THE ZIMBABWE JOURNAL OF ECONOMICS

(Formerly The Rhodesian Journal of Economics)

Editors: A. M. Hawkins, J. A. C. Girdlestone and J. M. Robertson

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A POPULATION POLICY FOR ZIMBABWE RHODESIA

Dr. John Hanks*

Few national leaders have systematically attempted to determine how many people their countries can carry at a specified level of food and energy consumption. We all know that we live in a world of finite energy supplies and where food scarcity threatens to become commonplace. We all know that nearly every developing country in the world, including Zimbabwe Rhodesia, has an unacceptaly high rate of human population growth. We all know that signs of stress on the world's principal biological systems and energy resources indicate that in many places they have already reached the breaking point. Yet in spite of this, very few national leaders have had the courage to overcome religious and political difficulties and put forward a declared Population Policy that defines an optimum population size for the country concerned that will be compatible with available resources, at the same time enhancing the quality of existence of people of all income groups.

Singapore is one example of a country that has a Population Policy with very explicit demographic goals - they plan to reach replacement fertility by 1980, and to reach zero population growth by 2030. If Zimbabwe Rhodesia is to have the political and economic stability it deserves, I believe that a Population Policy for the country will have to be an integral part of all future development plans. South Africa is no different.

In the first part of this presentation, I am going to consider very briefly some of the consequences of the present high rates of population growth in a global and African context before moving on to consider the steps that are required to introduce a Population Policy for Zimbabwe Rhodesia.

In a recent very important speech, the President of the World Bank, Robert McNamara said: "Short of thermonuclear war itself, the problem of population growth is the gravest issue the world faces over the decades immediately ahead. Indeed, in many ways rampant population growth is an even more dangerous and subtle threat to the world than thermonuclear war, for it is intrinsically less subject to rational safeguards, and less amenable to organised control."

I am sure we all tend to forget that it is a mere 80 generations since the birth of Christ, but in that time, the world population has increased from an estimated 300 million to over four billion (Table 1).

TABLE 1
YEARS REQUIRED TO ADD ONE BILLION PEOPLE TO THE WORLD'S POPULATION

	<u>Years</u>	Year Reached
First billion	2 000 000	1830
Second billion	100	1930
Third billion	30	1960
Fourth billion	15	1975
Fifth billion	11	1986
Sixth billion	9	1995

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If one postulates that the human race began with a single pair of parents, the population has had to double only 31 times to reach its present huge total!

In about 1970, the rate of world population growth reached an all-time high, and then began to subside. The most recent data (Table 2) shows that the rate of annual increase fell from 1,90 percent in 1970 to 1,64 percent in 1975.

TABLE 2

WORLD POPULATION INCREASE: 1970 AND 1975	<u>1970</u>	<u> 1975</u>
World Population (billions)	3,59	4,0
Rate of Annual Increase (percent)	1,90	1,64
Annual Increase (millions)	69	64

It now appears that a significant decline in fertility may have begun in developing countries. In fact, it has occurred in 77 of the 88 countries for which estimates are available. As welcome as this is, we have no ground for complacency. The fact remains that the current rate of decline in fertility in the developing countries is too slow to avoid their ultimately arriving at stationary populations far in excess of acceptable levels. To return to McNamara: "Unless governments, through appropriate policy action, can accelerate the reduction in fertility, the global population may not stabilize below 11 000 000 000. That would be a world none of us would want to live in."

In our discussions at this Symposium, we must remember that under natural circumstances, societies tend to move through four distinct demographic stages

- High birth rates and high death rates resulting in near stationary populations.
- High birth rates and declining death rates, producing growing populations.
- Declining birth rates and further declining death rates, maintaining high growth rates in the initial stages, but moving towards stationary populations in the final stages.
- Low birth rates and low death rates, re-establishing nearstationary populations.

Zimbabwe Rhodesia is in the early part of stage 3. We should not assume that it has taken the developed world about 150 years to pass through this demographic transition from the end of stage 1 to the beginning of stage 4. Zimbabwe Rhodesia cannot afford such a time-lag and every effort must be made to speed up the process of demographic transition. It can be done. No achievement is more impressive than the dramatic reduction of China's birth rate, from 32/1 000 in 1970 to 19/1 000 in 1975. For the record, six countries (East Germany, West Germany, Luxembourg, Austria, Belgium and the United Kingdom) had stable or declining populations in 1976. In West Germany, the number of births fell below the number of deaths in 1972. The birth rate of just under 10/1 000 is the lowest birth rate on record. The West German population is at present declining at 0,21 percent per year.

These statistics might seem to you to be remote from your situation here in Zimbabwe Rhodesia, but I suggest that we should look to the outside world to learn more of the speed of these demographic transitions and to appreciate that solutions are possible.

The African continent demonstrates only too readily some of the consequences of the pressure of growing populations. Overgrazing, overcultivation and overgathering of fuel have led to the onward spread of the desert. In parts of the Sudan, the desert has moved 200 km south in the past 17 years. (Throughout the world, deserts are now claiming five to seven million hectares every year, an area equivalent to two Belgiums!) The reason for this is misuse of fragile land. As the plant cover is destroyed, so erosion increases, leaving eventually only the dry bones of the land - hard, sterile and unproductive. For the countless thousands of nomads living in the Sahelian zone, the loss of livestock was total, and as a consequence 250 000 died in the 1970's. In Ethiopia, an attempt was made to keep the famine a secret from the outside world. Latest estimates put the Ethiopian disaster at a loss of 200 000 lives.

The destruction of trees and woody plants for fuel has few equals as a desert maker. In the Sudan, 548 million Acacia shrubs are used every year just for cooking food. They are not just cut down, but pulled up, so that regeneration is impossible.

Again, these statistics might seem remote from life in Zimbabwe Rhodesia, but I would like to call your attention to the 1977 Annual Report of the Natural Resources Board of Rhodesia. "The Board is very deeply concerned about ... the deterioration of the Tribal Trust Lands due to population pressures. In fact it is the greatest problem in Rhodesia today after the war, the general political situation and the population explosion, all four of which are inextricably linked."

Environmental degradation is intimately linked with declining food production, which, as I mentioned in my introduction, is threatening to become commonplace. By the year 2000, the amount of land cultivated per person will probably have been cut in half. The population will have increased by another 2 000 million, and although another 300 million hectares will be added to land under cultivation, 300 million hectares will be lost to urbanization, and 300 million hectares will be lost to soil degradation!!

There is a need to have acceptance at the highest possible governmental level of the fact that food and nutrition problems are serious enough to warrant their consideration in $\overline{\text{planning}}$ national development. It follows that every nation, including Zimbabwe Rhodesia, however inadequate its base of planning might be, ought to have some kind of national food and nutrition policy. On a global basis, it is estimated that by 1985 there may be a gap of 45-70 million tons between domestic food production and the food and nutritional needs of the people living in low-income developing countries. Are such statistics available for Zimbabwe Rhodesia?

Africa to the north of us has demonstrated time and time again that food supplies are essential not only to human survival, but also to economic and political stability. Prior to Independence, many of these African countries were food exporters - now the majority are food importers. Zimbabwe Rhodesia's future leaders, whoever they may be, if they want the present industrial base to expand, if they want educational and health facilities to be maintained, and if they are sincere in their desire to have economic and political stability, then they must guarantee the security and stability of what is at present known as White farming land, well into the foreseeable future. The abandonment of these farms or their fragmentation into non-viable entities would lead to disaster.

The developing countries must appreciate that the world's leading food producing countries will be unable to meet global food requirements in the years ahead. In 1961, the combination of reserve grain stocks in exporting countries equalled 112 days of world grain consumption. This fell gradually to an alltime low of 39 days in 1973, although recent record grain harvests have led to a modest stock rebuilding. Nevertheless, these rebuilt stocks provide only a minimal level of food security.

A world of cheap food, stable prices, surplus stocks, and a large reserve of idle crop-land, is part of history.

Turning briefly to the economic front, during the 1970's, several convergent factors, such as diminishing returns on investments in basic sectors of the global economy, unprecedented inflationary pressures, and widespread capital scarcity all contributed to the slowing of economic growth. This slowdown was associated with the dwindling reserves of natural resources on which economic activity depends, coupled with the <u>fourfold</u> increase in the price of oil during this decade, surely one of the most <u>dramatic</u> and foreboding commodity price increases ever recorded.

With the slowing of economic growth has come increasing unemployment, bringing with it the worsening of the distribution of income within societies, which in its turn further aggravates social inequities and political stresses.

I wonder if any African country has worthwhile statistics on unemployment and under-employment? I doubt if Zimbabwe Rhodesia has, nor has South Africa. Yet we must all be aware of the problem - every city and town in Southern Africa has desperate Africans looking for work. Every year in South Africa alone, 210 000 new work-seekers enter the labour market, and the government is faced with the impossible task of creating 1 500 new jobs each working day. This statistic does not take into consideration the present unemployed. Quite clearly, no government, black or white, can attempt the impossible.

What is most disturbing about these figures is that they illustrate the plight of the young. At an age when men are at their most ambitious and most idealistic period of their lives, they are subject to the humiliation of having failed. Nothing is more likely to sow the seeds of strife and discontent.

The essential choice open to Zimbabwe Rhodesia and to the rest of the world is whether to limit births and individual consumption consciously and voluntarily so as to avoid the unpleasant consequences I have mentioned, or to continue pressing against the earth's biological limits until regulation is forced upon us. Any responsible government must opt for the former, and a Population Policy would be a fundamental component of such a decision. Only governments have the power to implement the necessary changes, and they also have the tools at their disposal. Legislation, budgetary and fiscal policies, taxation and education have no rivals.

Before any attempt is made to introduce a Population Policy for Zimbabwe Rhodesia, the government must first of all create the demand for a change, by taking action to encourage small families in five closely related socio-economic fields.

Reducing Infant and Child Mortality

From studies in both developed and developing countries, it is now well established that a decline in fertility rates inevitably follows a

reduction in infant and child mortality. In Africa as a whole, the infant mortality rate is 142/1 000 compared with 2071 000 in the developed countries. These high mortality rates are a consequence of low nutritional standards, poor hygienic conditions and inadequate health services, and national health policies will have to be redesigned to change this situation.

2. Expanding Basic Education

It is also well established that expanding the educational opportunities of females correlates with lowered fertility. For example, in Latin America, studies indicate that women who have completed primary school average about two children fewer than those who have not. Education for both men and women facilitate acquisition of family planning material, and increase their exposure to mass media. Furthermore, parents with an education themselves typically desire an even better education for their children, and realize that if these aspirations are to be achieved, family size will have to be limited.

One principle is beyond dispute, and is highly relevant to educational planning in Zimbabwe Rhodesia - it is far better to try to provide a basic minimum of practical and development-orientated education for many, than to opt for expensive, formal and academic education for a few.

Increasing Productivity of Small Farmers and Expanding Earning Opportunities in the Cities for Low-Income Groups

In the Tribal Trust Lands of Zimbabwe Rhodesia in particular, a comprehensive programme is required that includes land-tenure reform, better access to credit, and other similar reforms designed to increase productivity. World Bank schemes of this nature have confirmed the basic feasibility of this concept. A total of 210 such projects have been initiated over the last three years, and these are calculated to double the incomes of 8 million farm families, or about 50 million individuals. It is through this increase in income that such farm families will almost certainly experience a beneficial decline in their traditionally high fertility. Similar arguments apply to increases in the earning capabilities of urbanized populations.

4. Organising a More Equitable Distribution of Economic Growth

Economic growth cannot change the lives of the mass of the people, unless it reaches the mass of the people. It is only too easy for individuals living at the subsistence level to be by-passed by the whole development process. I am sure that any economist will accept the growth of the gross national product as a key index of economic well-being, but whereas it measures the total value of the goods and services of the economy, it does not, and cannot, serve as a measure of their distribution.

The designers of future development plans for Zimbabwe Rhodesia should bear in mind the results of a study carried out in 64 developed and developing countries, which demonstrates quite clearly that a more equitable income distribution, with the resultant broader distribution of social services, is strongly associated with lower fertility. The conclusion from this must be obvious. Unless the benefits of economic growth are directed more to the lower income groups, where fertility rates are likely to be highest, economic growth per se will not move society forward at an optimum rate of progress.

5. Enhancing the Social, Economic and Political Status of Women

In most developing societies, and Zimbabwe Rhodesia is no exception, women do not have an equitable access to education, and the number of illiterate females is growing faster than the number of illiterate males. There is no doubt that an increase in the education of women tends to lower fertility to a greater extent than a similar increase in the education of men.

We should appreciate that in subsistence societies, women do at least 50 per cent of the work connected with agricultural production, as well as taking care of the home. In addition, they have the increasingly onerous task of gathering firewood. They often work an 18 hour day, but despite this contribution, women generally suffer the most malnutrition in poor families. Men have first claim to food, children second, and women last. It is inevitable that malnourished mothers will give birth to weak and unhealthy infants, and have problems nursing them. Such infants often die, leading to frequent pregnancies and diminishing the mother's occupational and economic status, which in turn re-enforces the concept that males are more important. This makes sons more important than daughters, and when only daughters are born, another pregnancy must ensue to try again for a son.

We should recognize that women represent a seriously under-valued potential in the development process. To prolong inequitable practices that relegate them exclusively to narrow traditional roles not only denies them and society the benefits of that potential, but very seriously compounds the problem of reducing fertility.

In outline then, those are the socio-economic activities the government must undertake as a basis for the introduction of a Population Policy. I suggest that it is beyond the scope of this Symposium for us to discuss the demographic targets for Zimbabwe Rhodesia that would be such an integral part of a Population Policy. Indeed, in the absence of integrated resource planning for the country as a whole, it would be premature to attempt such an exercise. I believe that many of you have heard Brian Walker speak on the need for a National Institute of Natural Resources, built around a data bank, and I will not repeat his ideas again. Suffice to say that Zimbabwe Rhodesia must have these data if long-term demographic targets are to be made with any degree of confidence.

However, even without this information, a Population Policy that has, as its initial target, a substantial reduction in the birth rate within the next ten years, should be implemented as soon as possible. Having created the demand for change, the next stage is for the government to satisfy the demand for change, by taking five main lines of action.

1. Supporting a Continuing Public Information Programme

There is an obvious need to inform, educate and persuade people of the benefits of smaller families. In the developed world, the average desired number of children ranges from two to three. In the developing world, the majority want at least four children. This is a very sensitive issue, and the organisers of any education programmes will have to appreciate that the reasons for fertility reduction that may be persuasive to planners in a city, may not be persuasive at all to parents in remote villages. Village couples are most unlikely to worry about the progress of the gross national product, but they do worry about

security in old age. An understanding of their worries and aspirations is an essential pre-requisite of a successful population education programme. The use of radio, television, newspapers and schools is obvious, but in the final analysis, we will probably find that no form of media information is as effective as person-to-person communication.

2. Providing Family Planning Services

The future government of Zimbabwe Rhodesia must improve the access to modern means of fertility control, both qualitatively and quantitatively, by providing a broad selection of the current contraceptives, as well as sterilization and abortion facilities, and by establishing a broad spectrum of delivery services and informational activities. The latter would be undertaken through the medium of existing health services, including maternal and child health systems, eventually expanding into paramedical workers. Recent reports have stressed the importance of commercial contraceptive distribution, and where possible this sector should be encouraged.

Unfortunately, many of the existing programmes are small, and they rely on foreign sources for much of their finance. Fertility reduction, as a priority, seldom commands more than 1 per cent of national budgets, and governments have often failed to give the programmes the status and national attention they deserve. This attitude must change if worthwhile progress is to be made, and if top managerial talent is to be attracted to these programmes. Zimbabwe Rhodesia is not alone here. Few countries provide adequate contraceptive facilities. There are at present 500 million women around the world of childbearing age: all face the risk of unwanted pregnancy, and yet an estimated 70 per cent are using no contraceptive method at all. For the world as a whole, one out The fact is that abortion, of every 3 - 4 pregnancies ends in abortion. even though it is still illegal in many countries, and remains ethically offensive to millions of people, appears to be one of the most widespread means of fertility control there is, Surely that in itself is a sound argument for easy access to contraception?

3. Manipulating the Balance of Incentives and Disincentives

By manipulating the balances of incentives and disincentives, governments can have a profound influence on the rate of population growth. Singapore has pioneered this field, and since 1973, it has been government policy to discourage couples from having more than two children by limiting income tax relief to the first two births, and increasing delivery fees on an increasing scale in order of birth. Furthermore, the cost of subsidized housing, socialized medicine and free education is transferred to the parents if they have more than three children.

Incentives can range from immediate cash payment to family planning acceptors to elaborate programmes for future payment, at the end of child-bearing years, for fertility restraint.

Perhaps the best incentive scheme for Zimbabwe Rhodesia should attempt to provide parents with an alternative source of security for their old age in place of the traditional one of large families.

4. Promoting Reproductive Biological Research

It is now generally accepted that cultural, religious and personal preferences in contraception differ widely, and yet these are rarely

70. investigated or considered by the relevant authorities. This important aspect requires a great deal of research. In addition, there is a clear requirement in Rhodesia to define more precisely those particular elements of social and economic development that most directly affect fertility.

5. Promoting a Social Consensus

Governments have considerable capacity to help create a generalized atmosphere of social consensus in an anti-natalist direction. As an example, villages or communities can be rewarded by the allocation of government funds for good performances in fertility restraint.

There are, of course, many different approaches to the task of promoting a new social consensus on population problems within a society, and the choice of one over another <u>must</u> be guided by the cultural context of the society in question.

It would be wrong for me to leave the subject of introducing a Population Policy without discussing the controversial subject of coercion, because many people are under the false impression that a Population Policy and coercion by Government are inextricably linked. In 1976, one Indian State introduced a Compulsory Sterilization Bill, which raised immensely important ethical, legal and practical issues. When a person had had three children, he had to present himself for sterilization at an approved institute. Contravention of the Act was punishable by up to two years' imprisonment and forced sterilization and pregnancy termination for the offenders. Recent evidence has indicated that coerced sterilization was far more widespread in 1976 than was generally realised, and it is now history that resentment against forced sterilization was a major factor in the defeat of Indira Gandhi and the Congress Party. Coercion as practised in India is unlikely to be attempted anywhere else in the world for some time to come.

In conclusion, in this presentation I have tried to stress that a Population Policy is closely linked to socio-economic development, and I think that it is very appropriate that the Rhodesian Economic Society has organised such a gathering. I would like to end with a word of caution, which economists might find difficult to accept. For the last 200 years, the principal dynamic that has shaped society has been the "growth ethic". Lester Brown has suggested that a new socio-economic force is with us, and this should be described as an "accommodation ethic" - an ethic associated with scaling human needs to the earth's resources and capacities.

This new dynamic will slowly replace the "growth ethic", because ecological stresses and the inevitable increasing scarcities of natural resources will force it upon us. The social order of the future will be born not so much out of vision, but out of necessity.

This country has a unique and exciting opportunity to choose which way it goes. The adoption of an "accommodation-ethic" - in other words, a sincere attempt to scale this country's human needs to its available resources and capacities, and this of course would include a Population Policy - would go a very long way towards promoting peace and stability. Surely, the choice is obvious?

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