should be reorganised in order to enable every man and woman rise above their limitations. In education such a reorganisation entail provision of knowledge, skills, and attitudes to all children to meet their needs for purposeful growth.

However, while Zambia's educational reforms make claim to the goal of universal basic education, there are constraints that have been identified as standing in the way of this policy objective. The major problem is that there are not enough resources to meet the ever increasing social demand for education. In this light, the position of the Government is that for some time to come, only a few

children would gain access to educational services unless the problems are confronted aggressively.

The problems at basic education identified in the educational reforms are: (i) only four out of five of primary school age children are actually enrolled in Grades I to VII. (ii) Many children who are old enough to enter Grade I do not have the opportunity to enrol because there are not enough places. (iii) Substantial numbers of children enrolled at Grade I in rural schools have no opportunity to complete Grade VII. (iv) In some rural districts, four out of ten pupils have to leave school at Grade IV because there are either no places or not sufficient of them at Grade V. To solve these problems, the educational reforms stipulated that far reaching changes will have to be undertaken. Such changes will not only be in the structure and the accompanying nomenclature, nor will it be in the improvement of acquisitional patterns. Rather the changes that would recieve the greatest attention will be in the content, the methods and the organisation of the stystem of education.

According to the reforms, implementing the goal of nine years basic education for all will entail changes in the direction, in the depth and in the breadth of the system. Such changes it is argued, will have to take full cognizance of the various factors which are the basis of the interplay between the educational system and the society. It is in this vein that multigrade teaching was considered a significant innovation to try within the educational system. Some of the aspects of the Zambian society which justified

the introduction of multigrade system are: (i) Certain areas in the country were historically neglected in educational provision. (ii) The sparsity of population in some areas of the country make the provision of full primary education under conventional means costly and difficult. (iii) Some communities in rural areas are too poor to stand on their own in matters of meeting educational services for their children. (iv) The increasing population growth in the midst of declining financial resources continues to lessen the Government's ability to provide basic educational services equitably and efficiently. These and other factors are discussed in detail in the next section.

BACKGROUND TO THE MULTIGRADE SCHOOLS POLICY

Zambia is a large country with a small population in relation to its size, the overall population density in 1980 being 7.5 persons per square kilometre. This population is unevenly distributed, with a heavy concentration in provinces where there are large urban areas and much more dispersion in provinces that are predominantly rural. The country's population growth rate is high, of the order of 3.6 per cent, but in several rural districts the rate does not exceed 2 per cent and in one (Chizera) it is actually negative. These demographic features suggest that several rural areas are quite sparsely populated, a consideration that has immediate consequences for the provision of social services. This low density of Zambia's

rural population has had several outcomes in the pattern of educational provision. At the secondary level it has lead to the need for the development of boarding schools that are costly to provide and to run. At the primary level it has lead to the existence of incomplete schools, that is, schools which cover only the first four years of the seven-year primary cycle. A second outcome at the primary level is the underenrolment in terms of the average size of class that is experienced in several rural areas.

In the early days of educational development, incomplete schools were a common phenomenon throughout the rural areas. They were also found in a number of the high density urban areas. Pressure from the urban communities lead quite early in the years after Independence to the upgrading of the urban schools into complete seven-year cycle schools. The target established by the Second National Development Plan (1969-1974) that every child who entered Grade 1 in an urban school would be able to proceed through to the completion of Grade 7 was, for all practical purposes, attained by 1974. The same Plan, however, set up a different target for rural areas, envisaging that 75 per cent of the Grade 1 entrants in rural schools would be able to complete the full primary cycle. But this target was not met in global terms in all districts until 1985 and in some districts has not yet been attained for girls. Although there has been a substantial improvement in the progression rate from Grade 4 to Grade 5 in recent years, incomplete schools are still found in numerous rural areas, reflecting both the sparsity of the population being served and the vulnerability of that

population in having the educational needs of its children met. Data from the Ministry of General Education and Culture show that in 1983 there were 785 such schools throughout the country. Although the total enrolment in these schools is small, they represent almost one-quarter of all the primary schools in Zambia.

In some areas, however, a different educational problem is experienced. Schools cover the full range of primary classes, from Grade 1 to Grade 7, but class sizes are very much below the national norm of 40 students per class. In some instances this is because the population being served has never been large enough to sustain larger enrolments, in others it is because out-migration has led to a decline in the population in the school's catchment area. It is also possible that in some areas the high incidence of child malnutrition and child mortality has led to some decline in the numbers of school-going age.

The upgrading of incomplete schools to full primary schools that are underenrolled pose problems in the generation and allocation of resources. The rural communities concerned may be too small and too impoverished to provide the self-help inputs that are needed for the physical development of an incomplete school, while the allocation of costly teaching staff to schools which cannot attract a sufficiently large number of students is an uneconomic use of scarce and costly resources. The solution to these problems consists in increasing the number of students within a teaching group so that it becomes economically viable. This objective could be attained by transporting students to centres where they would constitute teaching

groups of adequate size, but this solution is socially undesirable because it entails depriving some communities of a principal focus and symbol of community cohesion, the village schools. Moreover, given the poor infrastructure in Zambia and the difficulty in obtaining and maintaining transport this would be an impracticable solution. The solution of providing boarding facilities at centrally established complete schools would encounter similar difficulties.

But the objective of increasing the number of students within a teaching group can also be achieved by organisational measures. One such measure is to postpone the admission of new students until their number is large enough to justify their constituting a class. A second is to collapse together one or more cohorts, after they have entered school, so that they constitute a class group of acceptable size. Both of these solutions have been adopted in Zambia. In about 50 schools there is a system of biennial intake, where students are enrolled in Grade 1 only every second year. In such schools the age-range for admission is necessarily spread over two years (i.e. 7 and 8 year-olds), but if these schools can admit all children of the relevant ages in the years when admission does take place then the age-range occurring within classes would very likely be smaller than that obtaining in schools serving larger populations, especially in the urban areas. But information on this point awaits empirical evidence.

The second solution that Zambia has adopted to the problem of small enrolments in rural schools is multigrade teaching where grouping takes place after students have entered school. In this system, one teacher teaches two or more grades at the same time in the same classroom. Depending on the numbers and arrangements, one teacher may teach the whole range of primary school grades, thereby constituting a single-teacher school. In a multi-grade class, all students may study and be taught the same subject at the same time, but at different levels according to individual attainments. In another arrangement, the sub-groups that correspond to the different years of entering school, corresponding roughly to age-groups, may study and be taught different subjects during the same period of time. A third arrangement allows for common presentation by the teacher to all the sub-groups taken together. The system depends heavily for its success on the ability of the teacher to organise a judicious combination of group instruction and individualised self-instruction. The system of multigrade teaching can be used in combination with biennial intake to make educational provision for populations that are very small, but so far as is known the two systems are not used in conjunction in any school in Zambia.

Multigrade teaching was introduced on a pilot basis in four schools in 1985. Although sufficient time had not elapsed for an evaluation to be conducted, the experience with these schools was considered encouraging enough to lead to an immediate expansion of the system. Hence multigrade

teaching was introduced in a further 40 schools in 1986 and in about 50 more in 1987.³ At the same time all of these schools were upgraded from their incomplete status and began to make provision at the Upper Primary level (Grades 5 to 7). As it had been agreed from the outset that the new scheme should be carefully monitored and evaluated the principal purpose of the present study was to examine the effects of the system in the four pilot schools. This first formal evaluation was itself in the nature of a pilot study that would serve as the basis for a more extensive study of the effects of multigrade teaching in a representative sample of the schools where it is operating.

Aims of the Study

The principal aim of the study was to determine how successful the introduction and operation of the multigrade system had been in meeting the objectives established for it. The principal rationale for the commencement of the system was that it should enable schools serving a small population to provide at reasonable cost the full range of primary level education for the children in the vicinity of the school. Hence it was necessary to determine the extent to which multigrade schools have succeeded in catering for the educational needs of those of school-going age in their catchment areas and what it was costing to do so.

The information derived in this way would indicate the extent to which a multigrade teaching system might help to universalise educational access in a particular area and the cost of such universalisation. But it would lead to no more than limited understanding of the strictly educational aspects

of the system and of the potential impact that the introduction of the system might have had on the socio-cultural environment. To capture these aspects the evaluation considered certain pedagogic and educational dimensions of multigrade schools and assessed the relationship of the system to the local community. The importance of investigating pedagogic features arose from the nature of multigrade teaching which requires that the teacher give more prominence to individualised learning experiences and correspondingly less attention to formalised group instruction. While he does not abandon his role as mentor for individuals and groups, he must play a larger role as facilitator and organiser of learning activities which, to a considerable extent, must be undertaken on a self-directed basis by these individuals and groups. Hence multigrade teaching implies special pedagogic methods. These are deserving of attention as elements of the mechanism through which the system makes its impact. They also deserve investigation in their own right since they may be indicative of teaching methods that could profitably be introduced into schools where the conversational teaching by grade (single-grade teaching) occurs.

There is some evidence from other parts of the world, notably from Sweden, that the cognitive achievement of students in multigrade schools is at least as good as that of students from conventional single-grade schools.

Moreover, data from Chile and India show that mixed-age grouping, which is an integral feature of the multigrade system, does not have any adverse effect on scholastic performance. But the influence of the actual teaching arrangements adopted has not yet been so clearly established for developing countries. It was intended that the evaluation should seek to throw light on this issue as this too could have relevance for the teaching methodology in conventional schools. Moreover, because the multigrade methodology must depend to a considerable extent on individualised self-instruction it might be expected to foster a more self-reliant, independent approach to the acquisition of knowledge and gaining of understanding. This is a major aim of the entire educational process and one that assumes great importance in a situation where students may not be able to continue in formal schools after the seventh grade. National documents stress that in the current difficult circumstances of Zambia it is important that the schools develop the "potential of all citizens to think independently and to find their bearings among problems as they arise". It is acknowledged that orthodox schools have difficulties in attaining this objective but it is possible that the methodology required by multigrade teaching might be more successful in this regard. The evaluation sought to determine whether this is so.

A further point of interest is the internal efficiency of multigrade schools. While wastage through voluntary dropout and repetition is not excessively large in Zambian schools, nevertheless there is some incidence of both. It is sometimes alleged that the

sheer boredom of dull, uninspiring teaching is a contributory factor to such wastage. It is also alleged that parents sometimes withdraw children from schools if their perceptions are that the quality of provision and teaching is below standard. One would expect that there would be few grounds for either of these allegations in relation to newly established multigrade schools and hence that such schools would manifest a high degree of internal efficiency. The problem of wastage is usually greater with girls than boys, but in this case the reasons may lie more with the family and society than with the school. Nevertheless it needs to be established whether the special educational climate of the multigrade school contributes in any way towards fostering the continued participation of girls, especially in Grades 5 to 7. There is also the disquieting fact that in regular schools the performance of boys is almost invariably superior to that of girls. Again one asks: does the special educational circumstances and arrangements in a multigrade school act in any way to eliminate such differences?

At the non-cognitive level, it is sometimes argued that a multigrade system leads to more favourable student social development than a single-grade system. This is partly because of the interaction with others of a wide age-range which students in a multigrade school must constantly experience, this vertical group being regarded as a powerful socialising force. It is also partly because of the security and continuity that the student experiences, through association

with the same group of colleagues (with only small annual changes at the top and bottom of the group) and by being taught by the same teacher from one year to the next. The evaluation sought to determine whether such affective benefits are accruing in Zambia.

Finally, it appears to be necessary to consider the impact of multigrade teaching at the level of society and of the community the school serves. As has been indicated, parents have been known to react to the education provided in schools by withdrawing their children, especially girls. Instances have also occurred where families have migrated out of areas served by incomplete schools and into the catchment areas of complete schools. Even when entire families did not migrate in this way, children have been sent to live with relatives so that they could be in greater proximity to schools that provided the full primary range. Historically, one of the factors that contributes to an influx of people into urban areas has been the availability in towns of schools that went through to Grade 7. Even though such schools suffered from gross overcrowding, parents placed so high a premium on education that they preferred to seek a place in them for their children rather than rest content with the incomplete schooling that tended to be all that was available in rural areas. It is possible, therefore, that the upgrading of incomplete schools to institutions that could offer the full primary programme would lead to more favourable dispositions towards the local school as well as to changes in migration patterns. The numbers involved in the pilot

schools may be too few for a rigorous assessment of the impact on migration but it was not too early to conduct a preliminary inquiry that would guide the later more extensive study.

In specific terms, therefore, the evaluation addressed itself to the following issues:

- (a) the extent to which the multigrade system had enabled all children in a school catchment area have access to the full primary level programme;
- (b) the costs of making this form of provision;
- (c) the role of the teacher and the nature of his pedagogical activities in a multigrade school;
- (d) the impact of multigrade teaching on the cognitive achievement of students;
- (e) the impact of this form of teaching in promoting independent and self-directed habits of study;
- (f) the internal efficiency of multigrade schools;
- (g) the impact of multigrade teaching on the participation and performance of girls;
- (h) the perceptions of multigrade teaching held by participants, parents of students and the wider local community;

- (i) the impact that the introduction of this system has had on the attitudes and mores of the local community.

Methodology

The evaluation required the analysis of an extensive range of information about the schools, the teachers, the students and the community. Information had to be obtained on all that led up to the introduction of the multigrade system, with particular attention to the special training provided for participating teachers. Because of the comprehensive nature of the study it was necessary to gather the information that was required through a variety of techniques and data-gathering instruments. Some of the intended techniques and data-gathering instruments included the following:

- (a) questionnaires for completion by teachers, students and personnel involved in the training activities;
- (b) partly structured interviews with parents, members of the Parent-Teacher Association and significant members of the local community;

- (c) ability achievement and attitude tests for students;
- (d) interviews with Headteachers and participating teachers;
- (e) observations of multigrade teaching in action;
- (f) comprehensive schedules of the physical resources at each school;
- (g) a miniature census of the catchment area of each school;
- (h) interviews with personnel in the Planning Unit and in the Regional and District Education Offices.

It was also necessary to examine all relevant school records and gain access to as much detailed information as possible regarding the running costs of the schools and the resources they have received.

The target group for this first study was the four pilot schools where multigrade teaching was introduced in January 1985. Within these schools, the envisaged student target groups were all those in Grades 4 and 7. It was assumed that some of these students have had no experience of single-grade teaching - the 1988 Grade 4 students entered Grade 1 in January 1985 at the time when the experiment began. On the other hand, those doing Grade 7 in

1988 were beginning Grade 4 in 1985 and hence would have had their first three years in primary school in a single-grade system. This could lead to some confounding effects so that special care was needed in disentangling the precise impact of the multigrade teaching. The same situation could arise when the larger evaluation is conducted in 1989. It will not be until 1991 that the pilot schools will have students in Grade 7 who have come up entirely through the multigrade system, while for the other schools this will not occur until 1992. Since further evaluations may be undertaken in these later years, measures of the basic cognitive abilities of those in the lower grades will be taken (see item (c) on page 15 above) and procedures established for similar measures to be obtained with each upcoming cohort in successive years.

The cognitive achievement tests in Grade 4 were expected to be in English, Mathematics and Zambian Languages; for Grade 7 they were to be in these subject areas and also in Science and Social Studies.

In order to place the evaluation on as sound a footing as possible it was considered necessary to gather information about student achievement and attitudes and if possible about community perceptions,

for a representative sample of conventional schools where there is single-grade teaching. Information was also needed on the resources available to such schools and on details of their costs. This would enable comparisons to be made between the two systems regarding costs, efficiency, effectiveness in responding to local needs, impact on student attitudes and achievement, and spin-off effects on the local community.

LOGISTICS AND LIMITATIONS OF THE STUDY

The envisaged period of this study was from August to December 1988. The principal participants in the study were to include staff from the Inspectorate; Officers from the Curriculum Development Centre; the Planning Unit and Central Statistics Office, Academic staff from Malcom Moffat Teacher Training College; District and Regional Education Officers and the University of Zambia staff. Each of these groups of participants was expected to play different roles at various points in the study. Officers from the Curriculum Development Centre were expected to prepare ability and achievement tests. Staff from the Planning Unit and the Central Statistics Office were to prepare Census questionnaires for the local areas surrounding the schools. The

University of Zambia staff were expected to prepare such instruments as attitude scales, interview schedules, and various questionnaires. The implementation of the research instruments together with the observations of multigrade teaching was envisaged to be conducted by the University staff in collaboration with Malcom Moffat lecturers the Inspectorate and Officers from the District and Regional Education Offices.

Attempts were made to involve different participants at various points in this study. The Planning Unit played a major role in arranging for finances, transportation, and co-ordinating the scheduled visits. Officers from the Inspectorate together with Malcom Moffat lecturers were engaged in the study as planned. The Co-ordination of the study at the local level was mainly done by the officials at the District Education Office. Efforts were made to involve the Psychological Service Unit in preparing the achievement tests. However, this was not possible because the officers in that Unit were at the time not quite settled in their office accommodation. Ability and achievement tests were therefore not employed in this study because they could not be secured from the relevant offices.

The fieldwork was conducted in September to October for a period of twenty days. Prior to the

fieldwork, an on the sight preliminary visit was undertaken from August 1st to 7th by the consultant. The objective of the preliminary visit was to have an on the spot view of the environment and the schools in order that realistic adjustments could be made to the procedures of the study. As a result of the preliminary visit, certain amendments were made to the study. First, it was decided that the study be extended to include the multigrade component of the teacher training programme at Malcom Moffat Teacher Training College. Such an extension would help to shed some light on the professional and academic preparation of the teachers of multigrade schools. Second, because of the sizes of the schools and the local communities as observed in the preliminary visit, it was decided that the evaluation should focus more on interviews, observations and analysis of available official records. Third, the difficulties encountered in reaching the various schools in the Valley due to impassable roads led to a decision to increase the number of days for fieldwork from ten to twenty. The preliminary visit was important in that it helped the consultant to be psychologically set to stay in a tsetse infested area albeit for a brief period.

One of the major limitations of the study was the absence of ability and achievement tests. A measurement of the students ability and achievement on various tasks in comparison to other schools, should have enriched the study pedagogically. The second limitation of the study was the time. Most of the period allocated for fieldwork was spent travelling on very difficult terrain and impassable roads. Efforts were however made to spend at least a day at each school.

MULTIGRADE TEACHING: THE CONCEPT AND ITS OPERATIONAL DIMENSIONS

The conceptualization of multigrade teaching in Zambian schools is an undertaking which the Planning Unit, the Inspectorate and the teaching staff at Malcom Moffat Teacher Training College gave serious thought to prior to its implementation. In fact the conceptual operationalization of the multigrade teaching system was the basis of all the formal meetings and seminars that were organized around this programme.

DEFINITION

The concept of multigrade teaching is understood to be a system of teaching which

involves two or more grades that are taught by one teacher in one room at the same time. The system of teaching is considered applicable in those schools where a combination of two or more grades in one classroom will not go beyond the officially approved class unit of forty pupils. Multigrade teaching is therefore a method that is considered viable in these schools which have very low enrolments. Once enrolments increase to proportions where combining two or more grades in one classroom results in more students than the official class size, multigrade as a practice ceases.

OPERATION OF MULTIGRADE TEACHING

(a) Organization

The concept of multigrade teaching is considered to be synonymous with ability grouping in mono grade schools. The only difference however, is that a multigrade class has at least three variables operating at one time. These variables are: different ages, different abilities and different grades. The method is therefore considered to be heavily dependent on individualized instruction and pupil activities. In order for a multigrade class to work effectively the teacher must command organizing ability skills. Some of the skills

that a teacher need to develop in the pupils are good working habits, good study techniques and development of independency and responsibility. In the multigrade school, the teacher is defined as an organizer of work and supervisor. The teacher's designed work is either for individual self education or groupwork. The success of multigrade teaching is held to be dependent on such variables as: age of students, mental maturity, structure and sizes of classes, rooms, equipment, access to teaching materials, co-operation between grades, character of the subject and the interest and upititude of the teacher.

The teacher's ability to plan efficiently is critical to the success of multigrade teaching. What makes careful planning important in the multigrade system is that unlike a monograde teacher, a multigrade teacher has to make two year or three year plans in any single year, term, week, day or period. At every stage of the planning process multigrade teachers have to recognize that the objective is to enable pupils acquire knowledge and skills independently.

(b) Teaching Methods

There are four teaching methods which have been identified as central to multigrade teaching. These methods (also known as time-table options) are:

The Common Time-Table Option; The Subject Staggering Option; The Subject Grouping Option and The Integrated Day Option.

- (i) The Common Time-table Option: This option presents the same subject (e.g. Mathematics) to all the grades in a multigrade class in a given time table period. The subject is presented to each grade group according to the prescribed grade level and the work programme designed by the teacher.
- (ii) Subject staggering option: The determining factor in this option is the amount of teacher-pupil interaction required. The principle is that subjects (or subject topics) which require more teacher-pupil interaction are put together with subjects that require little or no teacher-pupil interaction. A good example is the staggering of a subject like English with creative arts. While one grade is doing English another grade would be working on various creative arts. The latter in this case would need less teacher-pupil interaction than the former.

- (iii) Subject Grouping Option: Under this option certain subjects, are presented by the teacher to all grades in a multigrade class at the same time. The basic education curriculum has subjects that easily lend themselves to be taught to vertical groups e.g. Music, Art, Social Studies and Religious Education.
- (iv) Integrated Day Option: This is a non-timetable approach. The pupil is considered to be an independent learner who is at liberty to make a choice as to what subject (or what topic of the subject) to learn and when to learn it. This is a laizer faire approach which involves careful arrangement and programming of both the pupils' and the teacher's work. by the class teacher.

Education authorities have a number of positive views towards multigrade teaching. (1) The introduction of the system in sparsely populated areas is considered to be the surest means of extending the seven years basic education to all children. (2) The system will help to upgrade

nongraded schools with minimum or no cost at all to the Government. (3) The system will help to stimulate favourable relationship between the school and the community especially as the latter experiences the opening of educational opportunities to their children. (4) The system will shorten the distances currently being covered by children in order to receive upper primary level of education (i.e. grades 5 to 7). (5) Multigrade teaching will help to foster attitudes of greater independence and self-reliance at school and at learning generally. (6) Multigrade teaching helps teachers to monitor the development of each individual child since the principle is more on childcentred approach to teaching. (6) Multigrade teaching develops a communal approach to learning as different grades come together under one roof. (8) The system helps teachers to have a broader overview of the curriculum. (9) Teachers will develop more effective discipline measures that are based on an understanding of each individual child.

Some of the concerns the authorities have towards the system are that: (i) Multigrade teaching demand a lot of comprehensive assessment of the records of

of each pupils progress and it takes a lot of the teachers time (ii) The system is demanding on the teacher in terms of material preparation and time and not all teachers might be good at solving organization problems. (iii) Ineffective teachers will contribute greatly to poor learning and education of pupils.

CONDITIONS OF IMPLEMENTING MULTIGRADE TEACHING

The condition attached to the implementation of multigrade teaching is that it will only apply in those ungraded schools on condition that there is a two classroom block and two teachers houses. In short communities that are able to meet these two conditions can enjoy the facilities of multigrade teaching. These are the conditions which prevail at the four multigrade plot schools whose conditions in respect to the objectives of this study are presented in Part II.

PART TWO

THE RESEARCH FINDINGS

1. OUTLINE OF THE PROCEEDINGS TO THE INSTITUTIONS

As stated earlier the fieldwork for this study was conducted between late September and early November. The principle participants in the fieldwork were: Dr. G. Lungwangwa, Dr. L.M. Chizinga, Mr. P.M. Machiko (Senior Inspector of Primary Schools, Kabwe Region) and Mr. Mwape (Lecturer Malcom Moffat Teacher Training College. Prior to the main visit to the various institutions, a preliminary visit to the area was conducted in August. The earlier visit was carried out by the consultant, the Senior Inspector of Primary Schools, Kabwe Region, the Regional Inspector of Schools, Kabwe Region and Mr. Lungu (Lecturer, Malcom Moffat Teacher Training College).

The main fieldwork started by a visit to Malcom Moffat Teacher Training College. This is a primary teachers college which has been designated as an institution for the preparation of multigrade teachers in its pre-service training programme. The visit was conducted by Dr. G. Lungwangwa and Dr. L.M. Chizinga and it took the whole day. Those interviewed at the college included the Acting

Principal, Lecturers associated with the multigrade programme, the student teachers who have had exposure to multigrade teaching in their training, and the teachers at the multigrade pilot school attached to the college. A short tour of the multigrade pilot school was conducted.

From Malcom Moffat Teacher Training College the entire fieldwork team visited Kalombe Primary School. The School is on the plateau along the Mkushi-Ndola gravel road. It is approximately an hour's drive from Mkushi to the school. A full day was spent at this school. The subjects that assisted in the evaluation exercise at Kalombe were: members of the parent-teachers' association, the political officials at the ward level, the teachers, parents and pupils. The turnout of the parents for the exercise was extremely overwhelming.

From Kalombe, the team travelled to Luano Valley to evaluate Katetaula, Mwape and Liteta in that order. Luano Valley is not only one of the remotest parts of Zambia but it is the most difficult to reach even with a four wheel drive landrover. The area is engulfed by the inaccessible Muchinga Escarpments. The escarpments are so high and steep in most

parts that driving along the winding road that passes through it has to be at a snail's pace. In fact a journey of eighteen kilometers ends up being covered in three to four hours in certain portions of the escarpment. What adds to the difficulty of the area is that the valley is infested with tsetse fly. In summer-(September to December) the valley is extremely hot and humid which makes travelling very very difficult. The difficulty has mainly to do with the problem of protecting oneself from the tsetse fly bites while ensuring that the vehicle one is travelling in can allow maximum air to offset the heat. The road to the valley is rocky and tyre punctures is a major worry to the road users. Fortunately, there was no tyre puncture which the team experienced while in the valley.

The first school to be visited in the valley was Katetaule Primary School. Like at Kalombe, a full day was spent at Katetaula conducting observations and carrying out interviews with teachers, parents and members of the Parent Teachers' Association. The turnover was equally good.

The second institution to be visited in the valley was Mwape Primary School. Unlike Katetaule Mwape is further down the valley from Mkushi Boma

Ordinarily, the School can only be reached on foot from Mbosha primary school. This is a distance of approximately seventeen kilometers. Fortunately for this team, the long distance on foot was cut short by using a route via chief Shikabeta's Palace to Lunsefwa river. The honourable Chief Mbosha assisted the team in finding the route by personally joining on the trip all the way up to the school. It was not possible to reach the school using the vehicle. Part of the journey to the school was covered on foot.. Like in the other cases, a full day was spent at the school conducting general observation and interviews with members of the parent teachers association, teachers and parents.

The final and most inaccessible school is Liteta primary school. This school can only be reached from Kabwe. From Kabwe one drives to Mulungushi where the vehicle is left on the table mountain. To reach to Liteta one has to descent along a steep slope down to the valley. From the bottom of the table mountain to Liteta is a two day's journey on foot. The whole journey from the table mountain to Liteta and back on foot could take approximately a week to cover all in the midst of the summer heat, tsetse fly and wild animals. The

The team did not reach Liteta primary school mainly because the route followed was extremely inaccessible. In fact the road at one point came to an end and it became difficult to proceed in the thick bush. With regard to this particular school, arrangements had to be made to meet the teachers and some of the members of the Parent Teachers Association during the first week of November. The arranged dates for meeting the teachers and the members of the Parent Teachers Association were from 4th to 6th November. However, it turned out that these dates could not be adhered to by the teachers because of the Grade seven examinations which they still had to supervise. A new date of 8th November was arranged. However, the team could not meet the teachers and parents on the arranged date because they had transport difficulties. In the end the teachers and two members of the Parent Teachers' Association had to travel all the way to Lusaka and they resided at the consultant's home for a couple of days before returning. Liteta is therefore the only school that the team did not physically visit. However, the data collected from the teachers and the parents are extremely representative of the general situation prevailing at the school and its locality.

In most of these places accommodation was usually on the floor in classrooms or other units. Because of the impassable roads, travelling took a lot of time.

Malcom Moffat

(i) MALCOM MOFFAT TEACHER TRAINING COLLEGE

Malcom Moffat Teacher Training College has been designated as the institution for the formal training of multigrade teachers. The training is of course not to be exclusive but an integral part of the existing teacher preparation programme. The reason for visiting the college was to get acquainted with the multigrade training system. The Principal participants in the study at the college were the Vice-Principal, Lecturers and students.

The multigrade teacher training as a component of the pre-service teacher training programme has been nurtured at Malcom Moffat because of the presence of staff that have had great interest in it. The Principal and the Vice-Principal for example had exposure to the multigrade teaching system in Australia in 1970.

The co-ordinator of multigrade teaching in the college (Mr. Lungu) has been extremely interested in the success of this innovation in the teacher training programme. Despite the enthusiasm on the part of some college staff for the success of the programme, a number of problems surround effective implementation of the system. These problems are enumerated below.

1. Multigrade teacher preparation, exists as an appendage and not an integral part of the teacher preparation programme. The introduction of the programme into the college caused a lot of anxiety on the part of staff and the administration. The concerns were that members of staff never had any exposure to multigrade teaching.
2. Since its introduction, multigrade teaching has continued to occupy a status of an extra curricula activity. It has not received any special time on the normal college time-table. Most students get exposed to multigrade teaching in the last few days before teaching practice commences. The absence of multigrade teaching on the college time-table means that the theory of multigrade teaching is not taught at all.

3. Because multigrade teaching has not been formalized as part and parcel of the teacher training programme; students at the college do not take it seriously. Students see it as a filler not as an important component of their training. What aggravates the students' negative attitude towards the programme is that there are no examinations in multigrade teaching. Additionally, multigrade teaching is resented by students because it is considered to be a preparation to teach in the remotest parts of the country a situation they all would like to avoid at any cost.
4. There are four lecturers that are currently involved in the multigrade teaching programme at the college. These lecturers are said to be overstretched because they have full time teaching loads. The absence of remunerations for the multigrade teaching co-ordinators contributes to low enthusiasm on the part of the lecturers involved. One way in which the enthusiasm of the lecturers can be raised, it is felt by the college administrator is through remunerations, and formal training so that staff can get recognition and status.

5. Although the workshops that normally take place a few days before teaching practice commences are directed at implementing the practice, the outcome has been found to be problematic. The problem of effecting multigrade teaching in teaching practice has been a result of lack of resources. It is contended by staff at the college that because of the scarcity of resources, it is difficult for teachers to enhance the concept of independent learning which is the basis of multigrade teaching.

Despite these constraints, staff at the college are positive towards multigrade teaching. The system is considered to be advantageous in a number of respects namely: It enhances independent learning on the part of the pupils; it encourages teachers to adopt pupil centred approaches to teaching; it facilitates revision of materials covered in earlier grades; it enhances more pupil to pupil interaction; it is an important mechanism for realizing the objective of universal basic education to every child. In general, the college staff are of the view that ways should be sought to institutionalize the system in teacher education.

KALOMBE PRIMARY SCHOOL

HISTORICAL BACKGROUND

This school is situated along the Mkushi-Ndola road. It was established in 1965. From 1965 to 1984, Kalombe was a feeder school to Msofu primary school (now a basic school). The concept of feeder school implies that it only went as far as Grade IV after which those pupils that successfully passed the elementary school leaving examination proceeded to the nearest school with upper primary level of education. The nearest upper primary school for students completing Grade IV at Kalombe was Msofu primary. The distance between the two schools is nineteen(19) kilometers meaning that those pupils that found places in Msofu primary school had to be weekly boarders. Prior to the introduction of the multigrade system, Kalombe only served four(4) villages. The school serves an area of eleven kilometres in radius.

The fewer numbers of villages served by the school was caused by the migration of the inhabitants of the area to Msofu and Chief Nkole areas. Part of the reasons accountable for the movement of people away from the area was because of lack of educational facilities for children, especially beyond Grade IV. The outward migration of people from the area resulted in very low enrollments at the school as evident from the situation in 1984 shown in Table I below.

TABLE I

PUPIL ENROLLMENT IN 1984

GRADE	BOYS	GIRLS	TOTAL
1	16	10	26
2	6	21	27
3	6	8	14
4	6	8	14
	34	47	81

This poor enrollment was attributed to the fact that parents and their children alike were not interested in the school because it never provided opportunities for schooling beyond Grade IV. Parents were of the view that Grade IV level of education was inadequate for their children and that it was a waste of time sending them to school. In addition not all of them could afford to send their children to Msofu primary school for weakly boarding because they could not afford the expenses of feeding and clothing them. Before the introduction of multigrade teaching, the status of Kalombe as a feeder school was a disincentive to the educational development of the children in the area. Rather than viewing the school as an institution that provided opportunities for social mobility, most parents and their children considered it as a dead end.

THE INTRODUCTION OF THE MULTIGRADE SYSTEM

Like all other pilot schools, multigrade teaching

was introduced at Kalombe in 1985. The most drastic change that has happened to Kalombe primary school has been a rapid increase in pupil enrollments as indicated in the following table.

TABLE 2

PUPIL ENROLLMENTS SINCE 1985

GRADE	Y E A R S							
	1985		1986		1987		1988	
	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS
1	11	7	18	6	21	20	14	21
2	13	9	9	10	14	3	23	19
3	7	17	6	11	11	10	16	14
4	11	18	7	15	7	13	13	14
5	14	16	8	7	5	12	10	13
6	-	-	15	15	7	10	4	10
7	-	-	-	-	14	12	18	14
Total Enrollment	56	67	63	64	79	80	98	105
GRAND TOTAL	123		127		159		204	

Between 1985 and 1988, the total pupil enrollment in the school increased from 123 to 203. The percentage increase is 65%. When compared to the 1984 figures the percentage of the 1988 enrollment over those of 1984 is 150.6%. The enrollment of both girls and boys has been on the increase. The percentage increase in the enrollment of boys between 1985 and 1988 was 75% while that of girls was 56.7%. Such enrollments

are indicators of real growth in pupil enrollments since the multigrade system was introduced.

The highest increase in enrollments has been at grades I and VII levels. In fact, 1988 seems to be the year that the school has experienced significant increases in enrollments in all the grades. This has posed a problem over multigrade teaching because apart from grades, V and VII most grades cannot be taught under the multigrade system due to large numbers. The school is in all respects on the verge of reverting back to a monograde school. The teachers and parents expressed the same view.

FACTORS ACCOUNTABLE FOR INCREASED PUPIL ENROLLMENTS

The major factor responsible for increased enrollments at Kalombe Primary School is the migration of people back into the area. While the school served only ~~four~~ villages prior to 1985, three hundred families have moved into the area since then. Parents expressed the view that the provision of upper primary level of education at the school has been a major attraction for settling in the area. Most of those that are settling in the area are retirees from the Copperbelt in particular. The newly introduced Chisanga

settlement scheme about ten kilometers from the school has contributed greatly to the population growth in the area. Because of the increasing numbers of children at the settlement scheme, parents from that area expressed the need to establish a multigrade school in the area in order to shorten the distance pupils have to cover travelling to Kalombe.

What has helped the resettlement of people in the area was the introduction of maize growing in 1985. Most people have resorted to maize growing for both consumption and as a cash crop. In addition, cattle raising is becoming an important economic activity. The opportunity for full primary level schooling that has come through the multigrade system is contributing to the economic stability of the families in the Kalombe primary school catchment areas.

THE PRACTICE OF MULTIGRADE AT THE SCHOOL

There are three teachers that are currently at Kalombe primary school. Both the Headteacher and his deputy are trained teachers. The third teacher is untrained. The two trained teachers

had specialized training in multigrade teaching. Their multigrade teacher training experiences lasted for two weeks respectively. These training sessions were at Chalata Primary School in Mkushi in December, 1984 for the Headteacher and at Chongwe Secondary School in August 1986 for the Deputy. The teachers felt that two weeks were not adequate. They expressed a need for more training in multigrade teaching through workshops or seminars for serving teachers and that the concept and practice of multigrade teaching should be introduced in the teacher education curricula in primary teachers' colleges.

The teachers have implemented the system of multigrade teaching vigorously. Since 1985 every pupil has had experiences of multigrade teaching. The current Grade VII pupils were in Grade IV in 1985 and they were taught together under the multigrade system with the Grade III class throughout the year. In 1986, the pupils were in Grade V and they were taught in the same class with the Grade VI class. In 1987, the group was in Grade VI and they were under the multigrade system with the grade V class. In 1988, the pupils were taught as a monograde class in Grade VII. As stated earlier

(page 30) the large pupil enrollments Kalombe is experiencing is rapidly making the school to revert back to a monograde school.

All the methods of multigrade teaching have been practiced by the teachers. However, their experience has been that common timetabling option and the subject staggering option are currently more useful in their case because of the large numbers of pupils that have to be handled.

Because of the increased pupil enrollments at the school teachers expressed a number of problems that they have experienced with multigrade ~~teaching~~. First because of the large numbers of pupils, the educational resources in the school can no longer go round among the pupils. The shortage of resources especially reading materials makes the concept of independent self learning very difficult to implement. Second, increased pupil enrollments has exerted pressure on the sitting space in the classrooms. Currently the available space on student desks in each class is not enough for two or more grades at a time. Third, teachers feel that the increase in pupil enrollments require upgrading the school in order that more staffing can be recruited. A continued classification of the school as a multigrade institution perpetuates immense workload for the teachers where ordinarily there should be five of them.

PUPIL ACHIEVEMENTS

There were no special instruments to measure the pupils' academic achievements in this study. However, teachers were generally of the view that pupils taught under a multigrade system are better prepared for self learning after they have left school. The view was that multigrade teaching contributes greatly to mastery of basic skills by individual pupils which have lasting impact on literacy. Such views need to be validated empirically however.

One measure of the pupil achievement which the study adopted is the pupils' performance on the Grade VII examinations. The first Grade VII at the school was in 1987. There were Twenty four pupils that wrote the examination. Out of that number, three found places in Grade VIII at Mkushi Secondary School, Chipembi Secondary School and Kalonga Secondary School respectively. The first Grade VII class at the school had only one year of exposure to multigrade teaching. The class was a monograde in 1985 and 1987. The only exposure to multigrade teaching was in 1986 when the group was in Grade VI and they were taught in the same class with the

Grade V class. The percentage of pupils that found places in Grade VIII was 12.5% of the class. This is about the progression rate from Grade VII to Grade VIII at the national level. The points obtained by the students were 711, 694 and 681.

SCHOOL - COMMUNITY RELATIONSHIPS

The community has responded positively to the multigrade system at Kalombe primary school. The situation which prevailed prior to 1985 whereby pupils from the area had no opportunities for upper primary education was considered to have been extremely unsatisfactory. The school and the community have formed a very strong Parent Teachers' Association (P.T.A.). Because of the increased pressure on the 1 x 2 classroom block, the P.T.A. mobilized the parents to construct a shelter for Grades I and II. In addition, the P.T.A. managed to raise 600 Kwacha towards the construction of the A. Ed 14 brick building house for a third teacher at the school. The house is now complete and occupied.

The P.T.A. considers the maintenance of the school as its major objective. The association is

currently on a fund raising campaign to raise 10,000 Kwacha for classroom block construction. Parents have been asked to contribute K50 per family towards the project. The spirit of school maintenance the community has embarked on is very evident from the surrounding of the school. Kalombe primary school is probably one of the neatest school in the country. The school surroundings and buildings are extremely clean and impressive to the visitors. The P.T.A. however, envisages a number of problems in collecting money for the construction of the classroom block because parents are in addition involved in raising money towards the Msofu basic school project.

While the parents have welcomed the multigrade system at the school, they expressed a number of problems the school is facing. The P.T.A. is concerned that the increased enrollments at the school contributes to more work for the teachers. The increase in the workload of teachers is of great concern to the parents because it affects the quality of teaching and ultimately the quality of learning will be affected. Parents noted that there are already indications of poor reading abilities on the part of the children. Parents are noticing that their children are not as proficient in reading either the local language or English as they would expect them to be. They felt that one way in which the quality of education can be maintained at the school is by increasing the number of teachers. The community is aware of the implications of

raising the number of teachers from three to five in terms of provision of teachers' houses and additional classrooms. While they are determined to construct the necessary buildings through self help the feeling is that the government should meet them part of the way.

Generally, the impression given by the community is that the multigrade teaching system has been extremely successful at Kalombe primary school.

SUMMARY

The major findings of this study at Kalombe primary school is that the multigrade system has been very successful. Success, in this case, is measured in terms of the extent to which multigrade teaching has contributed to the stability of the community resulting in increased enrolments at the school. The school is now at the point where it needs upgrading to a normal upper primary monograde school. The multigrade system has in this regard contributed to the development of a positive school-community relationship. The community is able to view the school in positive terms as an institution that holds opportunities

for the education of its children. This view is expressed in the positive way in which the community nurtures the school.

KATETAULA PRIMARY SCHOOL

POSITION

Katetaula primary school is in Luano Valley. It is accessible by road. The school is about 15 kilometers from Chingombe Mission a distance that takes about five hours on foot. People in the Ketetaula area get their medical facilities from the Zambia Flying Doctor Service Clinic at Chingombe Mission. The school serves 27 villages containing about 97 families. The furthest village from the school is 8 kilometers. Most of the villagers in the area are peasant farmers growing maize in very small gardens. The crop which is grown three times a year is largely for subsistence.

HISTORICAL BACKGROUND

Katetaula primary school was established in 1955. Until 1985 the school was a feeder school to Chingombe Mission. Pupils who used to pass the locally organized Grade IV leaving examinations could enroll as weakly boarders at Chingombe Mission. However, most pupils could not proceed to Grade V because their parents did not have enough food to feed them in the boarding school.

The greatest advantage of the multigrade system according to the parents is the opportunity it has given to their children to proceed to Grade V, VI and VII. Most parents admitted that there was a general apathy towards schooling in the whole area prior to 1985. Parents did not see the value of sending their children to school when Grade IV was the terminal point. The practice generally was to engage children in early marriages or to keep them at home in order to assist parents in the daily chores. The attitude of the community towards the school and education in general has improved since 1985.

SCHOOL - COMMUNITY RELATIONSHIP

The community is satisfied with the multigrade system at the school. The school has two classroom blocks, a one by one permanent structure and a one by two brick and grass thatched block. The latter is constantly under repair by the parents. The community would like to turn the one by two brick and grass thatched block into a permanent structure but people are very poor and they cannot afford the expenses. However, the community is currently building a teacher's house through self help. The P.T.A. feels that the numbers of children attending school has increased since the introduction of the

multigrade system. The numbers of children attending school shown in Table 3 indicate a significant improvement. The total pupil enrollment at the school has increased from 49 in 1980 to 113 in 1988 representing a 56.6% rise. The increase in the pupil enrollments is a result of the willingness of the parents to keep their children in school. A major problem which the P.T.A. is aware of is the high attrition rate among the girls as shown in the enrollment tables. The cause of high attrition rate among girls is early marriage and the P.T.A. is slowly encouraging parents to keep their female children at school. The task is not an easy one because the major cause of early marriages among girls is poverty.

It should however, be stated that the school uniforms donated to the pupils by the Childrens' Christian Fund (C.C.F.) has contributed to the stability in pupil enrollment and attendance at the school.

MULTIGRADE TEACHING AND THE PUPILS ACADEMIC ACHIEVEMENT

There were eight pupils that wrote the Grade VII examinations in 1987. Four pupils managed to find places in Grade VIII. However, two out of four pupils admitted to Grade VIII have since come back because their parents could not afford to pay the termly boarding fees of K100. The condition was considered extremely unfortunate because the District Education Office should have assisted the pupils to secure Government Bursaries.

TABLE 3

ENROLMENTS

KATETAULA PRIMARY SCHOOL

1980	<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
	1	13	8	21
	2	6	0	6
	3	8	4	12
	4	4	6	10
	<u>TOTALS</u>	<u>31</u>	<u>18</u>	<u>49</u>

1981	<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
	1	14	16	30
	2	8	3	11
	3	6	2	8
	4	7	4	11
	<u>TOTALS</u>	<u>35</u>	<u>25</u>	<u>60</u>

1982	<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
	1	10	20	30
	2	11	5	16
	3	9	2	11
	4	4	1	5
	<u>TOTALS</u>	<u>34</u>	<u>28</u>	<u>62</u>

1983	<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
	1	10	15	25
	2	5	7	12
	3	11	6	17
	4	6	2	8
	<u>TOTALS</u>	<u>32</u>	<u>30</u>	<u>62</u>

1984

<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
1	11	20	31
2	9	7	16
3	6	7	13
4	9	5	14
<u>TOTALS</u>	<u>35</u>	<u>39</u>	<u>74</u>

1985

<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
1	9	8	17
2	7	14	21
3	11	8	19
4	5	5	10
5	8	5	13
<u>TOTALS</u>	<u>40</u>	<u>40</u>	<u>80</u>

1986

<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
1	6	15	21
2	6	3	9
3	10	14	24
4	9	7	16
5	4	2	6
6	7	2	9
<u>TOTALS</u>	<u>42</u>	<u>43</u>	<u>85</u>

1987

<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
1	11	11	22
2	5	12	17
3	8	4	12
4	6	11	17
5	6	2	8
6	6	2	8
7	8	1	9
<u>TOTALS</u>	<u>50</u>	<u>43</u>	<u>93</u>

1988

<u>GRADE</u>	<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
1	14	16	30
2	11	11	22
3		12	12
4	7	5	12
5	6	8	14
6	10	0	10
7	6	1	7
<u>TOTALS</u>	<u>60</u>	<u>53</u>	<u>113</u>

All grades at the school have since 1985 been taught under the multigrade system. The current multigrade teaching combinations are Grades I and II, Grades III and IV and Grade V, VI and VII. The combinations are possible because the school has three teachers two of whom are trained and the third is an untrained teacher, from the enrollment figures, it is likely that the multigrade system will continue at this school for a considerable period.

TEACHERS' ATTITUDES TOWARDS MULTIGRADE TEACHING

Out of the three teachers, only one the teacher in charge had formal training in multigrade teaching (see appendix -). The other teachers have been taught the basic skills of multigrade teaching by the teacher in charge. The problems faced by teachers are listed below.

1. Under the multigrade system, oral language lessons in English turn to be very difficult to teach in the upper primary sections. The problem applies to the lower grades too. In Grade one for example, most of the work covered the few weeks of the first term is oral work and children in the other grade group have little time with the teacher.
2. The 30 minutes period in the lower primary classes is not enough. Teachers need more time to explain and give the necessary instructions in each grade group. This point was raised in all schools.

3. Lack of School facilities hinder effective teaching. For example, apart from English readers which are available to all grades, there are no other textbooks in the school. The teachers have no handbooks. The chalkboards are too small and cannot contain work for three classes. Some classrooms have no desks and pupils have to sit on the floor.
4. Teaching schedules are at times disrupted because of famine in the area. Additionally teachers find little time to prepare adequately because they spend most of their time on the fields chasing baboons from their small portions of maize.

The teachers at this school and not express any special problems with multigrade teaching. They were very conversant with the various methodologies applicable to multigrade teaching. Their main concern is the own availability of resources necessary for effective teaching and learning.

SUMMARY

Unlike Kalombe primary school, multigrade teaching will continue for a much longer time at Katetaula. The multigrade system has developed positive attitudes towards the schools within the community. The population within the area is slowly being stabilized. However,

there are three major problems that will continue to affect the operation of the school. These problems are (i) non availability of educational resources, (ii) traditional customs and practices especially as they relate to early marriages on the part of girls and (iii) general poverty within the local community which hinders the community's ability to generate resources for the maintenance of the school and children while they are in school.

MWAPE PRIMARY SCHOOL

POSITION

Mwape primary school is near the boarder with Lusaka rural district. It is about 27 kilometers from Mbosha, the nearest primary school within Mkushi District. The school is along the Lunsenfwa river and it is less than a kilometer from the banks of the river. The school is not easily accessible from Mkushi District. To reach the school within Mkushi, one has to walk a distance of 27 kilometers from Mbosha. However, it is much easier to reach the school from Lusaka rural District. From Lunsefwa on the Great East Road, it is possible to drive all the way up to the Ferry on the Lunsefwa river. Mwape primary school is about two kilometers from the ferry. The proximity of the school to the river causes it to get flooded during the rain season.

HISTORICAL BACKGROUND

Mwape primary school was established by the Jesuit missionaries as a village school in 1945. A permanent structure was built in 1968. From 1945 to 1963 Mwape was a feeder school to Chingombe mission, a distance of about 75 kilometers away. During that period, children completing Grade IV at the school were expected to go for upper primary at the mission station. According to the parents, most children never hoped to go for upper primary because the distance was too long and most parents could not afford to pay the 75 Ngwee annual boarding fees. When Mbosha primary school was upgraded in 1964, Mwape became a feeder school to Mbosha. The distance between the two schools was much shorter in comparative terms. It was estimated that there were about 5 pupils who used to find places in Grade V at Mbosha every year between 1964 and 1984. Most of these that proceeded to Grade V did not finish the first year because parents could not afford to feed them in the weakly boarding school. Only children that used to stay with relatives in Mbosha who could complete upper primary education. Between 1970 and 1984, only 3 individuals who initially started formal education at Mwape completed Grade XII. From 1965 to 1984, Mwape primary school was served by 20 villages. The number of villages serving the school has dropped to 10 and this has affected pupil enrollments since 1985.

PUPIL ENROLLMENTS

The introduction of the multigrade system in 1985 resulted in increased enrollments in general. However, the Parent Teachers' Association (P.T.A.) have great concerns over the pupil enrollments at the school. The greatest problem facing Mwape is to get children to enrol for Grade I. Most of the children enrolled in Grade I in 1988 are below 6 years of age. There are a number of factors affecting pupil enrollment at Mwape. The situation that prevailed at Mwape in 1985 and 1986 was that pupils came from Mkushi and Lusaka rural areas. Parents in Lusaka rural have since 1987 preferred sending their children to Shakabeta primary school about 10 kilometers from Mwape primary school. The major pull to Shikabeta on the part of Lusaka rural villagers that are within the vicinity of Mwape is the Christian childrens' fund assistance that was started at this school in 1987. Parents prefer to send their children to Shikabeta irrespective of the long distance because they are able to get school uniforms through C.C.F. Another major problem affecting the population within the Mwape catchment area is the migration of people to other areas within the district. Parents acknowledged that farming has become a major economic undertaking in the area and people are constantly in search of better farming lands. It is in

TABLE 4

PUPIL ENROLLMENTS AT MWAPE PRIMARY SCHOOL

	1983		1985		1986		1987		1988	
GRADE	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS	BOYS	GIRLS
1	5	3	18	12	25	20	8	8	8	9
2	4	4	4	7	6	7	12	13	12	11
3	4	6	3	5	1	5	9	15	9	5
4	4	3	4	4	3	6	2	1	2	5
5	-	-	3	7	4	4	3	6	3	3
6	-	-	-	-	5	7	6	4	2	7
7	-	-	-	-	-	-	6	4	9	3
TOTAL:	17	16	32	35	44	49	46	51	45	43
GRAND TOTALS:	33		67		93		97		88	

this regard that there are ten villages in the area at the moment with only 50 families serving the school with children. The drift from the area is predicted to continue and teachers are of the view that there might not be any children to enrol in Grade I in 1990.

THE MULTIGRADE SYSTEM AND ITS ACHIEVEMENTS

There are two teachers at Mwape and all grades have been taught under the multigrade system since 1985. One teacher teaches Grades I and II and Grades III and IV as multigrade classes in the morning and afternoons respectively. Another teacher handles Grades V, VI and VIII as one multigrade.

Like in all other schools, the major problem hindering effective multigrade teaching at Mwape is lack of resources. The school has serious shortages of educational resources of all types. The teacher, did not even have a log book for visitors. This is a major handicap to multigrade teaching. Another major problem is workload. Like Liteta where there are only two teachers, Mwape teachers expressed concern over their workload during times when only one teacher has to remain at the school. At times, when one teacher had to take charge of all the grades, there is too much work on the part of the teacher. Requests were made for an additional teacher, even an untrained one.

Teachers did not find major problems with the multigrade teaching if only resources were available. The only problem they have is that they are unable to organise periods for creative work or practical skills because they teach both in the mornings and afternoons. The production unit is almost non-existent in practice.

Despite these problems, four out of 8 pupils that wrote the Grade VII examinations in 1987 qualified for Grade VIII. Two pupils qualified for boarding schools one at Mumbwa secondary and another pupil at Mkushi secondary school. The two pupils that qualified for day secondary school did not proceed to Grade VIII because they did not have relatives to keep with.

THE SCHOOL - COMMUNITY RELATIONSHIP

Among all the multigrade pilot schools in Luano Valley Mwape has the least assistance from the community. There is very little enthusiasm on the part of the community to assist the school principally because most parents do not have the means to do so. For example, nothing has been done by the community to rehabilitate, the school buildings(classroom block and teachers' houses) and pupils' latrines which are on the verge of collapsing. The P.T.A. has no plans set up to assist the school in any other way.

SUMMARY

Mwape primary school, unlike Liteta and Katetaula, has severe problems which are threatening its continued existence as a viable educational institution. Its location is a health hazard to human lives in the rain season because of floods. The continued migration of people from the area will keep the school poorly enrolled for a long time to come. As far as Mwape is concerned, multigrade teaching is a phenomena that will not easily be changed. There is a lot of effort that should be made to build the image of the school. This could be done through varied forms of assistance whose objective should be to improve the quality of education at the school. Efforts should be made to assist the school and the community at the same time.

LITETA PRIMARY SCHOOL

POSITION

This school is situated in the heart of Luano Valley about fifteen kilometers west of the confluence of Mulungushi and Lunsemfwa rivers. The school can only be reached from Kabwe. Its position is such that no vehicle can reach the school. To reach the school, one has to drive from Kabwe to Mulungushi where the vehicle is left at the table mountain of

the Muchinga escarpment. From the table mountain one has to descend down the hills to the Valley itself. The process of descending from the table mountain to the valley can take up to six hours. From the foot of the hill to Liteta primary school through Chimika primary school is a journey of about two days on foot. This is the most difficult school to reach. The journey on foot from the table mountain to the school and back can take up to six days.

HISTORICAL BACKGROUND

Liteta primary school was established in 1944 as a village school by the Jesuit Fathers. Between 1944 and 1964, the school was managed by the Jesuit Fathers who were stationed at Chin'gombe Mission about 64 kilometers away. From its establishment until 1985 Liteta was an elementary school providing education up to Grade IV. Up until 1964, all those that went to Grade V had to travel to Chin'gombe Mission where they stayed in the boarding for the whole term. The missionaries played a major role in assisting the children that went to Chingombe Mission for upper primary education. Since 1965 when the government took over the running of the school, children from this school had difficulties getting upper primary level education. The condition was worsened by the withdrawal of the missionaries' assistance to the

children from the school. The nearest school, Chimika, was upgraded in 1983.

Liteta primary school faced immense problems since 1965. Between 1973 and 1984, the school was managed by untrained teachers because no trained teachers were prepared to go to the school. From 1977 to 1984 only one untrained teacher was running the school. The school was closed for two years from 1977 to 1978 because of very poor enrollments. In these years, there were 7 children enrolled in all grades. It was considered not cost effective to keep running the school with such low enrollments.

There are a number of factors that account for low student population in the catchment area of Liteta primary school. First, a lot of people moved out of this area in 1950, when Chief Liteta was dethroned by the colonial government. It has been difficult to retain people in the area since 1950 because the subjects of Chief Liteta never accepted Chief Chembe under whose authority the area fell henceforth. Ever since Chief Liteta was dethroned, the people of the area considered themselves "stateless" and they moved out of the area in large numbers. The second factor is environmental. Mulungushi river where the school is situated is

heavily infested with crocodiles and it is usually flooded in the months of January and February. The combination of floods and crocodiles has worked to discourage parents from sending their children to school. According to the teachers, the school is usually closed in the months of January and February because of absenteeism in all grades. Teachers have suggested that the school should follow its own calendar that should reflect the environmental constraints. The first and third terms need to be adjusted such that term one should start in the second week of February while the third term ends in the last week of December. Parents consider the time wasted in the first two months of term one as a major disadvantage on the education of their children. Most of them preferred sending their children to the schools on the plateau.

Famine is another factor that has contributed to poor attendance at Liteta. The major cause of famine are floods and monsoons which destroy whatever crops are grown. There is usually not enough food to go round the members of a family. Children are generally discouraged from attending school because they have nothing to eat while at school. Parents tend to withdraw their children from school when they are unable to feed them adequately. One way in which families cope with the problem of famine is to deploy children around the fields to chase away monkeys. It should be emphasized

that the task of chasing monkeys starts from the time of planting and lasts until harvesting time. For most parents therefore, sending children to school had great opportunity costs. It is in this regard that children were either discouraged from going to school or withdrawn from it altogether. The situation was worse when parents could not see any opportunities for upper primary education for their children.

THE PRACTICE OF MULTIGRADE SYSTEM

Liteta primary school will be under the multigrade teaching system for a long time to come. From the data in table 5, the enrollments at the school has improved slightly but not as rapidly as at Kalombe primary school. For example, the total enrollments in each grade in 1988 were: Grade I (12) Grade II (9) Grade III (12), Grade IV (9), Grade V (16), Grade VI (7) and Grade VII (9). These are very low enrollments by any standard. The only way the school can be run at the level of upper primary education is through a cost effective system like multigrade teaching. Indeed, multigrade teaching has been practiced at the school since its introduction in 1985. With the exception of Grade VII all grades are taught under the multigrade system (see the 1988 school timetable for details). The Grade VII class is taught as a monograde because the end of year examinations at this level compel teachers to give special attention to this grade.

TABLE 5

LITETA PRIMARY SCHOOL: PUPIL ENROLLMENTS 1979 1988

	1979		1980		1981		1982		1983		1985		1986		1987		1988		1989
GRADE	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
1	1	2	1	5	-	-	8	6	14	14	9	12	3	1	10	8	5	7	
2	2	5	1	5	4	14	2	10	5	12	8	10	11	11	7	8	4	5	1
3	9	3	3	3	5	-	2	5	4	8	4	10	7	10	7	5	6	6	1
4	-	-	-	-	-	-	-	-	-	-	4	7	4	8	8	8	7	2	
5	-	-	-	-	-	-	-	-	-	-	4	4	4	8	3	6	9	7	
6	-	-	-	-	-	-	-	-	-	-	-	4	3	4	5	3	2	5	
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	1	5	4	

GRADES 1 AND II MULTIGRADE TIME TABLE 1988

DAY	GRADE	1	2	3	4	5	6	
		13.30-14.00	14.00-14.30	14.30 -15.00		15.00-15.15	15.15-15.45	15.45-16.15
1	I	English Language	Mathematics	Icibemba	B	Creative	Activities	P/E
	II	Maths	English Language	Icibemba		R	Creative	Activities
2	I	Maths	English Language	P/E	E	Reading	Reading	Icibemba
	II	English Language	Maths	P/E.		A	H/W	Creative Activities
3	I	English Language	Maths	R.E.	K	English Language	Reading	Icibemba
	II	Maths	English Language	R.E.		English Language	H/W	Icibemba
4	I	Reading	Reading	English Language		Maths	Reading	R/E
	II	Maths	Reading	Reading		English Language	H/W	R/E
5	I	Maths	English Language	Reading		Icibemba	H/W	Creative Activities
	II	English Language	Reading	Maths		Icibemba	H/W	Creative Activities

GRADES III & IV AND GRADES V & VI MULTI-GRADE TIME TABLES 1988

DAY	GRADE	1 07.00 07.30	2 07.30 08.00	3 08.00 08.30	4 08.15 08.45	5 08.45 09.15	6 09.15 09.45	Grade	1 07.00 07.40	2 07.40 08.20	3 08.20 09.00	Grade	4 09.30 10.10	5 10.10 10.50	6 10.50 11.30	7 11.30 12.10
1	III	MATHS	READ	ING H/W	ENG LANG.	SOCIAL STUDI- ES	R.E.	V	ENG	R.E.	ICIBE- MBA	B	ENG	MATHS	S/ STUDIES	SOCIAL STUDIES
	IV	ENG LANG	SOCIAL STUDI- ES	MATHS	H/W	ICIBE- MBA	R.E.	VI	MATHS	R.E.	S/S	R	SCIE	ENG	ICIBE- MBA	MATHS
2	III	ENG LANG	H/W ICI	BEMBA	READ ING	MATHS	P.E.	V	RELI- GIOUS	EDUC- ATION	ICIBE- MBA	E	S/S	ENG	MATHS	SCIE
	IV	MATHS	READ- ING	H/W	S/S	ENG LANG	P.E.	VI	R.E.	R.E.	ICIBE- MBA	A	ENG	MATHS	SCIE	ENG
3	III	MATHS	ICI- BEMBA	ENG LANG	CREA ACTI	TIVE VITIES	READ		ENG	MATHS	BEMBA		SCIE	SCIE	CRAFTS	CRAFTS
	IV	ENG LANG	READ- ING	MATHS	CREA ACTI	TIVE VITIES	S/S	VI	MATHS		MATHS	K	SCIE	SCIE	CRAFTS	CRAFTS
4	III	MATHS	ENG	BEMBA	S/S	C/A		V	ENG	MATHS	P.E.		MATHS	S/S	R.E.	MUSIC
	IV	ENG	MATHS	READ- ING	READ- ING	H/W	S/S	VI	BEMBA	BEMBA	P.E.		ENG	R.E.	S/S	MUSIC
5	III	ENG LANG	MATHS	R/E	R/E	READ- ING	MUS- IC	V	ENG	MATHS	S/S		P.E.	CRAFTS	CRAFTS	
	IV	MATHS	ENG LANG	P.E.	R.E.	BEMBA	MUS- IC	VI	BEMBA	ENG	S/S		P.E.	CRAFTS	CRAFTS	

PUPILS ACADEMIC ACHIEVEMENTS

According to the teachers, the pupils' academic standard at the school was extremely low. The teachers that were sent to the school in 1985 could not find any single pupil who could read and write the local language or English. Teachers had to develop these basic skills even to pupils that were in Grade IV. The low academic achievements of the pupils is attributed to the fact that the school was generally neglected for a period of twelve years until 1985. It can be speculated that Liteta primary school has probably never been inspected since it became a government school in 1965.

The results of the first Grade VII class was however, impressive. There were 6 children in Grade VII in 1987. Four pupils wrote the examinations at the end of the year while two pupils refused to sit for the examinations because no one could support them financially even if they qualified for Grade VIII. Out of the four that sat for the examination, two qualified for Grade VIII. These were a boy and a girl.

Both teachers and parents feel that the educational standard at the school has improved significantly since 1985. Pupils no longer have to repeat any grade as the case was prior to 1985. The improvements on the pupils' basic skills has created a positive attitude towards the school on the part of the community.

SCHOOL - COMMUNITY RELATIONSHIP

There has been an improvement in attitude towards the school on the part of the community. The population is slowly getting stable. For example, whereas there were about 400 people in the area in 1985 the population has increased to 600 now. The parents do appreciate the opportunities which the multigrade system has brought into the area especially with regard to upper primary education. Instead of migrating to the plateau to look for upper primary education, a number of them are settling in the area.

The problem that will be with the school for a long time however is pupil absenteeism. Pupils' attendance is extremely erratic because of the problems of flooding and famine. The rain season is a difficult period in the school. In addition to the problem of crocodiles, pupils fear to walk in tall grass in the rain season because of lions and other wild animals. This is a genuine concern because some children have to travel distances of about 18 kilometers to the school everyday.

One way the problem of absenteeism can be solved is to establish ~~weekly~~ boarding at the school. However, both the teachers and parents feel that weekly boarding is a non starter because

parents do not have sufficient food to feed children in weekly boarding. Liteta primary school is unique among the multigrade schools in Mkushi district. Educationally the success of the school will largely depend on the solutions which could be found to the school's problems.

THE PROBLEMS FACED BY THE SCHOOL

SCHOOL BUILDINGS: According to the Buildings Supretendant at the District education office in Mkushi, the school buildings at Liteta and Mwape have been condemned. Between 1973 and 1985, the untrained teachers at the school used to stay in the villages. Consequently, school buildings were destroyed by fire, wind and termites. The classroom block and the teachers' houses still have no doors since they were destroyed by fire. The floors of these buildings are riddled with pot holes. The window panes are all broken. The walls are severely cracked while the logs supporting the roofs are very weak after having been eaten up by termites. The buildings need urgent repair because they are a threat to human lives.

SCHOOL SUPPLIES: Liteta lacks all the basic requisities which contributes to effective teaching and learning. Teachers have no teachers' handbooks, there are no textbooks in subjects like Social Studies, English Language, Mathematics, and Bemba. Apart from the supply of 75 exercise books received in the first term of 1987,

the school has never received any school supplies since 1985. The school does not have any storage facilities for the storage of teaching materials and other available properties of the school. A school that is very much in isolation needs certain basic tools to help in minor repairs of school property. However, there is no single tool at the school. Because of the total neglect given to the school in the years preceeding multigrade, school equipments like hoes, sickles, buckets, axes, and rakes were lost. The disappearance of these tools has created problems of clearing the bush that grew around during the period it was deserted.

TEACHERS' WELFARE: Teachers face immense problems at this school. Liteta is an area where teachers have to constantly pray for the continued good health of their families. Falling ill at this place means walking a distance of 17 kilometers to the Zambia Flying Doctors Service's centre for medical attention. This is definitely not a situation which any patient would like to face. For the teachers, falling sick means a lot of disruption to the teaching schedules. On the other hand, teachers undergo through major difficulties to get their food supplies. Since the area is always under constant famine, teachers cannot buy their food from the local communities. Most of their food has to

come from Kabwe. The expenses that teachers have to incur in transporting their food-stuff, make the final costs prohibitive. For example, it is estimated that by the time a 25 kilograms of mealie meal reaches Liteta primary school a teacher would have incurred about K45 in transportation costs thereby raising the cost to K60 from K15. The situation is worse in the rain season because travelling is extremely difficult and foodstuffs like mealie meal are easily destroyed by water. Because of these hardships, teachers have in fact suggested that the periods that they should stay in such areas be shortened.

TEACHING: Because of floods and other related problems, teachers find themselves having to teach several groups within the multigrade class. This is because special attention has to be given to children that are forced to miss several classes due to environmental problems within the area. In this way, teachers tend to be over-worked.

TEACHERS' ATTITUDES TOWARDS THE MULTIGRADE SYSTEM

In spite of the insurmountable problems that teachers at Liteta face, they are very dedicated to their work. What seems to be a major problem on their part is a feeling of neglect. According to them, senior officers at the district and provincial levels are not sympathetic

to the special needs and problems of such multigrade schools like Liteta. Such total neglect is reflected in a number of areas according to the teachers. First, schools like Liteta are never visited by inspectors and other education officers. Second, whereas buildings at Liteta are on the verge of collapsing, school maintenance work in the Central Province tend to be concentrated in schools that are accessible to the education officers. Third, education resources are not equitably distributed because multigrade schools like Liteta do not receive their share even of those materials and equipments meant for such schools. One example which teachers cited to support their case is the experience they have had with the District Education Office. In 1985, 20 classroom desks were sent to the school. However, only 6 desks have been assembled because the bolts supplied by the District Education Office were not the right size. Requests for the District office to supply the school with the right bolts have not received any positive response. The teachers have been constantly told by the district office to buy the bolts using money from the production units. The school has, since 1985 not been able to realize any money from its production units.

Another example of neglect of multigrade schools referred to by the teachers is the practice of sending multigrade trained teachers to monograde schools and vice versa. By multigrade trained teachers reference was made to those student teacher trainees who have

had a few days exposure to multigrade teaching while at college. The teachers were of the view that multigrade schools should be supplied with teachers that are familiar with the method. Failure to this creates a lot of work on the part of the multigrade trained teachers who are forced to provide in-service training sessions to their colleagues.

Apart from the problems enumerated above, Liteta teachers have no problems with the multigrade teaching approach. They are very familiar with the various teaching methods. Their only complaint is that the school should be supplied with one more teacher. In particular, they need a female teacher who can teach needlework or homecraft. An additional teacher will help ease the teaching load in cases where one of the teachers falls ill or has to travel elsewhere. The teachers' plea is for special consideration in the allocation of resources like Manila paper, chalkboards, textbooks, rulers, rubber, pencils, exercise books, tools and storage facilities like cupboards. This is a genuine concern because multigrade teaching require sufficient resources.

SUMMARY

The multigrade system at Liteta is greatly appreciated by the community. The gesture of this appreciation is in the following ways: (1) in 1987

the community donated money to purchase the Grade VII examination box; (ii) Parents have come forward to contribute their labour in building pit-latrines; (iii) the community have taken it as their responsibility to repair the blown-off roofing sheets to the teachers' houses. The Chief, Honourable Chembe has embarked on a vigorous educational campaign among his people. He constantly urges his people to work towards the development of the school in the following areas:

- (i) that village headmen and P.T.A. members should work cooperatively to solve the problems of the school;
- (ii) He constantly urges parents whose children have left school to send them back; (iii) He discourages parents from engaging their children in early marriages and instead concentrate on school work; (iv) He urges his subjects to work voluntarily towards, the school projects;
- (v) He threatens parents of children that abscond from school with punitive measures. (vi) The chief's messengers are usually sent to distant villages to enrol children for the new year. This is one way of helping teachers.

There is a positive image towards education within the community served by Liteta primary. Parents are confident that solutions will be found to some of the problems currently being faced by the school. Liteta is indeed a very difficult area from an environmental

standpoint the success of the multigrade system at the school in stabilizing the community should be followed by positive official responses from education authorities.

THE ADMINISTRATION OF THE MULTIGRADE SYSTEM

The management of the multigrade schools is at different levels. The Swedish International Development Agency (SIDA) is the sponsor of the multigrade project. SIDA has since 1985 provided financial and material resources to the project (see Table 6). The Provincial education office is in charge of the distribution of whatever resources are received to the district(s). The actual management of resource allocation to schools is done at the district level.

TABLE 6

RESOURCE ALLOCATIONS TO MKUSHI DISTRICT THROUGH SIDA SUPPORT

(A) FINANCIAL ALLOCATIONS

<u>YEAR</u>	<u>AMOUNT</u>	<u>PURPOSE</u>
1985	K8,000	For the 4 multigrade pilot schools only.
1986	K8,200	For multigrade school inspection.
1987	K3,000	Multigrade workshop. One seminar was organized at Malcom Moffat Teacher Training College.
1988	K8,500	For seminar: One was organized in January, 1988 at Malcom Moffat Teacher Training College
1988	K8,000	Multigrade Pilot Schools evaluation.

TABLE 7

EDUCATIONAL MATERIALS DONATED BY SIDA TO
MKUSHI DISTRICT

<u>YEAR</u>	<u>ITEM</u>	<u>NUMBER</u>
1985	In the House	3080
"	In school	3040
"	Reader 3	1118
"	What are they Doing	3080
"	In the Market	2356
"	On the Road	1848
"	Exercise Books Ex. 8	9200
"	Exercise Books Ex. 9	9600
1986	Grade 3 Pupils Maths textbook	2755
"	Reader 3	3968
"	Exercise Books Ex.8	12808
"	Exercise Books Ex.9	1138
"	My Studybook	2319
1987	Reader Grade 1 Term 2 Teachers Handbook.	80
"	Reader Grade 1 Term 3 "	72
"	Reader Grade 2 Term 1 "	72
"	Language Grade 2 Term 2 "	72
"	Language Grade 2 Term 3 "	51
"	Language Grade 3 Term 1 "	1188
"	Reader Grade 3 Term 3 "	90
"	Language Grade 4 Term 1 "	87
"	Language Grade 4 Term 2 "	86
"	Language Grade 4 Term 3 "	89
"	Reader Grade 4 Term 1 "	88
"	Language and Reading Grade 7 Term 1	166
"	Language and Reading " 7 Term 2 "	63
"	Language and Reading Grade 7 Term 3 "	76
"	Language Grade 1 Term 1 "	90
"	" Grade 1 Term 2 "	102
"	" Grade 1 Term 3 "	84
"	Reader Grade 1 Term I "	90
"	Bemba Grade 1 Term I "	100

TABLE 7 Continued/....

<u>YEAR</u>	<u>ITEM</u>	<u>NUMBER</u>
1987	Reader Grade 3 Term 2:Teachers Handbook	55
"	Language Grade 3 Term 1 " "	60
"	Grade 7 Reader 7	3661
"	Grade 5 Reader 5	11,000
"	Mulenga	11,000
"	Jelita	11,000
"	Grade 5 Pupils Maths Textbook	11,000
"	Grade 3 " " "	2,755
"	Exercise Books Ex.8	71,000
"	Exercise Books Ex.9	75,000
1988	Atlases	1525
"	Language Grade 3 Term 1 Teachers Handbooks.	60
"	Exercise Books Ex. 8	6050
"	Exercise books Ex. 9	4200

TABLE 8

ALLOCATIONS OF EDUCATIONAL RESOURCES TO MULTIGRADE PILOT SCHOOLS

QUANTITY ALLOCATED TO EACH SCHOOL

<u>YEAR</u>	<u>ITEM</u>	<u>KALOMBE</u>	<u>KATETAULA</u>	<u>MWAPE</u>	<u>LITETA</u>
1986	1. Maths Book 5	20	20	20	20
	2. Exercise Books Ex. 9	400	800	800	800
	3. My study Book	40	20	20	20
	4. Jelita	40	20	20	20
	5. In the House	40	20	20	20
	6. Mulenga	40	20	20	20
	7. In School	20	20	20	20
	8. Exercise Books Ex. 8	800	400	400	400
	9. What are they Doing	20	20	20	20
	10. Reader 7	20	20	20	20
	11. In the Market	20	20	20	20
	12. Reader 5	20	20	20	20
	13. On the Road	20	15	15	15
	14. Reader 3	20	15	15	15
	15. Maths Book 3	20	20	20	20
1988	1. Atlases	20	10	12	10
	2. World Map	3	3	3	3
	3. One Book of each of the Teachers Handbooks listed above is recorded as having been distributed to the School.				

TABLE 9

FUNDING FOR EDUCATIONAL SUPPLIES IN MKUSHI FROM SIDA

<u>YEAR</u>	<u>AMOUNT</u>
1984	K25,000
1985	K27,000
1986	K37,000
1987	K45,000
1988	K75,000
TOTAL:	K209,000

From the data in tables 6, 7, 8, and 9 above, SIDA has played a major role in assisting Mkushi District with educational resources. The District is probably one of the best stocked with educational resources in the country. With regard to the multigrade pilot schools, the problem is that they are not given any special consideration when resources are distributed to schools. According to the District Education Officers, the SIDA donated resources are distributed to all the 79 schools in the District. In fact, the impression the consultant got from discussions with the District Education Office was that the multigrade schools in the Valley are at a disadvantage because they have to compete for resources with a number of multigrade schools that have been established on the plateau. Thus far, the District Education Office has established six multigrade primary schools on the plateau and five more are scheduled to be opened in 1989. All these multigrade schools have to get shares from the resources funded by SIDA.

Because of ease access to the District Office, schools on the plateau have advantages in procuring resources from the District Office over those in the Valley where transportation is difficult.

There are no special administrative problems faced by the District Office over the multigrade schools. In the view of the Education Officers, the multigrade system has solved a number of educational problems in their District. The system has helped to extend full primary education opportunities to areas that would otherwise not have them. The multigrade system is also considered as having solved the problem of educational expenses in the District. For example, ordinarily, a full primary school needs 5 teachers hence five teachers houses. Additionally it also needs about 5 classrooms. Instead of providing these facilities only two classrooms, and two (or three) teacher's houses are needed under a multigrade system. The District Education Office consider it to be very cost effective. It is because of its cost effective advantage that a number of multigrade schools are being established in the District. The officials are pleased with the quality of instruction and learning taking place in the multigrade schools. A multigrade teaching model school has been established in Mkushi Boma for the teachers of multigrade schools to learn from.

CONCLUSION

One conclusion that emanates from this study is that multigrade teaching in Zambian schools is an effective mode through which universal basic education could be delivered to marginal communities in the remotest parts of the country. In all the four schools visited, multigrade teaching has minimized the costs of education to the family and the individual child. The costs that have been brought to a minimum are both direct and indirect. On the part of the individual child, multigrade teaching has minimized the costs in time spent on travelling to school especially for upper primary level education for which some students used to travel more than thirty kilometers. Multigrade teaching has minimized the distance between upper primary level education and the child. By so doing, it has eradicated the isolation between the family and the school child especially in cases where the latter had to spend a week (or a term) in weekly boarding. Weekly boarding had its own costs on the individual child because of the burden of having to fend for oneself while attending to educational responsibilities.

On the part of the parents (or families) multigrade teaching has minimized the costs of feeding their children while in weekly boarding schools. Weekly boarding was costly because families had to share the meagre harvests between the school (to feed the child) and the home (for the rest of the family). Instead of having to split the little that is harvested families are now able to retain

all the food that is obtained in order to feed everybody in the home. On the other hand, the cost that was incurred through the loss of the labour of those children that went for weekly boarding has now been eliminated. All able bodied members of the family are now able to contribute their part to the family economic activities. Additionally, family unity is now being maintained because all children in these areas are now able to stay with their families.

These direct and indirect costs to the communities served by the four multigrade pilot schools were real both socially and economically. Such costs were in fact significant and powerful enough to discourage children from going to school altogether. On the other hand, the costs were major obstacles that eliminated most children in these areas from completing full primary education. The experiences in the multigrade pilot schools so far indicate that the system has contributed significantly to the solution of these problems. Children are now able to complete full primary education in the areas where multigrade has been introduced. Efforts should, therefore, be made to institutionalise this mode of educational delivery through identification of the necessary effective mechanisms.

APPENDIX

TEACHERS PERSONAL DATA

A) LITETA PRIMARY SCHOOL

I. TEACHER'S NAME: MR. D.S. CHAVULA
POSITION: Teacher in Charge
AGE: 38 Years

QUALIFICATION: Grade XII plus Primary
Teachers Certificate

PROFESSIONAL EXPERIENCE: Attended Multigrade
Seminars for three years: (1) At
Chalata in 1984. (2) At Malcom
Moffat Teacher Training College
in 1985 and (3) at Chongwe in 1986.

2. TEACHER'S NAME: MR. HASWELL KASUMBA
POSITION: Teacher
AGE: 26 Years

QUALIFICATIONS: Grade XII plus Primary
Teachers' Certificate.

PROFESSIONAL EXPERIENCE: Does not have
special multigrade training
experience. Has been taught the
concept and practice of Multi-
grade Teaching by the Teacher in
charge who has prior training.

B) KATETAULA PRIMARY SCHOOL

I. TEACHER'S NAME: FALLS KIDDS SIABASIMBI
POSITION: Teacher in Charge
AGE: 36 Years

QUALIFICATIONS: Form III

PROFESSIONAL EXPERIENCE: Trained for Primary
level teaching from 1972 to 1973.
Attended two multigrade teaching
Seminars in November 1985 and in
August 1986. Has 14 years teaching
experience.

Cont'd. KATETAULA PRIMARY SCHOOL

2. TEACHER'S NAME: MR. EMMANUEL MULIMBWA
POSITION: Trained Teacher
AGE: 28 Years.
QUALIFICATIONS: Grade XII plus Primary Teachers' Certificate.

PROFESSIONAL EXPERIENCE: He only has the teaching experience following the teacher training in 1986 to 1987. Does not have special training in Multigrade teaching but has been taught by the Teacher in Charge.

3. TEACHER'S NAME: MR. VICTOR NGOBEKA
POSITION: Teacher
AGE: 32 Years
QUALIFICATIONS: Grade XII

PROFESSIONAL EXPERIENCE: He is an untrained teacher. He has been taught the concept and practice of multigrade teaching by the teacher in charge.

c) KALOMBE PRIMARY SCHOOL

1. TEACHER'S NAME: MR. JOUBERT CHIPABILA
POSITION: Teacher
AGE: 42 Years.
QUALIFICATIONS: Form II plus Primary Teacher's Certificate.

PROFESSIONAL EXPERIENCE: Has 22 years teaching experience. Attended the multigrade Seminar at Chalata in 1984.

KALOMBE PRIMARY SCHOOL

2. TEACHER'S NAME: MR. PASICAL CHIBUYE KANWA
POSITION: Teacher
AGE: 36 Years.
QUALIFICATION: Grade X plus Primary Teacher's Certificate.

PROFESSIONAL EXPERIENCE: Has seven years teaching experience and attended multigrade seminar at Chongwe in August 1986.

D) MWAPE PRIMARY SCHOOL

1. TEACHER'S NAME: MR. I.S. KUNDA
POSITION: Teacher in Charge
AGE: 33 Years
QUALIFICATIONS: Grade XII plus Primary School Teacher's Certificate.
- PROFESSIONAL EXPERIENCE: Has 12 years teaching experience. Attended one seminar on Multigrade Teaching in November, 1984 at Chalata.
2. TEACHER'S NAME: Mr. J.C. MULYATA
POSITION: Teacher
QUALIFICATIONS: Grade XII plus Primary Teacher's Certificate.

PROFESSIONAL EXPERIENCE: Has 8 years post college teaching.

Comment: Mr. Mulyata's personal data could not be collected in detail because he was out of the school.

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