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THE RHODESIAN JOURNAL OF ECONOMICS

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THE RHODESIAN JOURNAL OF ECONOMICS

Educational Development in Rhodesia

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EDUCATIONAL DEVELOPMENT IN RHODESIA

R. C. BONE

I. INTRODUCTION

A. HISTORICAL NOTE

1. Control of African Education

The first mission station established in what is now Rhodesia was the L.M.S. venture at Inyati in 1859. It was not until nearly 30 years later that a second missionary group entered the country (the Roman Catholics at Empandeni). Throughout the period of Matabele independence and dominance—until the European occupation in 1890—the efforts of the missionaries to evangelise and educate were almost total failures.

It was only with the European occupation that first in Mashonaland and then, from 1893, in Matabeleland there was a strong inflow of missionary societies and a rapid extension of activity in the fields of evangelization and education.

The first measure of Government participation was taken in 1899 with the promulgation of an Education Ordinance, establishing a system of grants-in-aid and the skeleton of an Education Department to administer it.

Over the years the system was developed and the administration strengthened. The Education Department, however, was "charged principally with the oversight of European schools"³ and only from the beginning of 1928 was a separate Native Education Department set up. Under the Native Development Act of 1929 the department was renamed the Department of Native Development and its functions appropriately widened to include agricultural and community development. Tensions between it and the Native Affairs Department built up and in 1933 the Native Development Department was broken up and its various components brought under the Native Affairs Department and so under the Chief Native Commissioner.

Only in 1956 was education again separated off and an "untrammelled"⁴ department of Native Education established.

Throughout this entire period (1890-1956), although government increasingly exercised control of African education and increasingly aided it, its provision was almost entirely in the hands of the missions.

Two specialist Government training schools (Domboshawa and Tjolutjo) were opened in 1920 and 1921. Tjolutjo had a difficult and troubled history and in the early 1940s was transferred to a new site near Bulawayo and given a new name—Mzingwane.

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1. A fuller version of this paper is available on request from Professor R. C. Bone, Faculty of Education, Univ. Coll. of Rhodesia, P.Bag 167H, Salisbury.
 2. For a detailed historical survey, see R. C. Bone: *African Education in Rhodesia*. Unpublished paper of the Institute of Education, U.C.R., 1968.
 3. *Report of the S. Rhodesia Education Commission, 1962*. ("The Judges Commission"). Para 20.
 4. *Ibid.*

No further extension in Government-provided education took place until 1945 when four Government Primary schools in urban areas were opened. In 1946 Goromonzi was opened to provide a full course of secondary education. As a result of the Kerr Commission (1951-52) Report it became accepted policy that the Government should assume full responsibility for African education in urban areas previously shared with Voluntary Agencies and the number of its schools steadily increased.

However, even in 1967 the number of Government primary schools was only 77 (enrolment 64,794) as compared with 2,852 Mission schools (enrolment 556,256).

Although, then, even today the active participation of the Government in African education is very limited its degree of control is essentially complete. The interests of the Voluntary Agencies, it is true, are safeguarded by strong representation on the Advisory Board, the U.A.T.S. Board, the Secondary Schools Advisory Committee, and the National Advisory Council for Teacher Training. It is further true that consultation takes place on issues such as syllabuses and examinations and so on. Fundamentally, however, it is Government which decides policy and Government which controls and directs development through its system of grants-in-aid. It will be argued later that the value of the contributions to African education made by the Voluntary Agencies, local government, parents and so on was, in 1967, of the order of nearly £4 million. Government aid that same year totalled £5,142,000,¹ apparently only some 56.8% of the total. There is no doubt, however, that if Government withdrew its aid altogether, the drop in enrolments, in the number of schools operating, and in the numbers of teachers employed, would be very much greater than 56.8% of the present totals. Government grants-in-aid are, in other words, quite vital to the effort of the missions in education, and give the Government an influence in that education that is decisive.

2. *Policy in African Education*

Over the first 50 years or so of European occupation in Rhodesia there was broad agreement between the aims of the providers of African education—the missions—and those of its financial supporters—the Rhodesian Government and the electorate. Substantially these aims were to provide the literacy without which evangelization could not effectively take place; and to provide those elements of training and of “discipline” that would lead to higher and healthier standards of living within the African communities. On the whole both parties were agreed on the emphasis that the desirable higher standards of Africans should be WITHIN their communities, WITHIN their way of life, WITHIN their culture (purified of its less acceptable features: witchcraft, superstition, the lowly status ascribed to women, the concept of cattle in quantity rather than quality representing wealth, and so on).

Hence tensions between the missionaries on the one hand and government officials and European settlers on the other were mostly the outcome

1. Annual Report, 1967. Page 12.

of the differing weighting in importance each group ascribed to the two fundamental aims. Understandably, the missions were preoccupied with their evangelistic purposes and on the whole attached chief importance to the spread of literacy. For the Government, community development was the prime consideration.

Neither the Government nor the missions were particularly concerned to extend education beyond this basic level except in so far as it was necessary to produce teachers, of whom at least a number—those teaching the upper standards—needed to have topped up their own primary education with a further period of study and training in teacher training institutions.

More critically, very rarely was the concept propounded, still less frequently practised, that the ultimate target must be the uplift of the African until he could take his full responsible role in the social, economic and political life of the country as a whole.

This issue, indeed, has never been resolved though there is no longer any dispute that fundamental literacy must be universally provided. This decision was taken in 1956 when a Five-Year Plan was framed which was designed to make available, to all who wished to partake of it, "five years' education for everybody".

It was claimed, in 1962, that this target had been achieved. On the basis of the growth of the number of children in Stds. 1 to 3 (189,609 in 1959, 241,145 in 1962—the first year in which that number exceeded the number in the infant classes), the assertion seems reasonable though there is evidence that a far higher percentage of children never go to school than is usually claimed.

In 1966 a new Plan was announced extending "education for everybody" from five years to seven years. The emphasis, however, remained on literacy. In this sense, it is, therefore, a mere extension of the earlier policy.

The question, however, remains: the basic literacy requirement having been met, is the African to be educated primarily WITHIN the cultural-socio-economic circumstances of his environment or is he to be educated to contribute directly to the economic, industrial, social and political development of a nation-state?

It is clear that the policy, certainly to the end of the period of the Federation, continued to be to prepare Africans for service within their community. It is true that opportunities for African students to pursue academic courses leading to University entry were opened and slowly extended: but the numbers admitted were insignificant and it was anticipated that the university graduates ultimately produced would serve their own community as doctors, teachers, clergy, agricultural officers and so on. It is further true that apprenticeships were opened to Africans in a number of important industries—building, engineering, motor trade, electrical engineering and so on—but the question of the role of the African skilled worker in the national industrial economy was never faced, still less answered.

Still, today, under the 1966 Educational Plan heavy emphasis is placed on "pre vocational" secondary education. The purpose is stated, as "the

establishment of a relationship between the school and the area in which it is situated . . . The schools should be able . . . to provide the labour to meet the demands of industry. In rural areas . . . it will be essential to link the two final years of schooling to agricultural activities . . . It should be demonstrable through the school and the Extension Services that agriculture in the African areas can result in more than mere subsistence . . . ”¹

It is clear that educational policy still today suggests that the future of the African lies very largely within his community, that his main contribution to the good of the State lies in servicing and working within the African community and in providing for the most important growth-sectors in the nation's economy—primary and secondary industries—both an efficient labour force and a growing domestic market. He is not conceived of as setting up alongside his European compatriots in professional, managerial, administrative or capitalist roles.

B. THE 1966 EDUCATION PLAN

(i) *Main Provisions.*

Since African education in Rhodesia today (1968) is directed towards the implementation of the 1966 Plan, it is necessary both to state the essential elements of that Plan and to make some assessment of its limitations.

Its main provisions are as follows:—

1. A full seven-year primary course for all children, commencing in 1969.
2. A two-year secondary course leading to the Rhodesian Junior Certificate and “directed towards the probable type of employment which will be available . . . It is in commerce, industry and agriculture that work must be sought.” These schools would begin to open in 1969 with as their target, an intake of “approximately 37½% of those leaving primary schools” by 1974.
3. “A four-year course of formal secondary education for approximately 12½% of those completing their primary education,
4. followed by a further course for those suitable to proceed to Form VI and university entrance.”
5. “Correspondence courses supervised by a mentor in classroom for the 50% which cannot be accommodated in secondary school. The cost of the courses to be met by the pupil.”

It was, however, laid down that the Government's financial contribution to this expanded education programme would be pegged each year to “a sum equal to approximately 2% of the G.N.P.” Any shortfall, it was suggested would be made good by contributions “from local government sources”, by “school fees” or “by any other appropriate means.” Implicit in this last, is the assumption that capital costs would be reduced, as in the past, by communities building their own schools and that recurrent costs would continue to be kept low by the hidden contributions, particularly in the shouldering of maintenance costs and in service, by the Voluntary Agencies.

1. Minister's statement in Parliament, Hansard, 20th April, 1966.

Even so the Government foresaw that annual costs would exceed the monies available and it proposed as one severe measure of economy a scheme whereby only four teachers would be allocated to teach a single 5 years stream from Grade I to Grade V—a scheme which it acknowledged, would involve “a degree of double sessioning in the primary course”, “a teacher teaching two classes in one day”.

(ii) *Progressive Features*

In broad principle the plan has many admirable features:—

1. The extension of “education for all” from a 5-year to a 7-year period is clearly a commendable advance.
2. Provision of secondary education of one type or another for 50% of the primary school leavers is a notable advance on the earlier pattern in which only some 20% were so admitted.
3. A secondary education allowing for differing aptitudes and abilities is unquestionably superior to one which is exclusively “academic”.
4. The attempt to link school to work—an exercise in which England is lamentably backward as compared with America and Continental Europe—is altogether desirable.
5. The restriction of academic education to the most promising 12½% children who leave the primary school may be regrettable but is sound sense in any underdeveloped country.

Indeed, academic secondary education for 12½% of the relevant age range was conceived by Britain itself, in 1944 and for 20 years thereafter, as being (i) all it could afford, and (ii) all that was necessary to give opportunity to *all* academically able children in the country.

Rhodesia, in 1968, is nowhere near as advanced as England in 1944. It cannot afford — however generous the outside aid—to offer mediocre academic secondary education to a mixture of academically bright and academically mediocre pupils. The folly, inefficiency and even impropriety of 11+ selection has been convincingly demonstrated in the United Kingdom. Nevertheless it appears to be historically a quite inevitable stage that in one form or another every developing country has to go through. Certainly no country in Africa can yet afford universal secondary education—and hence in every country in Africa some form of selection is inevitable.

(iii) *Limitations*

There are, however, two fundamental limitations written into the 1966 Plan.

1. *The Role of the Africans in the Development of Rhodesia:*

First, as already indicated, the 1966 Plan is based on the assumption that African development will take three forms—first, within their own culture and their own designated areas, improved productivity; secondly, also within their own areas and certainly with reference only to their own community, professional and skilled services as doctors, teachers, extension officers, administrators and so on; and thirdly, out-

side their own areas and within a national economy, an increasingly efficient labour force.

What is tacitly assumed is that as High Level Manpower (H.L.M.P.) can be and conveniently is, classified horizontally—for example, as “Professional-Administrative”, “Technical-Executive”, “Skilled”—so in Rhodesia it can be divided vertically into perhaps three columns—“African”, “Non-African” and “National”.

Europeans can help to meet needs in any of the three columns but it is unthinkable that Africans should enter the top echelon of the Non-African or National columns—as “Senior Civil Servants,” for example, or “directors, senior managers and principals of large sized establishments in both the private and public sectors”. Nor is it thinkable that as “doctors, chemists, engineers, geologists, architects, lawyers, secondary school teachers” they should form part of a NATIONAL pool and service any part of society other than their own.

The consequence of this limitation in the 1966 Plan is that African schooling is tightly controlled—especially at the post-“O” level—to allow avenues to Category I of the H.L.M.P. pool ONLY to that number estimated as being required once the non-African pool of ability has been drained.

2. *The “Conditional” Nature of the 1966 Plan:*

Almost equally limiting in the 1966 Plan is the overall proviso that only those portions of it will be implemented as may be met out of an allocation to it of “a sum equal to approximately 2% of the G.N.P.” Any shortfall, it was suggested, would need to be made good by contributions from other sources.

But the stark fact is that unless the G.N.P. is rising healthily from year to year, the burden on these “other sources” will rapidly become impossibly heavy.

In that event, either the whole rate of movement towards full implementation will have to be slowed down or certain parts of the plan will have to be shelved. Particularly likely to be affected are the 2 year Junior Secondary schools since in any case the responsibility for building these has been placed on the Community Councils and where those Councils have neither the means nor the initiative, no schools will be built.

Further, it must be presumed that prior to the formulation of the Plan a costing exercise was undertaken and the targets set were considered realizable, given an annual rise in G.N.P. realistically calculated. There is every reason to suppose, however, that the rise of G.N.P. has been and continues to be seriously restricted since the imposition of sanctions. And there is every evidence that predictions of population growth, of the percentage of annual wastage in the schools and so on were seriously undercalculated.

On both scores the allocation of 2% of the G.N.P. to African education is every year less likely to be adequate to cover the costs involved in implementing the 1966 Plan.

II. TRENDS AFFECTING SCHOOL ENROLMENTS

A. POPULATION GROWTH

The 1953-55 Sample Demographic Survey estimated population growth at 3.04% p.a.¹

The 1962 Census noted that in the eight years since the earlier Census exercise

- (a) African life-expectancy had risen by two years—from 48 to 50;
- (b) the net annual rate of population increase had risen to 3.5%.²

Applying the 1962 growth rate to the 1962 population (3,618,150), the present population (1968) would be 4,448,000 and live births this year (estimated, in the 1962 Census Report, as being 157,200 in that year) would be 193,250.

There is, however, no reason for supposing that the percentage of live births has remained constant since 1962 and every reason for supposing that the health services—at childbirth and in pre-natal and post-natal care—have continued to reduce the rate of infant mortality. (The death rate in the 1954 Census was estimated at 14.4 per 1,000: it had dropped by 1962 to 14.0 per 1,000. The birth rate over the same period had risen from 44.8 per 1,000 to 48.0 per 1,000).

The TREND, in fact, is marked and inescapable. The PROBABILITY, therefore, is that by 1968 the birth rate may be about 50.0 per thousand. On this basis live births in 1968 may be at least 10,000 more than the 193,250 calculated on the basis of the 1962 figures.

Reaching the age of 7, therefore, in 1975—and so seeking school places—may well be over 200,000 children.

The 1965 predictions for Grade I intake in that year, however, are of only 161,300 children.

There is further evidence that far more children never attend school than is commonly claimed.

Live births in 1962 were given, in the Census Report, as 157,200. These were those “actually living”—that is to say, they had survived the critical infant mortality stage. The Government Statistical Office estimates that perhaps 2½% will not survive to age 7 and that between 150,000 (minimum) and 155,000 (maximum) will reach school-going age in 1969. The estimated intake into Grade I, however, in 1969 is of 135,000, and the assumption must be that the other 15,000-20,000 children never seek school places.

Even more revealing are statistics in the 1962 Census Report which show that in that year of all the children born in 1946, 23% had never attended school, of those born in 1950, 29.5%, and of those born in 1954 40.3%.³

Paragraph 86 of the Report reads: “It is commonly believed in S. Rhodesia that over 90% of the children of lower primary school age (6½-11½)

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1. Final Report of the April/May 1962 Census of Africans in S.R., Central Statistical Office, Salisbury, 1964, Chapter 2.
 2. Ibid.
 3. Final Census Report, 1962, Op. cit, Para. 83.

and at least 70% of the children of primary school age (6½-14½) were attending school. The census results indicate that the following proportions are girls. Of the 6½-14½ age group, 64% of the boys, 58% of the girls)" Of the 6½-14½ age group, 64% of the boys, 58% of the girls.)"

In the past estimating the percentage of the relevant age range attending school has been largely a wasted exercise since the numbers of children shown as being in Sub. A in no sense implied that this was their first year at school nor that they were of a single age group. They might be any age between perhaps 7 and 14 and they might be spending their third year in the same sub standard.

The Census Report figures are far more reliable in indicating for 1962 the percentage of children at school and the percentage of those who never had attended.

At that time over 30% of all children belonged to the last category. Yet in 1962, 126,919 children were enrolled in Grade I (Sub A); in 1967, the enrolment stood at the LOWER figure of 124,465, and in 1968 at 126,854.

Clearly there has been no move at all since 1962 to extend education to cover the untouched 30%.

Further, GOVERNMENT PROJECTIONS DO NOT MAKE PROVISION FOR ANY EXTENSION OF THE PRESENT COVERAGE, INDEED, ITS CALCULATIONS OF INTAKES INTO GRADE I SHOW A PROGRESSIVE DIMINUTION IN THE DEGREE OF COVERAGE PROVIDED.

B. "NATURAL" WASTAGE

Every year, in Rhodesia, a significantly high percentage of children in every standard, from Grade I up to certainly Form III, fail to return to school the following year.

This annual wastage is, of course, a phenomenon common to all countries in Africa and investigations have taken place in countries other than Rhodesia to identify its causes. Three have been suggested.

First, as Commission after Commission investigating education in Africa has reported over the last 18 years, the lower Primary schools are so poorly equipped—lacking even a semi-adequate provision of the basic tools (most crudely, of slates and writing materials)—and, above all, so appallingly incompetently staffed that there is quickly a large-scale withdrawal from them of bored, untouched children.

Secondly, a non-educated community tends to think of education as being completed with the acquisition of a few elementary skills (witness the villagers' awe of Goldsmith's dreadfully limited schoolmaster: and the T.V. hillbillies awe of the "schooled" oaf, Jethro!). Hence there is a tendency to regard further schooling as unnecessary once some rudimentary three Rs have been acquired.

Thirdly, "in many of the world's under-developed areas . . . schooling, because it ties up a potential worker in non-productive activity, is expensive, even when it is free" (H. S. Becker: **Schools and Systems of Classification in Education, Economy and Society**, Halsey, Floud and Anderson (eds)). And in a rural subsistence economy children have a clear work-role as cattle-minders, bird-scarers and so on.

On all three scores the position in Rhodesia is improving. There is some swing towards a cash-economy, increasingly the community is consisting of adults with some education themselves and with a clearer realisation of the advantages that accrue from an education beyond the basic literacy stage. Above all the Ministry has revolutionised the training of infant teachers and its expectations of what such teachers ought to be doing. There is already evident in African education—particularly but by no means exclusively at the lower primary stage—a new vitality, a reorganised curriculum and enlightened teaching methods which promise to transform the situation.

Two consequences follow from these changes. First, the annual wastage rate is likely to continue to drop. How marked this will be it is impossible to predict, but it halved, from 16% to 8% in the 10 years 1956-1966, and there is no reason for supposing it will not drop to 4 to 6% by 1976. Indeed by 1968 the annual wastage rate had already dropped further—to 7.1%. What is particularly significant of the 1968 figures is that wastage in the lowest three classes was only 6.3%, in the top two standards 12.05%. Clearly, education is being priced out of reach to many children and if there were any significant reduction in school fees or rise in average African incomes, the wastage rate would drop rapidly.

The second consequence of the changes occurring in Rhodesian African education and Rhodesian African society is that the untouched pool of children who never attend school is likely also to shrink. Again, it is impossible to do more than hazard a guess as to shrinkage in this pool over the next 10 years. If one assumes that at present into Grade I is admitted some 80% of children of the relevant age range (and it can hardly be higher), it seems reasonable to envisage that a further 10% will be seeking school-entry in 10 years time.

But, of course, both entry-percentage and annual wastage rate are sensitively linked to the economic circumstances of the African people both since the education provided is not free and because "schooling . . . in underdeveloped areas . . . is expensive, even when it IS free".

C. COSTS OF SCHOOLING

1. School fees

Fees for attendance at Government schools are fixed but there are wide variations in the methods of assessment and amount of fees charged by the Voluntary Agencies. There is, indeed, not merely a variation from Mission society to Mission society, but in some instances even from school to school within the same society.

Government fees for tuition are fixed at:—

£2.17.0 p.a. for children in Sub. A—Std. 1

£3.8.0 p.a. for children in Std.2—Std. 3

£4.6.0 p.a. for children in Std. 4—Std. 6

£9.0.0 p.a. for children in secondary schools.

Mission fees are generally much less, averaging perhaps 12/6 p.a. for

the lower Grades, £1 for the middle Grades and up to £2.10.0 for the top Grades.

In addition, building funds, books, writing materials and uniforms have to be bought and form an increasingly heavy burden as progress is made up the school.

The probability, then, is that to send a child to school may cost the parents as little as £1.10.0 to £2 for the first few years. To keep the child at school thereafter may be possible, in the rural areas, for not more than £5 p.a.

The sums levied are relatively small but the more remote the area the more nearly is the economy entirely subsistence in nature and the less easy is it to find school fees.

Hence, as Rhodesian Africans progress towards a cash economy—provided that school fees do not rise and so price education out of reach—the more likely is it that more children will come to school and more will stay at school each year.

Clearly, however, as a matter of both justice and wisdom no child should be prevented, on economic grounds, from entering or staying at the “seven-year schools for everybody”.

The implications, however, are far reaching. First, it would suggest the need to make education free, but since this might not in itself be enough to allow the poorest families to keep their children at school, it would involve the provision of state subsidies to such families.

Desirable as both measures are, it is probably well beyond the means of the State to do either. For example, the abolition of school fees would have one certain and one probable consequence.

First, there would be an immediate need to increase State subsidies to the schools. It can be calculated that the revenue from primary school fees in 1967 may have been between £750,000 and £835,000 of which possibly some £610,000 was collected and used by the Voluntary Agencies. As in that year there were some 575,000 children in Voluntary Agency Primary schools, it is reasonable to assume that the abolition of school fees at primary level would necessitate a £1 to £1.5.0 per capita increase in subsidies to those Agencies.

More serious, the Grade I intakes would probably rise sharply and the 8% annual wastage thereafter be dramatically cut. This in turn would mean an extremely rapid increase in the total primary school enrolments, require a very much increased annual supply of teachers, and involve a considerable expansion on the present number of classrooms and school buildings.

Both annual capital expenditure and annual recurrent expenditure would rise steeply.

What is of the greatest importance to note is that it is through the device of school fees that Government may be able superficially to reach the targets laid down in the 1966 Plan. By limiting its subsidy to 2% of the G.N.P., the State may force the Voluntary Agencies to increase their fees to cope with expansion. But the raising of the fees will cut back demand and so slow down expansion. It is, therefore, possible that “seven years’ schooling for everybody”—since in any case it does mean “seven

years' schooling for all who want, and can afford, it"—will on the face of it have been achieved though some 30-40% of children will never go to school at all.

To avoid such an eventuality it will be necessary to find from sources other than school fees the monies to cover the difference between 2% G.N.P. and the costs of the expanding education.

It will further be necessary to provide other monies to make possible either the more generous remission of fees or to provide fee-grants to needy parents. The machinery of the newly formed African Education Assistance Fund may prove a most effective instrument for implementing this latter policy.

2. *The total expenditure on African Education*

It is extremely difficult to calculate the total cost of African education since many items—building, maintenance, administration and even teaching—are provided by Voluntary Agency, Community or parents' services.

In his Annual Report for 1965, the Secretary for African Education, dealing with his Vote of £6,600,300, reported: "It has been calculated—on the basis of what the system would have cost had it been run at Government rates—that the contributions from the missions, parents and children could be valued at £2,500,000 in 1965."¹

On that same basis, the contribution in 1967 could be valued at just under £4 million.

However, it is reasonable to assume that, even discounting the value of the services rendered to the rural, Voluntary Agency, schools, they are less expensive to build, to maintain and to run than Government, town schools. If, therefore, for any reason the Government found itself fully responsible for all the schools in the country, it is unlikely that its annual expenditure would increase by £4 million. It might, in fact, reasonably expect to maintain the schools at present at a cost of perhaps no more than £2 million annually.

Nevertheless, even £2 million is a very considerable sum to find and the Government certainly cannot afford to precipitate any withdrawal by the Voluntary Agencies from the field of education, at least until the economic strength of the African communities is such that they can step in as the missions step out.

It is, in fact, dangerous folly to use education, as a "felt need", as a means of Community Development. Far too much is at stake and undoubtedly the right policy is to regard education as a means of developing "felt needs" rather than as a classic example of such needs. Obviously Communities should be increasingly involved in responsibility for education: but only when it is clear they have the financial resources and the necessary administrative and educational experience should the Voluntary Agencies withdraw from the primary field.

1. Annual Report, 1965. Page 5.

III. PREDICTIONS OF SCHOOL ENROLMENTS

A. EXISTING PREDICTIONS

In 1965 Professors Rogers and Milton of U.C.R. prepared a paper recommending a strategy of educational development for Rhodesia. They based their predictions on existing forecasts of enrolments annually from 1966 to 1978. Those forecasts need revising, in the light of the 1966 Government Plan, to allow for a 2 year vocational secondary education for 37½% of the primary school leavers.

Table I is therefore a reproduction of the 1965 forecast with the addition of a phased growth of Junior Secondary education.

Ministry thinking on the rate of that growth is unknown. For purposes of the present calculations it is assumed that the growth pattern will allow places for 5 per cent of the 1969 Primary school leavers in 1970, for 10 per cent for the 1970 leavers in 1971, for 20 per cent in 1972, for 30 per cent in 1973 and for 37½ per cent for and from 1974.

Table I must, therefore, represent reasonably accurately the development plan to 1978 which, it was assumed, could be undertaken on the basis of a budget allocation of 2 per cent of the G.N.P. supplemented by fees and local contributions.

B. WEAKNESSES AND INACCURACIES IN THE 1965/66 PREDICTIONS

1. Linking the development plan to G.N.P. is, as has been shown, a fundamental limitation. This can be most simply illustrated by taking an extreme example. If, in fact, G.N.P. does not grow at all over the next 10 years then the implementation of the plan will be frozen at its present, 1968, level.

The correct strategy must surely be to take the 1965/66 Projection figures and cost them year by year and so arrive at an estimate of expenditure year by year to 1978.

It is important to realize that these estimates would provide the "currently planned annual expenditure" for "the education and training of Africans in Rhodesia" referred to by the British government in the "Fearless" document.

It is further important to note that the 1965/66 projections are inaccurate in that the fundamental assumptions are demonstrably unreliable; and that as a result of these cardinal errors the forecasts are serious underestimates.

Hence a further necessary exercise is to prepare a revised table of projections which take account of the major trends affecting school enrolments. Point by point they are:—

2. Population growth rate.

The 1965/66 projections are based on the assumption that intakes into Grade I would increase annually over the entire period at a constant 2.9 per cent.

The population growth rate, however, rose between the 1954 and 1962 census periods from 3.0 per cent to 3.5 per cent. There is every evidence that it has gone on, and still is, rising.

Even, however, if it remained constant at the 1962 figure the 1965-66 projections are such that every year a higher percentage of children reaching school age will not be provided with school places.

This percentage of children excluded from school will, of course, increase if the population growth—as must be realistically expected—goes on rising.

Clearly, then, more reliable predictions will take account of a RISING population growth, not assume that the percentage growth will remain stable.

3. Annual Wastage.

The 1965/66 projections are calculated on the basis that standard by standard, year by year, natural fall out will reduce class sizes by 8 per cent p.a.

Even if one accepted the fixed nature of this drop out figure, it appears absurd to apply it to the imposed cut-off points—between Primary and Secondary schooling, for example. The 1965/66 projections, however, first apply the 8 per cent wastage formula and THEN allow admission to a fixed percentage of the remainder. One must surely assume “12½ per cent of the primary school leavers” means precisely that, not “12½ per cent of 92 per cent of primary school leavers.”

It is, however, in any case unrealistic to assume a fixed, unchanging annual 8 per cent wastage. Natural wastage, indeed, dropped from 16 per cent in 1956 to 8 per cent in 1965 and by 1967 had further dropped to 7.1 per cent. It can be expected to go on dropping as teaching efficiency improves in the schools, as children's value as labour (cattle-herders, bird scarers and so on) declines—and UNLESS the costs of schooling (fees, purchase of books and materials, etc.) prices schooling out of reach.

A reasonable but cautious estimate might be that annual wastage will decline by 0.2 per cent every year between 1969 and 1978.

4. Percentage of school going children applying for places in Grade I.

There is evidence from the 1962 Census figures that hardly 70 per cent of children of school age ever attend school. From the same source there is evidence that 145,000 children may be expected to reach school age in 1969. There is evidence that even the projected intake into Grade I in 1969 (135,000 children) will not be reached.

It is clear, in other words, that a far higher percentage of African children never attend school than is usually claimed.

Yet the 1965/66 projections do not envisage any extension in the coverage provided by the schools.

It must be assumed, however,—again as teaching efficiency improves, as child-labour becomes less valuable and unless education is priced out of reach—there will be a progressive increase in demand for education.

C. REVISED PROJECTIONS 1968, FOR THE 10 YEAR PERIOD TO 1978

Table II reflects the revisions in enrolment projections 1968/1978 that would be entailed if the above weaknesses were removed from the 1965/66 projections.

In general the variation in the projections is not marked until 1971. From that year on, however, the variation becomes more and more marked. By 1978 nearly 200,000 more children may be at school than the 1965/66 calculations forecast. Almost 5,000 more teachers than expected may be needed in that year.

IV. EDUCATIONAL DEVELOPMENT IN RHODESIA: A TEN YEAR PLAN 1968-1978

1. *A strategy of National Development*

In the wide view, the future peace, prosperity, progress and political stability of Rhodesia depends on a massive simultaneous and sustained attack on THREE fronts:—

- (A) A rapid increase in the rate of growth of the national economy. This will involve heavy capitalisation and the further development of huge industrial, commercial and agricultural concerns. There is every reason to believe that foreign capital and private investment will be readily available and that State support and subsidies will be little necessary. An important aspect of this development which also can probably be left to private initiative will be the development of secondary industries. It is further certain that the training of skilled personnel can and will be undertaken by the enterprises themselves. The State should not direct any significant part of its educational effort to meeting the needs.
- (B) Much accelerated establishment of a cash economy over the country as a whole. This will involve above all a continued and intensified diversification of the traditional African way of life and the encouragement of the development of self-employing small men as shopkeepers, builders, mechanics, artisans and so on. The essential step forward is from individual subsistence agriculture to village or community self-sufficiency. It is only through the encouragement of small-man enterprises, through the development of a yeoman-craftsman class that the

problem of massive unemployment—driving people back to eking their living from the soil—can be overcome.

- (C) A vast NATIONAL campaign directed at bringing the population explosion under some measure of control.

Failure to realize the imperative nature of this task has been, and remains, the main reason why undeveloped countries have failed to achieve any social, economic or political break-through.

Where a State has had as its objectives only (A) and (B) above the consequence has invariably been a mere acceleration in the already furious rate of population growth.

It must, therefore, be regarded as the highest priority that Rhodesia throws itself single-mindedly into the task of controlling its population growth.

To achieve its objective—whatever else may be necessary in the way of providing the means of family limitation—*education* is above all necessary. What is required, however, is much more than as rapid an extension as possible of formal schooling.

The educational effort must be constantly directed at the adult community as well both formally and informally and directly and indirectly. Hence there must be a great extension of the network of clinics, a great increase in the number of Health personnel in the field, a much larger body of Social service and welfare workers and a great encouragement of women's organisations such as the National Council of Women, Women's Institutes and so on.

2. *A Strategy of Educational Development.*

(a) *The 1966 African Education Plan.*

- (i) Even if the accurate prediction of that plan at work is the one made in 1965/66 (see Table I) it is clear that a massive programme of expansion is involved.
- (ii) Further, there is no question that the Plan, if fully implemented, is progressive and as well balanced as Rhodesia's state of development allows. Any fundamental departure from it would create more crises and tensions than it would resolve. Already written into it, for example, is the production within 10 years of well over one thousand African pupils annually with full "A" level courses behind them. More than 7,250 additional teachers will need to have been trained and in the schools by 1978. Nearly 300,000 more children will be at school. The school building programme itself will be a formidable, possibly impossible, task.
- (iii) It is, however, extremely unlikely that the 1965/66 projections are reliable. They appear to be grave underestimates. Certainly, the enrolment figures which are realistically possible greatly exceed the 1965/66 projections. (See Table II). If in fact the present predictions prove more reliable than the earlier ones, enrolments will have gone up by nearly 500,000

children and over 12,000 additional teachers be required by 1978.

- (iv) For these very sufficient reasons any strategy of educational development 1968-1978 must be based on the 1966 Education Plan.
- (v) What, however, will be imperative is the freeing of that Plan from the present shackles which chain it to "2 per cent of the G.N.P." A careful costing exercise is necessary but preliminary calculations would indicate that—ignoring rises in salaries and costs to compensate for the inevitable declining value of money—if £8.25 million is available in 1968/69, an increase of £1 million will be necessary in 1969/70, and a budget of some £20 million be required by 1978. Further, to prevent costs of schooling excluding children from school attendance, the Rogers/Milton proposal of an IMMEDIATE £1 million to a Bursaries and loan fund should be made available.
- (vi) The Junior Secondary schools should be regarded as one of the "key" areas in the plan and every encouragement be given to make these the first training ground for the "B"-front of the national development programme. Three urgent needs immediately spring to mind:— First, systematic and thorough research to arrive at a meaningful and effective curriculum. Secondly, intensive, specialized and firmly controlled training of teachers of the calibre, quality, quantity and outlook required. Thirdly, financial aid to establish and equip the revolutionary new-style schools required.

(b) *Supplementing the 1966 Education Plan.*

(i) "Sub-professional Training"

It is clear that there will need to be vast development of facilities for "sub-professional" training. At all times, however, the needs of the National Development Programme must receive the main consideration.

Hence, the emphasis should be far less than is usually thought on training in the craft or technical skills. It should be axiomatic that industry (in conjunction with the already existing Technical Colleges) can and should train its own personnel.

Sub-professional training should, therefore, concentrate on three areas—first, on the production of the many thousands of additional teachers required over the next 10 years; secondly on greatly increased outputs of Community Administrators, Community Development, workers, agricultural extension officers and village-mechanic advisers and supervisors; and

thirdly on that whole army of workers necessary for a successful assault to be launched on the third, "C", front of the National Development Programme.

Since there are close and intimate links both in the training and in the subsequent careers between these various types of sub-professionals, there are immense advantages in seizing the present opportunity to build multi-purpose institutions. Plans for two very large Colleges of Education are very far advanced—one, indeed, is at the building stage. Both are, in fact, planned to be multi-purpose. A third is intended as soon as possible. It would be both very valuable—perhaps essential—that this should specialize in training the teachers for the new Junior Secondary schools and have, in other words, a bias towards agriculture and what used to be called, in England, "the mechanic arts." It is clear that it, too, could include the training of the extension officers and "village industry" advisers necessary for the "B" assault in the National Development Plan.

The establishment of these 3 new Colleges should be given an "immediate priority" rating and it should be anticipated that a fourth will be necessary within five years.

Total capital expenditure might exceed £5 million but there is every possibility, once Rhodesia is welcomed back into the world community of nations, of raising at least 25 per cent of that total from Trust funds, Church organisations and private sources.

The present State subsidies to Mission teacher training would, of course, be diverted to the new ventures but recurrent costs might require an additional £100,000 annually. And, once again, a substantial bursary fund would be necessary.

(ii) Higher Education.

For all three "fronts" of the National Development Plan, careful and comprehensive research is a paramount need: and for all three there is urgent need of top-level manpower adequate both in quality and in quantity to lead and direct the assault. The university, in fact, occupies a vital position in the strategy of national development. Confronted by the critical needs of the country, U.C.R. will be required to surrender the traditional rights of universities to pursue knowledge for its own sake, and, instead, select those areas of knowledge which are most clearly relevant to the context in which it finds itself and concentrate its energies and its resources on them.

Hence there should be some shift of emphasis from Arts to Social Studies. No new faculties—certainly not Engineering until real progress has been made on the "A" front—should be contemplated.

University extension activities need to be greatly expanded.

The Faculty of Education, in particular, must be geared to double and quadruple its output of graduate teachers. The emphasis, however, must shift from the production of graduate teachers for non-African schools to the production of them for African schools. And if, in fact, Rhodesians remain reluctant to serve in that field, the policy of the early 1960s must be revived and overseas graduates be recruited for training and subsequent service in Rhodesia.

Further, the University must take note of the fact that for the Triennial period 1973—75 African "A" level applicants will number more than 500 each year; and for the following Triennial will exceed 1,000 annually. Vast numbers of these will be required as teachers and it may be expected that the market for others in industry and commerce, in government service and social work, in medicine and even in law will rapidly open up.

In short the university needs to double its present size over the next 5 years and double it again over the subsequent 5. Fear of an over-production of High Level Manpower will be unfounded *provided the manpower produced is geared to serve the national development plan.*

THE 1965 PROJECTIONS, REVISED TO INCLUDE PROVISION FOR JUNIOR
SECONDARY SCHOOLS 1965/78
TABLE I

YEAR	SUB A 1	SUB B 2	STD. 1 3	STD. 2 4	STD. 3 5	STD. 4 6	STD. 5 7	STD. 6 8	I	II	III	IV	L.VI	U.VI
1965	119,934	108,595	105,071	93,575	89,701	45,137	36,737	29,056	5,422	3,720	1,255	876	110	56
1966	123,600	110,300	99,900	96,700	86,100	49,200	41,500	33,800	6,400	4,900	1,800	1,190	175	105
1967	127,300	113,700	101,500	91,900	89,000	53,200	45,300	38,200	6,200	5,900	2,300	1,700	240	160
1968	131,100	117,100	104,600	93,400	84,500	61,200	48,900	41,700	7,000	5,700	2,700	2,100	340	220
1969	135,000	120,600	107,700	96,200	85,900	77,700	56,300	45,000	7,700	6,400	2,600	2,500	420	310
1970	139,000	124,200	110,900	99,100	88,500	79,000	71,500	5,200 (4,650)	4,100 (3,200)	7,100	2,900	2,400	500	390
1971	143,200	127,900	114,300	102,000	91,200	81,400	72,700	8,200 (6,560)	8,200 (4,300)	8,600	3,300	2,700	480	460
1972	147,500	131,700	117,700	105,200	93,800	83,900	74,900	8,400 (13,370)	8,400 (6,000)	7,500	3,900	3,000	540	440
1973	152,000	135,700	121,200	108,300	96,800	86,300	77,200	8,600 (20,700)	8,600 (12,300)	7,700	5,200	3,600	600	500
1974	156,600	139,800	124,800	111,500	99,600	89,100	79,400	8,900 (26,700)	8,900 (19,050)	7,900	6,100	4,800	720	550
1975	161,300	144,100	128,600	114,800	102,600	91,600	82,000	9,100 (27,300)	9,100 (24,550)	8,200	7,300	5,600	960	660
1976	166,200	148,400	132,600	118,300	105,600	94,400	84,300	9,400 (28,200)	9,400 (25,100)	8,400	7,500	6,700	1,120	880
1977	171,200	152,900	136,500	122,000	108,800	97,100	86,800	9,700 (29,100)	9,700 (25,950)	8,600	7,700	6,900	1,340	1,030
1978	176,300	157,500	140,700	125,600	112,200	100,100	89,300	10,000 (30,000)	10,000 (26,750)	8,900	7,900	7,100	1,380	1,230

PREDICTING THE POSSIBLE - SCHOOL ENROLMENTS 1968-78.
TABLE II

YEAR	Grade 1	2	3	4	5	6	7	Std. VI	Form I Grade 8	Form II Grade 9	Form III	Form IV	Form L.VI	Form U.VI
1968	126,854	115,842	108,941	96,088	95,772	55,804	47,225	37,904	6,754 (353)	6,021 (108)	2,062	1,062	188	139
1969	134,100	117,800	107,600	101,200	89,300	65,100	51,800	43,900	2,831 (703)	6,250 (327)	3,010	1,900	212	175
1970	140,400	124,800	109,700	100,200	94,200	69,700	60,600		4,390 5,390 (5,180)	2,729	3,085	2,802	380	197
1971	147,000	131,000	116,400	102,350	93,500	82,900	65,000		7,575 (6,100)	8,930 (4,850)	2,546	2,878	560	355
1972	153,900	137,400	122,500	108,800	95,700	87,400	77,500		8,125 (13,000)	7,080 (5,700)	8,350	2,380	575	525
1973	161,300	144,200	128,700	114,800	101,200	89,700	81,900		9,700 (23,250)	7,600 (13,400)	6,635	7,825	476	539
1974	169,100	151,500	135,400	120,800	107,800	95,000	84,200		10,250 (30,700)	9,100 (21,800)	7,100	6,230	1,565	447
1975	177,200	159,100	142,600	127,400	113,700	101,400	89,400		10,525 (31,575)	9,600 (28,900)	8,500	6,667	1,246	1,471
1976	186,000	167,100	150,000	134,500	120,100	107,200	95,600		11,175 (33,525)	9,900 (29,700)	9,000	8,000	1,334	1,175
1977	195,100	175,800	157,900	141,750	127,100	113,500	101,300		11,950 (35,850)	10,550 (31,900)	9,350	8,500	1,600	1,254
1978	204,900	184,800	116,500	149,500	134,200	120,400	107,500		12,650 (37,950)	11,300 (33,900)	9,950	8,850	1,700	1,512

TABLE II
PREDICTING THE POSSIBLE—SCHOOL
ENROLMENTS 1968-1978

BASIC DATA

1. African population 1962:	3,618,150	} 1962 Census Report
2. Live births 1962:	157,200	
3. Population growth rate 1962:	3.5%	
4. 97.5% of 1962 "live births" reach school age		—Government Statistical Office estimate.
5. Natural wastage 1967/8 is	7.1%	
6. Enrolment, Grade I, 1968, represents 87.5% of children of the relevant age range		

ASSUMPTIONS

- Over the next 10 years an additional 10 children in every 100 will seek school entry.
- Population growth rate will rise by 0.1% every two years 1962-1971.
- Natural wastage will decline by 0.2% every year 1969 to 1978.
- School fees will be covered where necessary by bursaries or other means.
- The 1966 Education Plan will remain the basic framework.
- The imposed barrier between Grade V (Std. III) and Grade VI (Std. IV)—still in 1968 excluding 42% of the children—will, however well intentioned Government may be, take another 4 years—excluded percentage dropping by 12 annually—before it has completely disappeared.

TABLE III
ADDITIONAL COSTS OF 1968 PROJECTIONS

NOTE.—Average per capita costs 1965-66 to 1966-67 are taken as basic.

Average per capita costs of Junior Secondary Education are estimated at £25.

Year	Enrolments Primary	Costs ±	Enrolments JSS	Costs ±	Enrolments SSS	Costs ±	Overall Costs ±
1970 -2,600	-20,800	+1,184	+29,600	-3,800	-266,000	-£257,200
1971 +5,450	+43,600	+90	+2,250	-925	-64,750	-£18,900
1972 +28,500	+228,000	-670	-16,750	+3,250	+227,500	+£438,750
1973 +44,300	+354,400	+3,650	+91,250	+6,600	+462,000	+£907,650
1974 +63,000	+504,000	+6,750	+168,750	+5,500	+385,000	+£1,057,750
1975 +85,800	+686,400	+8,625	+215,625	+6,200	+434,000	+£1,336,025
1976 +104,700	+837,600	+9,925	+248,125	+6,600	+462,000	+£1,547,725
1977 +137,150	+1,097,200	+12,400	+310,000	+7,900	+553,000	+£1,960,200
1978 +166,100	+1,328,800	+15,100	+377,500	+9,450	+661,500	+£2,367,800

TABLE IV
ENROLMENTS (ACTUAL) 1952-1968

YEAR	Grade 1 Sub A.	Grade 2 Sub B.	Grade 3 Std. I	Grade 4 Std. II	Grade 5 Std. III	Grade 6 Std. IV
1952	84,444	57,262	40,540	26,975	18,732	9,371
1953	90,646	61,164	44,128	29,553	20,321	9,632
1954	104,525	70,003	52,308	34,446	25,171	11,268
1955	107,716	78,439	56,877	39,216	29,076	12,955
1956	116,567	85,992	64,522	45,186	35,270	14,737
1957	124,954	91,283	69,391	48,851	38,495	15,926
1958	124,153	102,975	77,206	54,931	41,945	18,319
1959	112,608	102,420	84,555	60,077	45,077	19,367
1960	113,941	103,387	91,235	69,816	54,214	21,343
1961	118,453	105,287	96,233	78,456	66,456	26,033
1962	126,919	107,054	99,235	81,904	75,590	29,388
1963	123,719	113,518	102,051	85,434	81,065	35,827
1964	117,736	111,807	106,179	90,256	85,160	40,979
1965	119,934	108,595	105,071	93,575	89,701	45,137
1966	122,590	110,365	102,672	93,535	94,772	48,456
1967	124,465	113,308	104,537	93,737	95,397	53,219
1968	126,854	115,842	108,941	96,088	95,772	55,804

	Grade 7 Std. V	Std. VI	Grade 8 Form I	Grade 9 Form II	Form III	Form IV
1952	5,644	3,727	1,190	950	209	86
1953	6,113	3,878	1,686	1,169	530	100
1954	7,317	4,429	1,542	1,313	513	183
1955	8,347	5,311	2,108	1,428	735	135
1956	9,659	6,434	2,201	1,653	947	223
1957	11,576	7,051	3,216	1,889	894	107
1958	13,186	9,503	3,010	2,462	949	379
1959	14,881	10,921	1,506	1,163	318	278
1960	17,136	13,227	1,919	1,415	413	325
1961	19,081	15,424	2,539	1,617	444	364
1962	22,434	17,832	2,819	2,200	439	352
1963	27,219	21,962	3,407	2,447	724	386
1964	33,011	25,140	4,108	3,041	949	655
1965	36,737	29,056	5,478	3,720	1,255	876
1966	41,380	32,938	6,137	4,800	1,319	1,081
1967	43,781	36,262	6,699	5,644	1,712	1,282
1968	47,225	37,904	{ 6,754 353	{ 6,021 108	2,062	1,602

TABLE FOUR contd.

	Form V	L. VI	U. VI	TOTALS		
				PRIMARY	SECONDARY	GRAND
1952	31					
1953	24					
1954	109					
1955	49	11				
1956	29	18	10			
1957		69	13			
1958	26	13				
1959		17	18	449,806	3,335	453,141
1960		52	15	484,299	4,206	488,505
1961		71	34	525,423	5,174	530,597
1962		56	56	560,356	6,084	566,440
1963		45	36	580,795	7,129	587,924
1964		58	35	610,268	8,939	619,207
1965		110	56	627,706	11,661	639,367
1966		156	94	660,555	13,837	674,392
1967		155	148	664,706	15,943	680,649
1968		188	139	684,430	16,766	701,196



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