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## Population and Family Planning in the Economic Development of Rhodesia

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The effects of population growth on economic development are hotly debated by rival schools of economists, and with the notable exception of Colin Clark,<sup>1</sup> there are basically two camps. Firstly, the Marxist School believes that the problems of the less developed countries can be solved by socio-economic development alone; development, they claim, will outstrip population growth provided that the society is not handicapped by the shackles of capitalism.<sup>2</sup> The second school, encompassing most Western economists, believes that too rapid population growth can retard development independently of the social order. The authoritative conclusions of the Pearson Commission reinforce the case for substantial action as a necessary prerequisite for development in the less developed countries: 'No other phenomenon casts a darker shadow over the prospects for international development than the staggering growth of population.'<sup>3</sup>

The Commission's Report cited six 'direct difficulties' created by rapid population growth. Firstly, high expenditures are required for education, public health and social services, and these create budgetary strains. Secondly, the quality of the next generation, on which the prospects of development rest, is jeopardized. Thirdly, the 'burden of dependency' is increased and levels of capital formation retarded. Fourthly, aid requirements increase ahead of available supply. Fifthly, income distribution becomes more inequalitarian, accentuating dualism, and allowing only relatively few people to share in the fruits of development.

Finally, severe urban conditions result and shortages of social products are the outcome.<sup>4</sup> Thus the Commission's major recommendation is that, 'Developing countries should identify their population problem if they have not already done so, recognize the relevance of population growth to their social and economic planning, and adopt appropriate programs.'<sup>5</sup>

This paper is an attempt to place the population problem of Rhodesia in perspective in the light of this clearly reasoned advice. The questions to be answered are whether the 'direct difficulties' can be identified and their severity calculated, whether present population policy is the right solution and what alternatives there are.

### REGIONAL CONTEXT

The annual rate of growth of the world population between 1963 and 1968 is put at 1.9 per cent but for Continental Africa it is 2.4 per cent, that is about 26 per cent above the world average; and for 1970-1980 it will be considerably greater.<sup>6</sup> Birth rates throughout the continent are still high and the relatively close movement of falling birth rates behind falling death rates that characterised the development of Western European countries in the nineteenth century cannot be expected to occur in Africa in the immediate future. Broad aggregates do, however, tend to obscure wide variances in individual countries. A rudimentary statistical analysis of selected African countries, south of the Sahara, together with the extent of their family planning programmes, portrays the bare outlines of the current situation.<sup>7</sup>

Table I

## POPULATION AND FAMILY PLANNING IN SELECTED COUNTRIES IN SUB-SAHARAN AFRICA

Country	Population <sup>6</sup> 1968	Average Annual Percentage Growth 1963-67	Deaths per 1 000 1967	Extent of Family Planning
South Africa	19 263 000	2,4	—	Exists: limited support
Rhodesia	5 020 000	3,4	14	Exists: voluntary association
Mozambique	7 237 000	1,2	—	No organized activity
Zambia	4 079 000	3,1	19,6	Government neutral and passive
Malawi	4 324 000	2,5	—	Government hostile
Lesotho	1 018 000	2,9	23	Government lukewarm
Botswana	600 000	3,0	—	Government committed in principle
S.W.A.	611 000	1,8	—	No organized activity
Angola	5 360 000	1,4	—	No organized activity
Tanzania	12 578 000	2,9	25	Government committed
Congo (Dem. Rep.)	16 648 000	2,2	20	No organized activity
Congo (Brazz.)	912 000	1,4	24	No organized activity

Source: INTERNATIONAL PLANNED PARENTHOOD FEDERATION 1969 *Family Planning on Five Continents*, London, pp. 3-9. All figures are national figures.

It does seem, therefore, to be the relatively more economically advanced states that have family planning programmes, though the scope of many of these leaves much to be desired. The first Government sponsored programme was instituted in Kenya in 1965, but despite this breakthrough, official backing for family planning in most countries of the Southern Continent has not been easily obtained.

An evaluation of the causal factors responsible for the low rates of natural increase in many African countries shows clearly that the condition is the result of high death rates, not low birth rates, and as a consequence the real population explosion is yet to be experienced. In other African countries death rates per thousand are even higher than those in Table I;<sup>8</sup> and when modern medical science reaches these backward areas and brings down mortality levels nearer to those of advanced countries, then there can be but one unavoidable consequence: continued upward trends in population growth throughout the continent.<sup>9</sup>

## THE RHODESIAN PROBLEM

The Rhodesian economy exhibits virtually all the major characteristics of dualism that are so well known in the literature on economic development;<sup>10</sup> and nearly all available economic data, quantitative or qualitative, illustrates this dualism, especially in the sphere of population.

The population problem is found principally in the African community, which constitutes 95 per cent of the total population; but it must not be

inferred that policy should neglect the European, Asian and Coloured communities<sup>11</sup> for there is a frequent assertion by white Rhodesians that the expansion of the European population by an increase in the birth rate would be economically advantageous to the whole community. Yet when examined on economic grounds this supposition is seen to be extremely weak. If the 'inherited' abilities of man are a common factor, unalterable in the short run, and for all practical purposes a constant, then any 'acquired' abilities that are likely to influence the quality of the 'human capital' element of the total wealth component, will be functionally dependent upon the existence and distribution of factors such as education, public health, nutritional intake, housing and social welfare.

On this basis Rhodesia must be regarded as being adequately endowed, in both stock and flow relationships, with the quantitative elements of human resources required for economic growth. Lacking in abundance is the present stock and future flow of the qualitative aspects of 'human capital'.<sup>12</sup> Any measure designed to increase (European) birth rates<sup>13</sup> in this situation would exert additional pressure on already scarce investment resources and thereby increase the per capita resource contribution that would have to be made in non-productive 'demographic investments'. In real terms there is no demographic problem amongst the European population group. The rate of natural increase has declined sharply since 1954 when it was 2.0 per cent per annum and in 1968 stood close to levels experienced in

economically advanced countries at 1.0 per cent per annum. This 50 per cent decline in the rate of natural increase in a period of fifteen years is due to a fall in the birth rate from 27 per 1 000 in 1954 to 16 in 1968, while death rates have remained relatively constant throughout the period

at 6.7 per 1 000. Because of the small absolute size of the European, Asian and Coloured population groups<sup>14</sup> they will be disregarded for the rest of this paper. Recorded changes in the African population are reflected in the summary of changes in rates of growth as shown in Table II.

Table II  
RATE OF GROWTH OF THE RHODESIAN AFRICAN POPULATION

Year	Births per 1 000	Percentage change in birth rate between dates of estimation	Deaths per 1 000	Percentage change in death rate between dates of estimation	Natural increase per cent per annum
1948	46.2	—	18.1	—	2.81
1954	44.8	- 3.03	14.4	- 20.40	3.04
1962	48.0	+ 7.14	14.0	- 2.77	3.40

Sources:

- (a) SOUTHERN RHODESIA 1951 *Report on the Demographic Sample Survey of the African Population of Southern Rhodesia*. Salisbury, Central African Statistical Office, f. 8, Table IV.
- (b) SOUTHERN RHODESIA 1959 *The 1953-1955 Demographic Sample Survey of the Indigenous African Population of Southern Rhodesia*. Salisbury, Central African Statistical Office, p. 8, Table 4.
- (c) SOUTHERN RHODESIA 1964 *Final Report of the April/May 1962 Census of Africans in Southern Rhodesia*. Salisbury, Central Statistical Office, p. 8.

Although the comprehensive analysis of the 1969 census has not yet been released it appears that the annual rate of natural increase of the African population is 3.6 per cent.<sup>15</sup> Consequently, the rate of growth of Rhodesia's African population is approximately 41 per cent above the African continental average and 100 per cent above the world average. At this rate of increase, the African population will total approximately 13.6 million at the turn of the century and some 19 million by the year 2010 (see Table VII).

Net increases and aggregates alone conceal many other significant demographic features which can either aggravate the economic problem or mitigate its seriousness: age structure, fertility rates, gross and net reproductive rates, population densities, urban-rural composition, sex balance, factors affecting fecundity, life expectation and migration patterns. An outline survey of national income per capita in Table III depicts the effect of population growth on the long-term trend over the period 1959-68.

The inference from Table III is that there has been a decline in the average standard of living in real terms since 1959. In practice the real income of different population groups is influenced by other factors such as initial income distribution, differential rates of population increase and the pattern of economic growth. At this juncture it will be useful to dis-aggregate the economic structure into three components: the 'high in-

Table III  
RHODESIAN NATIONAL INCOME PER CAPITA  
1959-1968 (Rh. \$)

Year	G.D.P. (Factor Cost) Current Prices	G.N.I. Constant 1954 Prices	G.N.I. Constant 1965 Prices
1959	151.4	132.2	—
1960	155.4	133.6	—
1961	159.0	133.6	—
1962	156.4	128.4	—
1963	156.6	125.4	—
1964	160.2	125.0	—
1965	167.2	129.0	172.8
1966	158.0	—	159.8
1967	164.8	—	162.8
1968	167.0	—	161.0

Source: RHODESIA 1969 *National Accounts and Balance of Payments of Rhodesia 1968*. Salisbury, Central Statistical Office, p. 2, Table 3.

come' European, Asian and Coloured community, mainly urban in character, and exclusively orientated towards the modern sector of the economy,<sup>16</sup> the 'medium income' African population in wage employment in the Money Economy, and the 'low income' rural based African population in the Tribal Trust Lands and Purchase Areas who comprise the Indigenous Economy<sup>17</sup> or African Rural Household sector. An examination in Table IV of the past record of employment creation in the 'high' and 'medium' income groups indicates the structural nature of the problems engendered by rapid population growth and the inability of the Money Economy to effect meaningful economic advance in the period 1956-1968.

Table IV

## RHODESIAN POPULATION AND EMPLOYMENT 1956-1968

Year	Africans in Wage Employment				European, Asian and Coloured Employment		Total Wage Employment	
	Numbers ('000)		Percent of Total African Population		Numbers ('000)	Percent of Total European Population	Numbers ('000)	Percent of Total Population
	Total	Total less agriculture	Total	Total less agriculture				
1956	602	374	18,8	11,4	72,6	37,6	674,6	19,96
1960	640	400	17,7	11,1	89,4	38,1	729,4	18,99
1964	627	352	15,3	8,6	87,1	38,0	714,1	16,45
1968	663	407	14,1	8,7	95,6	38,9	758,6	15,36
1969	697	429	14,4	8,9	99,5	39,1	796,5	15,65

Source: Calculated from RHODESIA 1970 *Monthly Digest of Statistics*. June. Salisbury, Central Statistical Office.

Thus it can be seen how for the African population (comprising 89 per cent of the economically active labour force in the Money Economy) employment opportunities have declined relative to population size. From 1954 to 1968 the average annual rate of growth of African employment was 1,2 per cent whereas for the European, Asian and Coloured group the average annual rate (1954-1965) was 2,83 per cent.<sup>18</sup> Despite the higher rate of growth of the non-African labour force the percentage of the total population in wage employment declined from 19,96 per cent to 15,65 per cent between 1956 and 1969.

The implications of these trends for levels of unemployment can be seen to have their primary impact on the 'medium income' African sector of the Money Economy and in the African Rural Household sector. An estimate of the incidence of increasing unemployment or low productivity employment<sup>19</sup> can be obtained by calculating the number of African adult males between the ages of 15 and 59 years who do not find gainful employment in the wage sector and by comparing this result with the total number of African adult males (who may be regarded as the potentially employable labour force) either in the Money Economy or in the Indigenous System. Table V illustrates the position as it has developed from 1956 to 1968.

Thus, while the level of employment reacts to the fortunes of the agricultural sector, to changing capital-labour ratios in the major economic sectors, and to changes in wage rates, the growth of the number of African adult males eligible for wage employment does not show the same elasticity of adjustment. Thus there has been a sharp

increase in the proportion of adult African males who are not economically active in the Money Economy. The inference is that either these persons are overtly unemployed in the Money Economy, or are translocated to the Rural Household sector, which has for some time been acting as an 'accommodation mechanism'<sup>20</sup> in absorbing increasing numbers of persons by increasing levels of underemployment. While it is almost certain that there is some direct unemployment in the Money Economy it is likely that a large number of dislocated labourers and their dependents seek

Table V  
AFRICAN ADULT MALE POPULATION  
OF RHODESIA

Year	In Employment ('000)	Aged 15-19 Years (a)	Percentage in Wage Employment (b)
1956	602,0	772 299	77,95
1960	640,0	873 891	73,24
1964	627,0	991 031	63,04
1968	663,0	1 135 449	58,40

Source: Calculated from RHODESIA 1970 *Monthly Digest of Statistics*. June. Salisbury, Central Statistical Office; RHODESIA 1964 *Final Report of the April/May 1962 Census of Africans in Southern Rhodesia*. Salisbury Central Statistical Office, p. 18.

Note (a) The 1962 census estimates that 46,0 per cent of the African population are between the ages of 15-59 years and of these 52,65 per cent are males. It has, therefore, been assumed that 24,21 per cent of the total African population are adult males between the ages of 5-59.

Note (b) A strict estimate would reduce the total labour force by the percentage of females included in its total number. Similarly an accurate estimate of labour supply would need to include those African females seeking employment. These refinements have not been made in order to simplify the analysis.

reliance on the traditional economic system. Yet even with increased labour inputs from this source the Rural Household sector has not managed to improve its real per capita income status. The income of this sector is derived from three

sources: 'Production for own Consumption', 'Income from Sales' and 'Remittances from the Money Economy'. Between 1960 and 1968 there has been little evidence of rising income levels in the Rural Household sector.

Table VI  
THE AFRICAN RURAL HOUSEHOLD SECTOR

Rh. \$ : Current Prices

Year	Income (Millions)			Population ( <sup>000</sup> )	Income per Capita		
	From Sales (a)	Production for own Consumption (b)	Total (c)		(a)	(b)	(c)
1960	4,5	16,3	20,8	1 983	2,269	8,219	10,489
1961	4,0	19,2	23,2	2 148	1,862	8,938	10,801
1962	3,8	20,5	24,3	2 310	1,645	8,874	10,519
1963	3,4	21,8	25,2	2 410	1,410	9,045	10,456
1964	3,4	24,2	27,8	2 500	1,360	9,680	11,120
1965	3,7	22,6	26,3	2 600	1,423	8,692	10,115
1966	4,2	25,4	29,6	2 720	1,544	9,338	10,882
1967	4,4	30,0	34,4	2 870	1,533	10,452	11,986
1968	2,8	29,7	32,5	2 960	0,945	10,033	10,979

Source: RHODESIA 1969 *National Accounts and Balance of Payments of Rhodesia 1968*. Salisbury, Central Statistical Office, p. 13, Table 24.

Note (a) The figures under income per capita column (c) do not aggregate with (a) and (b) because of rounding.

Admittedly certain conceptual and methodological criticisms<sup>21</sup> can be made of estimates of 'Production for Own Consumption' which thereby throw doubt on the effectiveness and accuracy of the total income data; nevertheless the important 'Income from Sales' indicator, which may be regarded as a reliable index of available purchasing power in the rural economy, also exhibits a downward trend when computed on an income per capita basis. Furthermore, the data used in Table VI are given at current prices. When deflated to allow for depreciation in many values,<sup>22</sup> the small margin left for the average African Rural Household between bare subsistence and a minimum degree of cash security is further reduced.

What has not been included in the estimates in Table VI is the important factor of remittances from the Money Economy by migrant workers or relatives. Without such data it is difficult to reach any firm conclusion about the degree of reliance of the African Rural Household Sector upon the 'medium income' groups in the Money Economy. If, however, there is a continued failure of the Indigenous Economy to effect real economic progress and the rural population continues to increase, it is, as Sadie concluded,<sup>23</sup> likely that rural underemployment will manifest itself in overt

unemployment. For these reasons considerably greater attention should be given in development policy to the problems of African agriculture. This sector must, in the context of Rhodesia's dual economy, be regarded as the structural base upon which the economic system rests and should therefore be a fundamental priority in any planning or investment decisions.

So far the focus has been on the record of the last ten to fifteen years. When consideration is given to future trends in population and employment there is further room for concern. Table VII gives estimates of population growth for the African community over the next 30 years assuming that the current rate of natural increase of 3.4 per cent is maintained and that net migration equals zero. The number of African adult males is then calculated using a constant fraction of 24 per 100 persons as an estimate of this population group (see Table V). Finally, the model includes projections of the number of Africans in wage employment under three arbitrarily assumed rates of increase in employment. These figures are then related to the size of the African adult male group between the ages of 15 and 59 years to estimate the percentage of adult males who will find wage employment at different intervals of time:

*Table VII*  
RHODESIAN AFRICAN POPULATION AND EMPLOYMENT PROJECTIONS

Year 30th June	African Population ( <sup>000</sup> )	Adult Males 15-59 Years ( <sup>000</sup> )	Wage Employment at Assumed Annual Average Rates*					
			1,2%		2,0%		3,5%	
			No. ( <sup>000</sup> )	% Adult Males Employed	No. ( <sup>000</sup> )	% Adult Males Employed	No. ( <sup>000</sup> )	% Adult Males Employed
1969	4 840	1 162	697,0	59,9	697,0	59,9	697,0	59,9
1970	5 004	1 201	705,0	58,7	711,0	59,2	721,0	60,1
1975	5 899	1 416	747,0	52,7	780,0	55,2	843,0	59,7
1980	6 987	1 677	789,0	47,0	850,0	50,6	965,0	57,5
1985	8 256	1 981	830,0	41,9	920,0	46,4	1 081,0	54,9
1990	9 757	2 342	872,0	37,2	990,0	42,3	1 210,0	51,7
2000	13 620	3 269	956,0	29,3	1 130,0	34,5	1 453,0	44,4

\*The estimates given are projections not forecasts.

Highlighted by the model is the almost certain reduction in the percentage of adult males who will find employment in the Money Economy. At a rate of growth in employment equal to that experienced between 1954 and 1968, the percentage of adult males in wage employment will decline to 29.3 per cent by the year 2000. If this rate of growth in employment is increased by 67 per cent to 2.0 per cent per annum there will still be a significant reduction from 59.9 per cent in 1969 to 34.5 per cent in 2000. Should the rate of growth of employment exceed the rate of

growth of population at 3.5 per cent, a deterioration in employment conditions will still not be avoided. While the model clearly reflects the need for an effective and conscious employment policy, consideration should be given to the effects of a decline in the rate of population increase and an analysis of the extent to which such a measure would ameliorate the critical nature of current trends. Table VIII attempts to show how a reduction in the natural rate of increase of 0.05 per cent per annum, starting in 1970, would influence employment conditions:

*Table VIII*  
RHODESIAN AFRICAN POPULATION AND EMPLOYMENT PROJECTIONS AT ASSUMED RATES OF GROWTH

Year	Projected ( <sup>000</sup> )	Natural Increase per cent	Adult Males* 15-59 years ( <sup>000</sup> )	Employment Projections at Assumed Annual Average Rates		
				1,2%	2,0%	3,5%
				Percent of Adult Males in Employment		
1970	5 004	3,40	1 201	58,7	59,2	60,0
1975	5 872	3,15	1 409	53,0	55,3	59,8
1980	6 808	2,90	1 634	48,3	52,0	59,1
1985	7 797	2,65	1 871	44,3	49,2	58,1
1990	8 825	2,40	2 125	41,0	46,5	56,9
2000	10 723	1,90	2 575	37,1	43,9	56,4

\*Assumed as a constant fraction of 24 per 100 persons.

Even with this rapid decline in the rate of natural increase (14.7 per cent per decade) the 1954-68 rate of growth in employment of 1.2 per cent per annum will not be sufficient to avert a reduction in the percentage of adult males who will obtain wage employment. In order to experience only a small deterioration in the percentage of adult males in employment from 60 per cent in 1970 to 56.4 per cent in 2000, African wage employment would have to increase at an annual average rate of 3.5 per cent. Only by 1990 would Rhodesia reach a rate of natural increase com-

parable to the present African continental average and ten more years would pass before the rate of population growth had reached a level close to the present world average. To reach the equivalent levels presently experienced in advanced industrialized countries of 0.9 per cent per annum the assumed rate of reduction would have to continue until the year 2020.

There are, however, several reasons for concluding that this assumed decline in the natural rate of increase is probably unattainable in the next thirty years. Firstly, Rhodesia has no

effective national population policy and would, therefore, be a late starter in terms of the model set out in Table VIII. Secondly, the major reductions in natural increase will have to be achieved by means of a reduction in the birth rate, now standing at 48 per 1 000. Assuming that the death rate remains at 14 per 1 000, a natural rate of increase of 1.9 per cent per annum in the year 2000 would require a 31.2 per cent reduction in the birth rate to 33.0 per 1 000. In the light of the British experience between 1850-1900, when births per 1 000 persons in England and Wales declined from 33.4 to 28.7 (a reduction of 14 per cent in the birth rate),<sup>23</sup> such a rate of reduction in the birth rate amongst Rhodesian Africans can be considered unlikely. The final reason for this conclusion is that the forces working for upward pressure on birth rates and downward pressure on death rates are not easily reversed. Nevertheless the longer the delay in implementing a successful population policy, the more protracted will be the period during which difficulties will be experienced and the more elusive the final solution.

Attention has been centred on the consequences for employment that might result from rapid population growth. Other aspects of social and economic life are likely to experience similar difficulties. Between 1962 and 1969 the African population increased by 990 000, which means that 21 per cent of Africans today are under seven years of age. With an increasing juvenility in the age pyramid and a steady increase in life expectancy, due to the rapid extension of public health facilities, the 'burden of dependency' will grow together with the demand for food, housing, employment opportunities, educational and social services.<sup>24</sup> The problems of education<sup>25</sup> dramatize the dilemma of excess demand and deficiency in the supply of social services<sup>26</sup> in the African sector. Levels of capital formation have been considerably lower in both amount and in relation to G.D.P. than was achieved during the 1950-1958 era. In those days external sources of aid were readily available and significant, whereas, since 1965 and in the immediate short term, capital inflows from other countries are neither assured nor predictable.<sup>27</sup> Income distribution, too, shows little sign of moving towards an egalitarian norm and the present disparities can be expected to widen further, especially if differential rates of population growth continue to influence real incomes per capita.

It is against this background that the 'direct difficulties' facing Rhodesia are identifiable and upon which the qualitative deficiencies of life take on their seemingly intractable significance. Barring a Malthusian check Rhodesia faces a number of alternatives: (a) to effect a rate of economic development that exceeds the rate of growth of population; (b) to alter the factor endowment ratios by a migration policy; (c) to adopt a population policy aimed at a reduction in the rate of natural increase, or (d) a combination of the aforementioned possibilities. This paper contends that alternative (c) would provide the optimum choice.

In respect of alternative (a) the main lines of a strategy for development would need to achieve provision for the maximum rate of growth in African employment in the Money Economy, maximum monetization of the African Rural Household sector, and a reversal in the trends towards inequalitarian distribution of income. Alternative (b), the migration solution, has a number of constraints. Firstly, the artificial transference of a section of the population presupposes that there exists some 'zone of relief' to go to, and on a regional basis in itself it cures nothing. Consequently, population re-distribution within Rhodesia can at best be a short-run palliative. Although economic gains can be made by spatial allocation policies,<sup>28</sup> these can never provide an adequate prescription for the problem of excess population growth.

A second form of partial solution often mooted is the repatriation of the estimated 200 000 foreign African employees and their dependents<sup>29</sup> in order to provide extra employment opportunities for the indigenous African community; a number of economic, social and administrative objections however impair the possibility of such a policy being made effective within a short space of time.<sup>30</sup> What is possible is a reduction in the net inflow of foreign Africans seeking employment in Rhodesia in categories of work for which supplies of local labour are available. Immigration data show that this has been taking place since 1955.<sup>31</sup>

The third type of migration solution that has received attention is the promotion of European immigration. Although it has always been a policy of Rhodesian governments, the recent formulation of immigration policy as an economic solution to the population problem, principally by the Sadie Report,<sup>32</sup> requires qualifications to correct the popular myth that European immigration in all



cases will be economically beneficial for the creation of employment opportunities for the African population. It is sufficient to note that for the purposes of this paper an inflow of skilled personnel may well be a valuable gain for an underdeveloped country, but as a solution to the population problem it can only be regarded as partial and unreliable. A selective immigration policy designed to promote an inflow of High Level Manpower, however desirable it may be in itself, fails to attack the causes of excess population growth. In fact, migration solutions of all types avoid the root of the demographic issue.

What is apparent from the argument thus far is that no rapid improvement in the 'quality of life', as expressed in terms of the six 'direct difficulties' listed by the Pearson Commission, is attainable without a solution to the quantitative side of the population problem. Thus alternative (c) provides the basis upon which economic development in Rhodesia must rest. It should be regarded as a necessary, but not sufficient, condition for economic progress without which the removal of economic dualism will be virtually impossible. A population policy should now be considered.<sup>33</sup> Before turning to the difficulties currently facing the implementation of such a policy, consider the extent of family planning in Rhodesia today.

#### FAMILY PLANNING IN RHODESIA

It was only in 1957 that the Family Planning Association (FPA) was formed as a voluntary organization and began operations by opening up a clinic for Europeans in Salisbury.<sup>34</sup> The total income of the FPA at that stage was £205 and in the last thirteen years it has become the most effective agency for family planning in the country. Though no accurate data are available, the following is an estimated breakdown of the work of the major agencies in Rhodesia at the present time:

Table IX  
FAMILY PLANNING ACTIVITY IN RHODESIA  
1969

Agency	Educational	Medical
F.P.A.	95%	25%
Missions		25%
Government	5%	40%
Local Authorities		10%

Because the returns of such expenditure and effort are 'social benefits' family planning cannot be economic to private or even voluntary concerns. Its provision, therefore, remains a social responsi-

bility. Analysing the financial statements of the FPA, as it is the dominant agency in this field,<sup>36</sup> it is apparent from the sources<sup>37</sup> from which aid has been forthcoming that Government support has been sporadic, irregular and alarmingly late compared with the known changes in population that have taken place in the last twenty-two years. Of the total funds available from 1957/8-1968/9, some £77 261, approximately 57 per cent, were derived from public sector sources and 43 per cent from private donors. The complacency of Government is brought out by the fact that some 88 per cent of its total donations of £39 123 over the period have been in the last two years.<sup>38</sup> The only redeeming feature of the public sector record is in fact that this is now a permanent commitment;<sup>39</sup> and fortunately Government's own efforts are being extended, in the medical field at least.

#### LIMITATIONS

The FPA's major task lies in its educative function, but this valuable groundwork is being jeopardised by the Association's increasing burden in the medical field.<sup>40</sup> The shortage of staff and funds to train them, coupled with difficulties of rural remoteness, inertia of the people, distrust of technical or social innovation, low levels of education, vernacular problems and other socio-political hindrances, all mean that this herculean effort, given the small resources available, is considerably short of the task faced.

Furthermore there are other problems which hinder progress. Family planning poses ethical considerations in virtually all societies. Professor Arthur S. Miller writes, 'population control whether for growth or reduction or the maintenance of an equilibrium involves deep seated instincts and arouses immediate emotional reactions. It is fraught with the most difficult questions of morals and religion, of personal freedoms and natural rights, and touches the core of both individual and social wellbeing.'<sup>41</sup> These observations are not less true for Rhodesia where large Church bodies exist that are opposed to comprehensive family planning programmes on principle. For these reasons family planning, an issue that is for the individual intimately private, yet for society inescapably public, cannot be sold or marketed like other services. It can only be offered with no guarantee of acceptance.

Other obstacles are peculiar to Rhodesia. African social structure is particularly pro-natalist, a result of history, philosophy, circumstance, environment and economic forces. The community

places a high status on childbearing, and a large family is an indication of a man's standing, if not his 'wealth'. Division of labour in the traditional economy is on the grounds of sex, giving rise to a desire for both sons and daughters. Coupled with a fear of losing children, experience of high infant mortality rates in the past, and the effect of the social security system, it is not surprising that a high institutionalised birth rate results.

Some idea of the difficulties can be gauged from typical reports of field-workers: 'The Chief had changed his mind, he did not like to hear any more about family planning, of which he went about telling people not to come to our film show.'<sup>42</sup> 'Five of the families I visited had six wives with the average of 15 children per family.'<sup>43</sup> 'Some returned the papers I gave them, saying "We do not know how to read . . .".'<sup>44</sup> 'After I had said these words the teacher shows me he was not interested. He said to me that family planning is only for white people, not for Africans. He said, "we want to have many children that can look after our cattle".'<sup>45</sup> 'Some people complained that their salaries were very low and they could not afford 25 cents every month.'<sup>46</sup> 'One of the orderlies said that he had a difficult time in trying to convince villagers that herbs tied around their waists were useless as a contraceptive.'<sup>47</sup> 'By question time a good number of parents had come. One boy stood up and asked: "If my parents continue producing children I suffer because I get less food and can't go to school. Is it proper for me to advise them to limit their family?" The parents seemed to have been taken aback by the boy's question, especially his courage.'<sup>48</sup> 'The Prime Minister's speech in Bulawayo as reported in the press where he referred to immigration via the cradle, and encouraging the crowded people overseas to come and fill the empty spaces of Rhodesia seemed to have an adverse effect on education of Family Planning among the educated — one school cancelled my appointment with the Remove Class because, as the Headmaster put it "There are many empty spaces in Rhodesia as we have been told".'<sup>49</sup> 'One woman stood up and said most women like family planning but the main trouble was with their husbands.'<sup>50</sup>

Not all the problems are social, educational and economic. Political difficulties abound, aggravated by misinformed, emotional and provocative statements from both black and white politicians, professional and amateur alike.<sup>51</sup> It would be the grossest misunderstanding to insinuate that family planning will reduce African numbers in the short

or even the long run. Nothing short of a Malthusian check, or major disaster, could inflict such damage. All that family planning could hope to achieve is a reduction in the rate of natural increase, say from 3.4 to 2 per cent per annum. Even with the present size of the African population this would reduce the annual population growth to about 97 000 and because such a large drop in the rate of natural increase could not possibly be achieved overnight (it is likely to take at least thirty years) by the time it is achieved the population size would be double its present dimensions (see Table VIII).

Even if ethical, social and political difficulties were removed there still exists the problem of communication. Language barriers and literacy levels, though impeding progress, are surmountable, given forethought and backing. Mass media communication was successful in Japan, but in Rhodesia how many people listen to the radio, possess or watch television, or read a regular newspaper? All these problems mentioned above cannot be overcome without substantial aid and co-operation. The mechanics of administration are not as important as the dire need to gain genuine national commitment.<sup>52</sup> A national family planning structure, adequately financed and staffed, providing a comprehensive educational and medical programme designed for Rhodesian conditions is needed, the responsibility for which lies squarely in the public, not the private domain.

## RESULTS

Where the FPA have been operative there is an increasing awareness, interest and acceptance of family planning amongst both urban and rural Africans. For 1968-69 the total attendance at clinics has increased 80 per cent over the previous year and the number of persons reached by educational film units has doubled from 26 472 to 52 633 in the same period.<sup>53</sup> Considering that the FPA handles about 95 per cent of the educational work in the country, this effort still means that only about 2.5 per cent of the 'target' has been reached by this method.<sup>54</sup> Have the other 97.5 per cent been reached through the literature campaign, household visits and public talks that constitute the rest of the educational programme? This is highly unlikely, as an examination of field-workers' activities indicates that in January-June 1969 some 16 496 homes were visited only, 11 148 of which were in rural areas.<sup>55</sup> Urban dwellers tend to be more receptive to the concept and the degree of acceptance of family planning tends to be related to the level of

education. But of course the FPA data has limitations and although greater research is needed and would assist in planning, such a 'luxury' though too a 'necessity', paradoxically cannot be financed out of the limited financial and human resources at the disposal of the Association. The size of the task has highlighted the necessity for direct action and relegated data collection to a secondary role, but an analysis of the Chairman's and field-workers' reports does throw considerable light on the major obstacles to be surmounted before such an important ingredient of a population policy mix can be effective.

#### CONCLUSION

Had a successful population policy been instituted some twenty years ago, one could speculate on the nature of present problems pertaining to school places, school-leaver problems, labour market absorptive powers, housing deficiencies,

consumption and nutritional standards, social services and incomes per capita — conditions that are inextricably woven out of our evolving demographic character. The changes have, however, already taken place. All that can be done now is to ensure that the future is not aggravated by more serious features. The absence of a cautious, rational and acceptable population policy leads to a situation in which the writer feels he cannot be both optimistic and honest. Only when the population problem is no longer undervalued in practical policy,<sup>56</sup> when the social responsibilities for economic development are accepted by all, and a concerted effort made can Rhodesia hope to be an active participant in the 'Second Development Decade', and only then will it be possible to meet the six 'direct difficulties' cited by the Pearson Commission, and identifiable in Rhodesia, with confidence and vigour.

#### ACKNOWLEDGMENT

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2. For an exposition of the Marxist case, see MAULDIN, W. P. 1960 Population Policies in the Sino-Soviet Bloc. *Law and Contemporary Problems*, 25, 490-597.
3. COMMISSION ON INTERNATIONAL DEVELOPMENT 1969 *Partners in Development: Report* (Chairman: L. B. Pearson). London, Pall Mall, p. 55.
4. *IBID.*, pp. 57-8.
5. *IBID.*, p. 206.
6. UNITED NATIONS 1969 *Demographic Yearbook 1968*. New York, Department of Economic and Social Affairs, p. 83. The relatively high average annual death rate in Africa of 21 per 1 000 (1963-68) implies that upward increases in the rates of natural increase are likely in the years to come; the average annual death rates for the Americas in the same period were 9 per 1 000 (North America) and 11 per 1 000 (South America), *IBID.*
7. It is claimed that the only reliable statistics in Africa are for Rhodesia and South Africa, *Oxford Regional Economic Atlas: Africa*. Oxford, Clarendon Press, p. 5. Yet even in these countries data are estimated to under-enumerate the real size of population. Rhodesia in 1969 revised her estimates upwards, and South Africa is expected to do the same for 1970.
8. See for example the death-rates (per 1 000) of 43 for Portuguese Guinea; 31 for Chad; 33.3 for Ivory Coast; 35 for Upper Volta; 29 for Liberia, INTERNATIONAL PLANNED PARENTHOOD FEDERATION 1969 *Family Planning on Five Continents*. London, pp. 3-9.
9. Despite much work by Governments, voluntary associations and international agencies, Africa does not enjoy good medical facilities. Whilst there is one physician for 750 persons in U.S.A., the ratio in Kenya is 1:20 000, GUTTMACHER, A. F. 1968 *Medicine in Developing Countries*. In: INTERNATIONAL PLANNED PARENTHOOD FEDERATION 1968 *The Role of Family Planning in African Development*. London, 27. The Rhodesian ratio is given as 1:4 300, RHODESIA 1966 *Rhodesia in the Context of Africa*. Salisbury, Ministry of Information, Government Printer, p. 49. Added to this is the fact that medical expenditure *per capita* is smaller than that of advanced countries.
10. For an exposition of this model, see BARBER, W. J. 1961 *The Economy of British Central Africa*. London, Oxford University Press.
11. The annual average rates of increase 1962-69 are as follows: Europeans 0.8 per cent; Coloureds 4.8 per cent; Asians 2.5 per cent, RHODESIA 1970 *Economic Survey of Rhodesia for 1969*. Salisbury, Ministry of Finance, Government Printer, C.S.R. 16, p. 6.
12. For an empirical examination of human resource deficiencies in Rhodesia, see UNIVERSITY COLLEGE OF RHODESIA AND NYASALAND 1964 *The Requirements and Supplies of High Level Manpower in Southern Rhodesia, 1961-1970*. Salisbury, Manpower Survey Sub-Committee, Department of Economics, Occasional Paper No. 3.

13. The spirit of such a measure was expressed in the recent plea by the Prime Minister, Mr. I. D. Smith, for European 'immigration via the cradle', *The Rhodesia Herald*, 2.vi.1970.
14. RHODESIA 1970 *Monthly Digest of Statistics: December*. Salisbury, Central Statistical Office, p. 1, Table 1. The European, Coloured and Asian populations on 30.vi.1970 were 239 000, 16 100 and 9 200 respectively.
15. RHODESIA 1971 *Economic Survey of Rhodesia for 1970*. Salisbury, Ministry of Finance, Government Printer, Cmd.R.R.12, p. 5.
16. RHODESIA 1970 *Monthly Digest of Statistics: December*. Salisbury, Central Statistical Office, p. 1, Table 2: 90.8 per cent of the Asian, 83.2 per cent of the Coloured and 79.0 per cent of the European communities were urban.
17. Defined as 'total *de facto* African population less all Africans living in urban areas, all Africans and dependents working on mines, all Africans living on European occupied farming land and all male employees living in tribal areas other than those working for African employers', RHODESIA 1969 *National Accounts and Balance of Payments of Rhodesia 1968*. Salisbury Central Statistical Office, p. 13, Table 24. It should be noted however that the divisions made are somewhat arbitrary in that a degree of transition exists between them, particularly between the African Rural Household sector and the 'medium income' sector of the Money Economy.
18. PEJOVICH, S. 1970 Some Important Factors in the Economic Growth of Rhodesia, *S. Afr. J. Econ.*, **38**, 141, Table II. The average annual rate of growth of African labour is estimated at 0.83 per cent, but these estimates were based on unrevised employment data.
19. A theoretical treatment of this phenomenon which closely approximates the Rhodesian condition can be found in CHO, Y.S. 1963 '*Disguised Unemployment*' in *Underdeveloped Areas with Special Reference to South Korean Agriculture*. Berkeley, University of California Press.
20. RHODESIA 1967 *Report by J. L. Sadie on Planning for the Economic Development of Rhodesia*. Salisbury Government Printer, C.S.R. 35, p. 7.
21. JOHNSON, R. W. M. 1961 On the Valuation of Subsistence Production. In: *Occasional Paper No. 1*, University College of Rhodesia and Nyasaland, Department of Economics.
22. Between 1960 and 1962 the European Consumer Price Index moved upwards from 91.7 to 96.3 points and from 1962 to 1968 the African Consumer Price Index recorded an increase of 15.1 points from 94.4 to 109.5 points, RHODESIA 1969 *Monthly Digest of Statistics: January*. Salisbury, Central Statistical Office, pp. 14-15, 16, 17.
23. MITCHELL, B. R. 1962 *Abstract of British Historical Statistics*. Cambridge, University Press, pp. 27-37.
24. RHODESIA 1964 *Final Report of the April/May 1962 Census of Africans in Southern Rhodesia*, pp. 8, 18. In 1954 expectation of life at birth for both sexes was 48 years and in 1962 was put at 50 years. No doubt the 1969 Census data when released will confirm that it has risen further. The 'burden of dependency' in Rhodesia is indicated by the following statistic: 50.9 per cent of Africans were in the 0-14 years age group in 1962. Consideration must, however, be given to the incidence of child labour in the Rural Household sector.
25. For an analysis on this problem see BONE, R. C. 1968 Educational Development in Rhodesia, *Rhod. J. Econ.*, **2**, (iv), 5-27; see also RHODESIA 1969 *Third Report of the Select Committee on Education*. Salisbury, Government Printer, S.C.5.
26. For another aspect of the problem, see RHODESIA 1970 *Report of the Secretary for Health for the year ended 31st December, 1969*. Salisbury Government Printer, Cmd.R.R. 19, pp. 29, 54: '... surveys indicate that among African children in the younger age groups 50 per cent are below the 10 percentile weight level; 14 per cent are severely mal-nourished and of this number approximately one third have "Kwashiorkor"'. The findings of medical inspectors in European schools indicate that of 6 936 children examined the nutritional state of 11.85 per cent was 'borderline' and another 7.98 per cent were regarded as being in an 'unsatisfactory' nutritional condition; for Coloured and Asian children, of which 1 528 were examined, 20.7 per cent were 'borderline' and 28.59 per cent 'unsatisfactory'. No data are given for African schoolchildren.
27. PEJOVICH, 146. Table VIII, shows that between 1960 and 1967 the 'savings ratio' (S/Y) at 1964 prices declined from 19 per cent to 14 per cent while the 'investment ratio' (I/Y) declined from 18.13 per cent to 8.07 per cent. On a *per capita* basis the decline in levels of capital formation would be further emphasised.
28. The theoretical issues involved in such a policy are examined in SPENGLER, J. J. 'The Population Explosion: Implications.' Paper delivered at the South African Institute of International Affairs Conference on the Impact on International Relations of the Population Explosion, 23.vi. — 1. vii. 1970, Johannesburg.
29. RHODESIA 1970 *Economic Survey of Rhodesia for 1969*. Salisbury, Ministry of Finance, C.S.R.16, p. 7. Half of these employees are believed to be engaged in the agricultural sector where low real wages lead Rhodesian Africans to assign a low preference to agricultural employment.
30. RHODESIA 1969 *Report of the Secretary for Labour and Social Welfare for the year ended 31st December, 1968*. Salisbury, Government Printer, C.S.R.31, p. 38. Also RHODESIA 1970 *Monthly Digest of Statistics: December*, p. 4, Table 5.
31. *Report by J. L. Sadie*, pp. 2-3.
32. See CLARKE, D. G. 1970 The Assumed Employment Generating Capacity of European Immigration in Rhodesia, *Rhod. J. Econ.*, **4** (ii), 33-42.
33. A population policy implies control, or some measure of control over the growth and size of the total population. Whilst these variables are affected by mortality rates, migration and the rate and level of economic development, the discussion that follows will be primarily concerned with policy directed towards lowering the birth rate. In Rhodesia the birth rate for the African, Asian and European groups is 52 per 1 000, 25 per 1 000 and 18 per 1 000 respectively. Exact details of the Coloured birth rate are not available, but their average growth seems to be about five per cent. RHODESIA 1970 *Monthly Digest of Statistics: December*. Salisbury, Central Statistical Office, p. 2, Table 3.
34. The first clinic for Africans began 1960 and received 142 patients in its first year of operation.
35. Estimated by the Chairman of Family Planning Association (Rhodesia), Mrs. I. R. E. Spilhaus. It excludes work of private doctors and industrial firms.

36. It was only in 1966 that the Ministry of Health agreed to allow family planning facilities to be made available in Government hospitals. Indications are that increasing emphasis is being given to family planning in State institutions.
37. Private contributors include the International Planned Parenthood Federation, Pathfinder Fund and other donors. Public contributors are the Rhodesian Government, the State Lotteries and Local Authorities.
38. Data from the Family Planning Association, Salisbury. 1969.
39. The direct central exchequer support for the Family Planning Association in the fiscal year 1970-71 has been increased 59.4 per cent on the previous year's allocation from \$40 000 to \$65 000. RHODESIA 1970 *Estimates of Expenditure during the year ending 30th June, 1971*. Salisbury, Government Printer. Cmd.R.R. 6, p. 100.
40. Of total Family Planning Association expenditure in 1969-70, medical services account for 33 per cent.
41. MILLER, A. S. 1960 Some Observations on the Political Economy of Population Growth. *Law and Contemporary Problems*, 25, 627. According to the Family Planning Association, Rhodesia, 8 per cent of 2 015 Africans who expressed reasons why they had 'no interest in family planning' (January-June 1969) indicated that it was 'against their religious beliefs.'
42. FAMILY PLANNING ASSOCIATION, RHODESIA F.Mdege, Report on a visit to Belingwe Area in February 1970.
43. IBID., D. Chivongodze, Report on a visit to Nuanetsi Area in January-February, 1970.
44. IBID.
45. IBID.
46. IBID., F.Mdege, Report on a visit to Belingwe Area, 17.iv.1970.
47. IBID., A. R. Ndhulukula, Report on a talk given at Domboshawa Training Centre, 8.vi.1970.
48. IBID., A. R. Ndhulukula, Report on a visit to Que Que 6 — 10.x.1969.
49. IBID., A. R. Ndhulukula, Report on a visit to Gwelo 15 — 26.vii.1970.
50. IBID., F. Mdege, Report on a visit to the Shabani Area, 10.ii.1970.
51. Data collected by the Family Planning Association show that after the Minister of Labour's announcement that Government had established a Population Committee new attendances at clinics exhibited a noticeable decline.
52. A major obstacle is the political opposition to family planning. Consequently a major governmental programme at this stage might meet with considerable hostility from the African population.
53. FAMILY PLANNING ASSOCIATION, RHODESIA, The Chairman's Report July 1st 1968 to June 30th 1969.
54. Assumes on the basis of the 1962 Census that there were approximately 2 060 000 Africans between 15 and 4+ years of age.
55. Urban areas are Harari, Highfields, Mufakose, Mabvuke, Tafara, and Hunyani. Rural areas are Marandellas, Macheke, Hartley, Sinoia, Doma, and Triangle. Strictly speaking many 'rural areas' are associated with small towns, hence the connotation rural requires qualification.
56. A recent statement by Dr. J. Marais, Chairman of the Trust Bank of Africa, when opening the annual congress of the Association of Rhodesian Industries, that Rhodesia should aim at a minimum population size of between 12 and 15 million by the year 2000 shows a singular lack of appreciation of the economic dynamics and external effects of rapid population growth, *The Rhodesian Financial Gazette*, 31.vii.1970.