

## A CRITICAL EVALUATION OF THE FAMILY PLANNING PRESCRIPTIONS FOR RURAL WOLLO AND TIGRAI

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### I. INTRODUCTION

The drought-prone regions of Wollo and Tigray have continued to receive massive relief aid in recent years. The possible recurrence of the drought in that general area was not unexpected. Unfortunately, the prevention of drought in the present state of the arts is outside the command of national policy; for the drought that engulfed Africa was the result of a long-term pattern of global climatic variation.<sup>1</sup>

It is, moreover, well-known by now that the periodic crises of famine are not the result solely of drought.

*"Drought is a natural climatic phenomenon involving the absence of rainfall over an extended period of time. Famine is a matter of human beings suffering from the lack of food and, often in growing numbers, imperilled by starvation. Not only is there no automatic or direct link between the two, but any analysis which assumes this misses a major political point. To the extent that there is a connection between drought and famine, it is mediated by the political and economic arrangements of a society. These can either minimize the human consequences of drought or accentuate its effects."*<sup>2</sup>

Attention would, therefore, need to be focused on the multi-faceted socio-economic factors which have left the population vulnerable and unable to withstand the effects of the natural calamity. It will be shown below that, in the case of Wollo and Tigray, this implies the need for the articulation of a long-term strategy of rural development based on the historical facts and analysis of the multiple inter-dependent factors. The presence of such a perspective can immensely facilitate progress. The absence of it, in addition to impeding progress, leaves the door open for misplaced emphasis arising either from failure to make a careful analysis of the facts and circumstances or even from preconceptions.

Thus, an officially commissioned Survey and Project Preparation Mission of specialists placed special emphasis and urgency on the need for the implementation of family planning measures in Wollo and Tigray, though certainly as only part of a series of recommendations. The Report of the Mission argued:

*"Human population increase, in the areas concerned, where 95% of the population are agriculturists, can in fact only be dealt with by early introduction of methods to reduce the birth rate to a level at which population will not increase beyond the real carrying capacity of the land in human terms. . . . The effective permanent measures needed are family planning (or birth control). . . . At present, it appears that women in the rural areas of Wollo and Tigray can have an unlimited number of pregnancies; but very few of the children born survive, so that the population increases by only 2.5% per year. . . . If, however, we assume that better health facilities will inevitably result in a greater number of children born surviving, then, with-*

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*out family planning measures, there is the ominous likelihood of the rate of population increase rising to 3.5% per annum or more. . . .*<sup>3</sup>  
(italics added).

It will be shown in this paper that this is a case of misplaced emphasis which should be seriously questioned. Such family planning recommendations are often not based on well-documented evidence or adequate analysis of the socio-economic circumstances in which they are to be applied.<sup>4</sup> The general tendency to prescribe family planning as a basic cure for poverty in developing countries is, indeed, well-known and has been a major topic of discussion on national and international platforms alike. The recurrence of the drought in Wollo and Tigray can, therefore, lead to a revival of the recommendation of such policy prescriptions.

This paper argues, firstly, that the introduction of birth control policy following the 1972/73 famine, which resulted in extensive fatalities weighing heavily on children, could not have found ready acceptance in highly traditional rural Wollo and Tigray. Secondly, the spectre of "population explosion" resulting from a rise of 2.5 percent or more per annum does not in fact find much support in available official and independent population estimates.

The data which form the basis of this paper are of two types: (1) those gathered as part of a rural socio-economic survey made soon after the 1972/73 famine in Wollo and Tigray; and (2) Central Statistical Office (CSO) and other independent population estimates. A brief description of the background of the survey data is in order.

## II. SURVEY BACKGROUND

The survey data were gathered soon after the 1972/73 famine as part of an extensive socio-economic study of rural Ethiopia. The detailed procedures of the study are described elsewhere.<sup>5</sup> Briefly, however, the study was based on a random sample of approximately 1 per cent of the number of households in the *weredas* covered by the study. The individuals interviewed were the household heads, the great majority of which were men.

Due to circumstances beyond the control of the investigators, data were successfully obtained for only four *weredas* in Wollo and Tigray. These *weredas* were Dessie Zuria and Were Ilu in Wollo, and Adwa and Inda Mahone in Tigray. The information obtained through the surveys is taken as *indicative* rather than as *conclusive*. There is, however, ample evidence in support of the bulk of the findings in the demographic as well as in the other aspects of the survey.

The number of household heads interviewed in the four areas was 554, representing a total population of 2,707 found in these households.

The great majority of the interviewees were sedentary farmers. The religious affiliations of the population varied from *wereda* to *wereda*; the two major religions of the country, namely the Ethiopian Orthodox Church and Muslim religions, were however well represented. The literacy rate among the population in the survey households was very low, as is true for rural Ethiopia generally. Thus, the population in the sample can be described as representative of "traditional" communities of the four *weredas* — sedentary farmers, adherents of either the Orthodox or Islamic faith, and predominantly illiterate. (See Table 1.)

TABLE 1  
 Characteristics of the Survey Population

<i>Characteristics</i>	<i>Percentage</i>
Proportion of sedentary farmers of sample household heads	86
Religious affiliation of total household population	
Orthodox	50
Muslim	49
Other	1
Rate of illiteracy among population 10 years old and over	84

### III. THE FINDINGS OF THE SURVEY

The aspects of the survey data relevant to the present purpose are similar to those referred to as the KAP data (Knowledge of, Attitudes towards, and Practice of Family Planning),<sup>6</sup> as well as those pertaining to the demography of the survey areas. We shall summarize below the findings in these respects in the four survey *weredas*.

#### A. The KAP Findings.

The respondents were asked the following series of questions:

- (1) Would you like to have more children? Why? Why not?
- (2) Are you aware of the existence of modern birth control methods?
- (3) Would you or would your spouse make use of modern birth control methods if such facilities were made available?

#### 1. Desire for Children

There was remarkable consistency of responses among the interviewees of three of the four *weredas* as shown in Table 2, around 70 per cent expressing the desire to have a greater number of children. It should be noted that the proportion of the Adwa respondents responding positively to this question was very different from the average of *all* other areas surveyed as well.

TABLE 2  
 Pattern of Responses to Question:  
 Would You Like to Have More Children?

<i>Wereda</i>	<i>Percentage Yes</i>	<i>Percentage No</i>
Adwa	36	64
Inda Mahone	70	30
Dessie Zuria	69	31
Were Ilu	69	31

What were the reasons for desiring a greater number of children? The responses are summarized in Table 3. The most common reason for desiring more



children was the expectation of assistance in work and during old age from one's children. Other responses included: "appreciation of God's gift"; "appreciation of children"; and the desire "to increase the number of relatives and the population".

**TABLE 3**  
**Reasons for Desiring a Greater Number of Children**

<i>Reasons</i>	<i>Responses (%)</i>
To assist parents in work and old age	46
Appreciation of God's gift	25
Appreciation of children	22
To increase number of relatives and population	9
Other	8

*Note:* Often the respondents gave more than one reason; hence the number of responses exceeds the number of respondents.

### 2. Knowledge About the Existence of Modern Birth Control Methods

A very small proportion of all respondents had any knowledge about the existence of modern birth control methods. (See Table 4.) The somewhat greater proportion of Dessie Zuria respondents who expressed knowledge about modern birth control methods may probably be attributed to their proximity to a major urban centre.

**TABLE 4**  
**Knowledge About the Existence of Modern Birth Control Methods**

<i>Wereda</i>	<i>Responses (%)</i>	
	<i>Yes</i>	<i>No</i>
Adwa	2	98
Inda Mahone	3	97
Dessie Zuria	5	95
Were Ilu	—	100

### 3. Willingness to Make Use of Modern Birth Control Methods

The proportion of respondents expressing willingness to make use of modern birth control methods was also very small. (See Table 5.) Again, the percentage of Dessie Zuria respondents expressing willingness to make use of modern birth control methods was comparatively greater than those of the other three *weredas*.

**TABLE 5**  
**Willingness to Make Use of Modern Birth Control Methods**

<i>Wereda</i>	<i>Responses (%)</i>	
	<i>Yes</i>	<i>No</i>
Adwa	4	96
Inda Mahone	3	97
Dessie Zuria	8	92
Were Ilu	1	99

### B. Estimate of Natural Increase of Population in the Survey Areas

The natural increase of the population computed for the four *weredas* resulted in the *low* figure of less than 10 per 1000 population or an increase of less than 1 per cent per annum. (See Table 6.) The crude birth rate of 45.5 per 1000 for the survey area as a whole was not inconsistent with the figures found for rural Ethiopia as a whole.<sup>7</sup> On the other hand, the death rate of 36.2 per 1000 obtained for the survey area was comparatively high, possibly reflecting the toll of the famine in the region. In any case, it must be *emphasized* that the low order of magnitude (rather than the precision) of our findings is sufficient to raise a basic question.

TABLE 6

#### Estimate of Natural Increase of the Population in Survey Area

Crude Birth Rate	45.5
Crude Death Rate	36.2
Rate of Natural Increase	9.3

### IV. ANALYSIS OF THE SURVEY FINDINGS

To recapitulate, a significant proportion of the household heads interviewed expressed the desire to have a greater number of children than they had at the time of the survey. Only a small proportion of the sample had any knowledge about modern birth control methods or expressed willingness to make use of such methods if made available. The rate of natural increase of the population of the survey areas was found to be probably in the region of 1 per cent per annum.

Was it correct then to advocate family planning as an urgent matter of policy in the areas of the survey following the 1972/73 famine conditions? We argue that a family planning programme would neither have been easily realizable, nor were there sufficient grounds to make such a case for the survey areas of rural Wollo and Tigray.

Let us reconsider the evidence. The key points with regard to the KAP data pertain to the reasons for desiring more children and the attitudes expressed by the respondents regarding the practice of birth control. It will be recalled that the reasons given for desiring a greater number of children have their roots in economic, religious and generally cultural considerations.

It is well recognized that pronatalist attitudes prevail in many traditional societies, because children provide family labour and are considered as sources of support for their parents during old age. In the survey areas, it was found that children in the 5-9 age-group performed regular duties, particularly herding cattle, gathering firewood and fetching water, and in many cases assisted in the family farm activities.<sup>8</sup> The expectation of support from one's offsprings during old age expressed by the interviewees is also a well-known phenomenon in rural Ethiopia.

Chang has confirmed the expectation of economic benefits from one's children in his study in both rural and urban Ethiopia:

*"Family planning literatures often stress the economic areas as the principal perceived benefit of higher parity. The study's data was not inconsistent with such a perspective. By far the highest response was economic, regardless of geographic area."*<sup>9</sup>

Under these conditions, the high rates of infant mortality that prevail in many rural communities reinforce the general pronatalist attitudes, since only a few of those born in any one family will survive; and under the circumstances of famine, deaths among children are likely to be extensive. One study based on a survey in five *Awrajas* of Wollo showed that the death-rate due to famine was extremely high in the 0-4 as well as the 45-64 age-groups.<sup>10</sup> The study report further noted:

*"For the whole of the surveyed population, the proportion of the young (those aged less than 15) had dropped from 63.8% of the total population in 1970 (CSO Survey) to 56.2%. The decline for the very young (under 5) is still more important. From 17.6% in 1970, it has now dropped to 11%. Migration being much less of a factor for younger and older people (over 45) than for adults (15-44), the decline in proportion of these groups might have been greater if adults had not massively migrated. Hence the decline could mainly be explained by a higher force of mortality in these groups."*<sup>11</sup>

The implications of the abnormally high rates of infant and child mortality under the prevailing socio-economic circumstances can therefore be readily appreciated.

Obviously the economic dimension cannot be considered in isolation from the broader cultural context. The influence of deep-rooted beliefs deserves particular attention, however. In this respect, too, our findings are in general agreement with the earlier findings by Chang, who concluded:

*"Of those in the surveyed population who specified an actual number of children that would be ideal for a family, the most frequently noted response was four. However, thirty, sixty and fifty per cent of the urban, rural and Muslim segments of the population respectively noted that the number of children in the family was determined by 'God's will'. . . . In general, the survey population tended to view contraceptive usage as 'against God's will'. This response received the highest percentage for each group: thirty-four per cent urban, thirty-seven Muslim, and forty-four rural."*<sup>12</sup>

Certainly, with the spread of health services, mortality will tend to decrease as indicated in the *Report* quoted at the outset. We might add that the same factors that influence the decline of mortality will also tend to make for a rise in the birth-rate, resulting in an increased rate of population growth. This is a plausible formulation of the "problem" of population growth. It must be recognized, however, that no timetable can be set for either the decline of the death rate or for the rise of the birth rate. In any case, the prescription of birth control can perhaps be a palliative, but not a cure, for the "problem"; for the reduction of the birth rate can only result from the following processes of long-term change:



1. The adoption of modern "technology" in agriculture, leading to consequent reduced dependence on child labour;
2. The provision of social security for the aged, again reducing dependence on one's offsprings for support; and
3. Changes in the culture-based attitudes toward fertility.

These, of course, are not new findings, but they are confirmed by our survey. Nor are they the only conditions under which the birth rate can decline substantially. The expansion of educational opportunity for the young will at once tend to reduce early marriage and to change attitudes toward a large family, since child labour will no longer be counted on. Further, the gradual change of the role of women in a developing society, opening the door for greater participation in industrial life and in professional activities, will tend to decrease the birth rate because of the likely late marriage and relatively common non-marriage of women under such conditions.<sup>13</sup>

In the context of such a *long-term* process of socio-economic transformation, birth control can perhaps be considered as an ingredient of an effective population policy under conditions of serious pressure of population growth. However, in the particular case of the survey areas of Wollo and Tigray, we find no evidence of a particularly rapid rate of population growth.

## V. THE EVIDENCE OF RELATIVELY LOW RATE OF POPULATION GROWTH

We find in fact that the estimate of recent population increase of 2.5 per cent or more for Wollo and Tigray contradicts the available evidence.

The rate of natural increase of less than 1 per cent per annum for the areas of the survey is admittedly *low*. Without dwelling on points of precision, *since population data for Ethiopia remain as gross approximations*, and reflect wide local variations, estimates of as low as 1 per cent natural increase per annum have also been made for at least parts of Tigray in the recent Tigray Rural Development Study. (See Table 7.)<sup>14</sup>

TABLE 7  
Net Growth Rates of the Population of Tigray  
Annual Percentage of Rural and Urban Population

	<i>Natural Increase</i>	<i>Net Migration</i>	<i>Growth</i>
Rural	1.0 to 1.5	-0.5	0.5 to 1.0
Urban	1.5 to 2.0	+3.50 to 4.00	5.0 to 6.0

Source: *Tigray Rural Development Survey*, 1976.

The investigators gave the following explanation for the low rate of growth of the population:

*"It is unlikely that there has been a rapid growth of the rural population at least over the last decade, or even longer. The present saturation of the land was probably reached some time ago. Since the 'saturation point' was reached, increases in population in some years have probably been matched by decreases in other years, depending on the favourability or otherwise of agricultural conditions. In particularly bad years, such as in 1972/73 when there were famine conditions in Tigrai, there were undoubtedly absolute decreases in the rural population"*<sup>15</sup> (*italics added*).

CSO estimates of *over a decade ago* placed the natural increase of the rural population of Wollo and Tigrai at about 1.6 per cent per annum.<sup>16</sup>

In the face of such evidence, the prognostication of a rate of natural increase of over 2 per cent per annum for rural Wollo and Tigrai was questionable for the period immediately following the 1972/73 famine.

## VI. CONCLUSIONS

It appears that relatively strong pronatalist attitudes prevail in the survey areas of Wollo and Tigrai. Such attitudes are manifestations of deep-rooted and highly interdependent socio-economic circumstances. It is in such circumstances that the slogan "development is the best contraceptive" can have an appeal.

Despite the fact that population estimates for Ethiopia are not conclusive, the evidence available indicates that the rate of growth of the rural population of Wollo and Tigrai has been relatively low for at least a decade. Under such conditions, emphasis on family planning turns out to be a rather facile policy prescription.

It would seem that, at the very least, a *careful assessment* of the effect of the 1972/73 famine fatalities as well as of out-migration should *precede* any consideration of population control in Wollo and Tigrai.

All this is not to deny the large size of the population in these regions relative to productive agricultural land. It is recognized, for instance, that the population density of rural Dessie Zuria *Awraja* (181.8 per sq. km. as compared with 16.92 for rural Ethiopia) is the highest to be found in the country.<sup>17</sup> The apparently high man-to-land ratio, especially where the land is *relatively unproductive*, as generally is the case in the drought-affected areas of Wollo and Tigrai, must not restrict our attention to one side of the picture, i.e. population. This situation rather indicates that attention should be focused on the *other* side of the picture, implying in the case of the areas of the study, the need for a policy of intensifying rural development, including efforts to raise agricultural productivity and diversification of employment opportunities outside agriculture as well as for resettlement programmes, and not necessarily for an urgent family planning policy.

Diversification of employment opportunities may be possible through, for instance, public works programmes and investment in rural industries, but will obviously depend on the conditions and circumstances that manifest themselves in every community and on the creative design and application of rural development policy. In this connection, it must be borne in mind that, over the long term, increases in agricultural productivity will result in a continuous decrease of the pro-



portion of the total population engaged in agriculture. This should form part of the broad perspective of development policy for Ethiopia generally, and for Wollo and Tigray particularly.

The solution to the problem of Wollo and Tigray is a long-term one and will entail a good deal of investment in rural development. It must however be remembered that a family planning policy too is likely to require the allocation of significant amounts of financial and skilled manpower resources.<sup>18</sup> Furthermore, under the prevailing age-structure of the population of developing societies generally, it might take a period of decades for even a family planning policy to have an impact on population growth, assuming in the first place that such a policy is called for and finds acceptance.

## NOTES

1. Refer to P. O'Keefe and B. Wisner, "African Drought—The State of the Game", in *African Environment, Special Report No. 1*, International African Institute, London, 1975. For information on drought-affected areas of Wollo and Tigray, refer to *May Starvation Cease—"Ethiopia Tikdem"*, Relief and Rehabilitation Commission, 1975, pp. 5, 8 & 9; later information is to be found in the *Crop-Dependent Food Supply System Reports*, Relief and Rehabilitation Commission.
2. Quoted from Lofchie by Abdul Mejid Hussein, "The Political Economy of Famine in Ethiopia", in *African Environment, Special Report No. 2*, International African Institute, London, 1976, p. 39.
3. *Drought Rehabilitation in Wollo and Tigre*, Report of Survey and Project Preparation Mission, Relief and Rehabilitation Commission, 1975, p. 24.
4. This point is well articulated in *On Family Planning in Ethiopia*, No. 1, Ethiopian Nutrition Institute, 1972, p. 1.
5. Refer to Fassil G. Kiros and Assefa Meheretu, *Survey of Socio-Economic Characteristics of Rural Ethiopia*, Institute of Development Research, Addis Ababa University, Bulletins 1-14, 1975-77.
6. The reader must be forewarned that no implication is made here that high fertility results from lack of knowledge.
7. Refer for instance to *The Demography of Ethiopia, Results of the National Sample Survey, Second Round*, Volume I, Central Statistical Office, 1974, p. 78.
8. This is of course not unique to Ethiopia. Refer for example to Mead T. Cain, "The Economic Activities of Children in a Village in Bangladesh", in *Population and Development Review, Center for Population Studies of the Population Council*, Vol. 3, No. 3, September 1977.
9. Wen Pin Chang, "Population Studies in Ethiopia: Knowledge, Attitudes and Practice Surveys in Population and Health", *The Journal of Ethiopian Studies*, Vol. XII, No. 1, 1974, p. 11.
10. Showandagne Belete et al, *Profile of Wollo Under Famine*, Ethiopian Nutrition Institute, 1974, p. 22.
11. Ibid, p. 11.
12. Op.cit., p.5
13. For discussion of these and related matters, refer to Samir Amin, "Under-Populated Africa", in *On Family Planning in Ethiopia*, No. 3, Ethiopian Nutrition Institute, 1972, p. 93; and to Tesfa Yesus Mehary, "Population Dynamics in Ethiopia: An Overview", Discussion Paper prepared for the Seminar Population and Employment Planning, Central Statistical Office, April 1978, p. 12.
14. *Tigray Rural Development Study*, Annex 3, *Population*, prepared for the Government of Ethiopia, Hunting Technical Services Limited and Sir M. Macdonald and Partners, London, 1976, p. 41.
15. Ibid.
16. *Report on A Survey of Tigre Province, National Sample Survey, Report No. 4*, reprint, 1970, p. 18, and Report No. 5, p. 22. Later CSO estimates which put the natural increase of the rural population as a whole in the comfortable range of 2-3 per cent per annum could hardly be used; refer to *The Demography of Ethiopia*, op. cit., p. 79.
17. *Summary of Present Demographic Characteristics of Ethiopia* (Mimeo. Paper), abstracted from "Population of Ethiopia", *Results of the National Sample Survey, First Round*, CSO, 1971, Table IV. 3.
18. Refer for example to *African Population Newsletter*, Vol. 1, No. 1, Economic Commission for Africa, 1970.