The Feasibility of An Effective Population Policy for Pakistan

by

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The purpose of the following discussion is threefold: to consider whether or not rapid population growth is an impediment to economic development in Pakistan; to assess the impact of alternative changes in population growth on the size and composition of national development plans; to consider means of manipulating population size and growth. Under the last group of problems, questions will be asked about the effectiveness of a government-directed family-planning programme. Is a national population-policy a feasible operation at all? There is no evidence after four years of the Pakistan programme and only scanty evidence from abroad². The major complaint in this respect will be

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¹ Whatever references there are will be used in the text or, if not used, given in the list of references at the end.

² "The first successful effort to lower the birth rate... through an educational programme" has been reported from Singur in West Bengal. (Population Council, Studies in Family Planning. Number One. New York: July 1963, p. 3.) There are occasional reports from various countries, e.g., Taiwan, but it is difficult to distinguish between general drops in fertility and programme-induced declines (ibid., p. 12). Furthermore, reports arise of impressive declines without any programmes at all, e.g., in Bombay ("Sisyphus vs. Malthus", The Economist, March 28, 1964, p. 1197) or Singapore ("Power and Idealism in Singapore", The Times of London, March 10, 1964). All these are isolated instances, which cannot yet be used as examples of affectiveness of a national population-policy. The often-quoted example of Japan is not relevant because almost every variable there was different including the fact that the birth rate in 1920 was already at a low level and the determination of the public is so strong that in spite of limited contraceptive knowledge (50 per cent of couples) the age-specific fertility dropped below the French level. (Dr. Nobue Shinozaki. The Promotion of Family Planning in Japan and its Possible Implication. Tokyo: Institute of Population Problems. Mimeographed paper presented to the Population Quake Seminar, Lahore, March 1964).

that nobody, not even the economic planner, is prepared to pose the crucial question: what can be expected from any one programme.

The problem is not an exclusively Pakistani worry. It is a common concern. All countries have a stake in the success of Pakistan's population and development policies. However, even though the concern is shared by many, the answers are not apparent³. In this context, it is instructive to read the recommendations of the First Asian Population Conference⁴. The specificity of recommendations in the economic field stands in strong contrast to the vagueness of demographic recommendations. Even trade barriers and other impediments in international trade have been spelled out in detail. When it comes to national population-policies, "action programmes" is the nearest approach to specificity. Some recommendations, arising out of the current tendency of doing good, or at least "talking" about it, in all directions at once, may actually be harmful in misdirecting resources, though they are probably not meant seriously and as long as no time limit has been attached no harm need be expected.

The Demographic and Economic Present

During the Second Population Census of Pakistan in January 1961, 94 million people were reported⁵. Independent demographic analysis suggested that the true population was in fact 102 million or more⁶. Two estimates prepared in the Planning Commission came out with 100 million and 105 million⁷. Although disagreeing to this extent on the base population, all three sources are close in their estimates of current rate of population growth (2.6 per cent annually). With 102 million in January 1961, the population of Pakistan in the middle of 1964 must be more than 111 million. In fact, the suggested rate of growth seems to be on the low side. Preliminary results from the PGE (Population Growth Estimation) study⁸ indicate a still higher rate of population growth.

³ Pro-natalist policies are more obvious (family allowances, tax exceptions, employment of married women, provision of housing, free higher education), though equally not conspicuous for effectiveness.

⁴ First Asian Population Conference, Summary Report: Appendix A: Recommendations of the Conference. (Bangkok: Economic Commission for Asia and the Far East, 1963. Mimeographed).

⁵ Government of Pakistan, Ministry of Home Affairs, Population Census of Pakistan, Final Tables of Population: Sex, Urban-Rural, Religion. Census Bulletin No. 2. (Karachi: Office of the Census Commissioner, Ministry of Home Affairs, 1961).

⁶ Karol J. Krotki, "Population Size, Growth and Age Distribution. Fourth Release from the 1961 Census of Pakistan", *Pakistan Development Review*, Vol. III, No. 2, Summer 1963, pp. 279-305.

⁷ Wouter Tims, *Population Projections for Pakistan. 1965-1990.* (Karachi: Planning Commission, Perspective Planning Section, April 9, 1963. Mimeographed for private circulation).

Mahbubul Haq, *Population Projections* (1961-1991). (Karachi: Planning Commission: Perspective Planning Section, October 23, 1963. Mimeographed for private circulation).

⁸ Nazir Ahmed and Karol J. Krotki, "Simultaneous Estimations of Population Growth, the Pakistan Experiment", *Pakistan Development Review*, Vol. III, No. 1, Spring 1963, pp. 37-65.

The economic situation can be described briefly in a variety of ways. The per-capita national income grew almost imperceptibly over the fifties: from just under Rs. 250 to just over Rs. 250 at constant (1949-53) prices, although an increase to Rs. 260 has been claimed in 1962/639. The per-capita food consumption out of internal production hovered uneasily around 16 ounces per day but with a somewhat downward tendency. On the other hand, between 1955 and 1962, increase of almost one-fifth in the per-capita consumption of foodgrains and sugar have been quoted 10.

The Demographic and Economic Future

In the absence of reliable information on birth and death rates, and until dependable estimates become available from the currently conducted PGE study¹¹, the proportionate age distribution is of prime importance for estimating the birth rate. With a young population, the birth rate must be high: that is where the many children come from. Because East Pakistan has a higher proportion of children it must have a higher birth rate than West Pakistan. A following analysis of the two age distributions (and some other materials) suggested the rates per thousand population for the years around 1961¹².

	Crude birth rate	Crude death rate	Natural increase
East Pakistan	58	32	26
West Pakistan	51	25	26

There is considerable confidence in the accuracy of the birth rate because of the direct association with the proportions at young ages. The big unknown is the death rate. Should East Pakistan have already succeeded in bringing down its mortality to something nearer to the West-Pakistan level—contrary to the above estimate—the population of East Pakistan would presently be increasing at a rate faster than that of West Pakistan¹³. On the other hand, there are

⁹ Central Statistical Office, Government of Pakistan, Pakistan: Some Socio-Economic Trends. (Karachi: Manager of Publications, March 23, 1964, p. 31. Provisional).

¹⁰ Government of Pakistan, Planning Commission, Guidelines for the Third Five-Year Plan (1965-1970). (Karachi: Planning Commission, September 1963. For official use only). Page 2. Use is made of information from this document only of parts released to the press.

¹¹ Ahmed and Krotki, op. cit.

Karol J. Krotki, "First Report on the Population Growth Estimation Experiment", Congress of the International Statistical Institute. (Ottawa: in print).

Nazir Ahmed and Karol J. Krotki, "Second Report on the Population Growth Estimation Experiment", Indian Statistical Bulletin (in print).

¹² Krotki, "Population Size, Growth and Age Distribution. . ", op. cit., p. 304.

¹³ With a death rate similar to that of West Pakistan, East Pakistan's natural increase would be equal to 3.3 per cent annually. This, however, may be tempered by emigration.

⁽footnote continued on page 286)

few economic reasons why East Pakistan should be able to get its death rate down to the West-Pakistan level. Furthermore, in West Pakistan the death rate is subject to malaria-provoked seasonality (so is, apparently, the birth rate). Should the malaria-eradication programme be implemented in West Pakistan, there could be a drop in mortality and an increase in fertility of a speed and dimensions quite staggering and resembling the results of similar campaigns on the islands of Ceylon and Cyprus. On grounds of commonsense and common knowledge, it would be difficult to anticipate a similar result in East Pakistan. Thus, in spite of the potentiality due to its high birth rate (high proportions at young ages), East Pakistan may continue growing at a lower rate than West Pakistan¹⁴ because of its higher death rate—higher in East Pakistan than in West Pakistan, even if a drop in mortality of East Pakistan has already taken place.

Even though the First Five-Year Plan was a failure 15 and the Second Five-Year Plan is not yet a marked success, it is possible to argue that the plans did perform a useful role in building up economic and social overheads, particularly in the organizational and institutional field, and that, therefore, the Third Five-Year Plan has a greater chance to achieve its aims. On the other hand, it must be remembered that the aims of the Third Plan, though far from ambitious, are twice as large as those of the Second Plan. Among other things, it is intended to increase the national product annually by 5.4 per cent. Even if there is no further rise in the growth rate of the population, half of this growth in the national product will be needed simply to maintain per-capita income levels.

Population Growth: Stimulant or Impediment?

In developed economies, population growth can be viewed, and is so viewed by the "stagnation theory", as the stimulant which consumes surpluses

⁽footnote continued from previous page)

An estimate through demographic analysis suggested a Hindu emigration out of East Pakistan in the intercensal period of 2 million while the Indian Census Commissioner reports a higher figure and in addition a sizeable Muslim emigration, i.e., over one million. (Government of India, Census of India, Paper No. 1 of 1963). 1961 Census—Religion. Delhi: Manager of Publications, 1963, p. XXXIV). Before these figures can be accepted some further research need be undertaken and a certain noticeable selectivity in percentages used avoided. Some beginnings have already been made. See, for example,

M.S. Jillani, "The Comparability of Literacy between the Pakistan Censuses of 1951 and 1961", Summary in Abstracts of Papers Contributed by Individual Authors to the Asian Population Conference: Pakistan. (New Delhi: Office of the Registrar-General of India), p. 3.

M.S. Jillani, "Change in Levels of Educational Attainment in Pakistan: 1951-1961", Pakistan Development Review, Vol. IV, No. 1, Spring 1964, pp. 69-92.

¹⁴ Karol J. Krotki, "Seasonality of Vital Events in East and West Pakistan", *Indian Statistical Bulletin* (in print).

¹⁵ Government of Pakistan, Guidelines . . ., op. cit., pp. 2 and 10.

arising as frequent by-products of the working of the capitalist system ¹⁶. When the increasing army of consumers is accompanied at the same time by shortages in the labour force, caused by low births twenty years earlier ¹⁷, then persistent boom conditions prevail. In Pakistan, no similar shortages in the labour force can be expected, while the poor consumers with empty pockets are no stimulants to the business community. There is an elaborate body of theories "proving" that high fertility is the rational response to economic necessity ¹⁸ in circumstances where the family is the economic unit. Inasmuch as elimination of the family as the economic unit is a condition of tearing up the restraining social matrix, these theories offer no guiding hand.

It is not very illuminating to say that the reason why the increasing population has a depressing effect on the economy of Pakistan is the fact that essentially the marginal product of the additional people is less than the average product. With few exceptions 19, this is probably true in all countries. In Pakistan, not only is the marginal product below average product, but also probably below subsistence needs. Over some sections of agriculture, it may actually be a negative quantity; not necessarily because of the extreme case of "farmers getting in each other's way", but because the family labour remains dispirited under the burden of a large membership requiring support.

Furthermore, with the given capital equipment and the additions to it, envisaged currently, in all probability conditions of diminishing returns²⁰ for each additional unit of labour prevail. Additions to capital take place at a rate // slower than additions to labour. Even if additions to capital and labour were in more advantageous proportions, the natural-resource position at this stage of knowledge and technology is such that the conditions of diminishing returns would still prevail. The total production of the additional population, when looked at throughout the length of a generation, is likely to be less than the

¹⁶ Karol J. Krotki, "Economic Significance of Population Growth in Pakistan", Pakistan Commerce and Industry, Vols. II, III, Nos. 11, 12, 13, November, December 1963, January 1964, pp. 239-245, 251.

¹⁷ W.D. Borrie, "Demographic Cycles and Economic Development: Some Observations Based upon Australian Experience", *Population Index*, Vol. 26, No. 1, January 1960, pp. 3-14.

¹⁸ Sydney Coontz, Population Theories and the Economic Interpretation. (London: Allen and Unwin, 1957).

Sydney Coontz, "The Economics of High Fertility in Densely Populated Underdeveloped Areas", International Population Conference, Wien 1959, op. cit., pp. 83-91.

¹⁹ E.g., Sabah, formerly British North Borneo and Sudan.

The Economist, March 14, 1964, "Sabah: Trojan Horse or Mare's Nest", p. 988.

Karol J. Krotki, 21 Facts About the Sudanese. (Khartoum: Population Census Office, 1958).

²⁰ Though for some underdeveloped countries this is denied. D. Hamberg, "Review of Economic Backwardness and Economic Growth by Harvey Leibensten", American Economic Review, Vol. XLXIII, No. 5, December 1958, pp. 1020-1023.

consumption of this generation. This will be so particularly with the eventual production suitably discounted, especially for the first fifteen years of each generation, during which the generation makes its contribution as consumers, but not as producers²¹. It would be opening a wide discussion to consider what discount should be applied in Pakistan. But even a very low discount rate (or even a zero discount rate) leaves our general point valid with the imperceptible growth of per-capita income experienced by Pakistan in the last decade or so. Should the population be growing at a faster rate than currently estimated—a distinct possibility—the per-capita income would be currently decreasing, if we accept the available national-income estimates as correct and assume that the national income is not growing in sympathy with population growth.

Five-Year Plans with Lower Population Growth

The first thing in appreciating the relationship among the needs summarized in the five-year plans is the recognition that whatever may happen to fertility, it will certainly not lower either the size of the labour force or even its rate of increase for at least fifteen years. Fertility control may increase the supply of job-seekers inasmuch as potential mothers, freed from child-bearing, may join or try to join the labour force 22. The five million jobs, which are to be provided during the Third Five-Year Plan, will still be needed, whatever the success of the current family-planning programme.

It is important in this connection to appreciate that the accretions to the labour force on account of improved mortality are likely to be of lesser significance than the additions on account of high fertility. This is true particularly in the Western world, where the room for improvements in mortality is limited. It has been calculated that in a century the work-life expectations in the United States of America will rise from 39.4 years to 43.2 years²³. But even in Pakistan, where more spectacular improvements in mortality are possible, a drop in the death rate from, say, 25 to 15 will have less important consequences for the labour force than a drop in birth rate from 55 to, say, 30.

²¹ Stephen Enke, "Some Reactions to Bonuses for Family Limitation", *Population Review* (Madras), Vol. 5, No. 2, July 1961, pp. 33-40.

²² The point about women being freed from the labour force must not be overdone. For one thing, it will not be possible to provide equipment for all the *males* joining the labour force during the next few five-year plans. For another, women managed, at least in the United States, to have both more babies *and* join the labour force in increasing numbers and proportions.

See, Stanley Lebergott, "Population Change and the Supply of Labour", Demographic and Economic Change in Developed Countries. (Princeton: Princeton University Press, 1960), p. 409.

²³ Stuart Garfinkle, "Changes in Working Life of Men, 1900-2000", Monthly Labour Review, March 1955. Quoted in Lebergott, op. cit., p. 409.

Finally, on the "credit" side the advantageous consequences of an improvement in mortality must be mentioned inasmuch as mortality is only a last stage in morbidity. With improved morbidity, a better performance from the labour force may be expected.

On the optimistic assumption that fertility will start dropping from the very beginning of the Third Plan and that mortality will not start falling (or continue falling) faster, the effect will not be felt on the labour market (and consequently the investment needs on this count will not be any smaller) until the beginning of the Sixth Five-Year Plan, 1980. However, even when smaller numbers start joining the labour force this will not end Pakistan's problem. Disguised unemployment or underemployment must be very high. We need not accept any one estimate²⁴, but it is important to realize that investment in equipment for the unemployed and underemployed part of the labour force would be needed even after fifteen years²⁵. Employment should not be, speaking economically, the sole or even the most important criterion in determining a development programme. With suitable distributive arrangements, the effective employment of only a proportion of the labour force leaving a percentage idle. might increase the gross national product faster than employing everybody less effectively. It is, nevertheless, an unavoidable fact of political and social necessity that "full" employment be aimed at. For at least fifteen years, the hands of economic planners are tied in this respect even in developed countries. For example, during the next ten years the labour force of the United Kingdom will grow by 6 per cent, that of the United States by 18 per cent. This is one reason why automation causes less of a problem in the United Kingdom than in the United States.

A similar, though not identical, argument applies to the provision of educational facilities and also to other social overheads, like hospitals. Admittedly, in the case of schools, the decrease in needs will become apparent six years after the first drop in fertility, and in the case of maternity hospitals immediately. Inasmuch as large segments of population will remain outside schools and hospitals no matter how successful the family-planning campaign, no resources can be said to have been freed from diversion to other uses (like the family-

²⁴ E.g., Six million in Mahbubul Haq, Strategy of Economic Planning: A Case Study of Pakistan. (Karachi: Oxford University Press, 1963), p. 108.

²⁵ One is in no danger of overstressing the importance of a lower growth rate to national wellbeing on account of its contribution to ameliorating the underemployment problem. It has been shown that even in an economy like that of the United Kingdom where there is little, if any, of the orthodox type of underemployment, the losses to the gross national product because of an increase in unemployment are like an "iceberg": the visible unemployment is small in comparison with the lost labour and lost output per hour "underneath". Editorial review: "The London and Cambridge Economic Bulletin", The Times Review of Industry and Technology, November 29, 1963.

Real savings do occur immediately with the first drop in fertility on the consumption side in some narrow sense, that is excluding investment needs in consumer durables, particularly housing. The consumer durables are in a similar category to the other previously described investment needs, the magnitude of which does not lessen with a drop in population growth. But in the case of nondurable consumer goods, the denominator having become smaller, the per-capita output or consumption increases. Alternatively, the ratio of savings which can be extracted from the population without increasing the hardships of its living can be raised²⁷.

Probably, the most important conclusion from the discussion of the effects of lower fertility is the wellknown one that with smaller population not only the per-capita national income would be higher but the total national product would be greater in spite of a smaller labour force²⁸. This startling conclusion has a simple explanation. With lower population growth and fewer additions to the labour force, larger savings can be extracted from the population. Consequently, larger investments can be made, and the productivity of the smaller labour force increases faster than the decrease in the size of the labour force. Then total national product increases faster than it would with a larger labour force.

Finally, there are three imponderables. Many would say that welfare is affected immediately with a drop in fertility, though the element of a value judgement in this suggestion must be recognized as a factor limiting its generality. Secondly, it is possible to become very eloquent about the invigorating effects of fewer children in a family. The mother becomes of greater help to the father. The fewer children get more attention. The father rests better when he returns home and takes up the next day's task with a lighter, but firmer, heart. Thirdly, there is the group of health benefits. Maternal mortality rises sharply with age of mother and parity (number of children). Spacing and limitation after age 35 in the West lessens the risk of premature death. The incidence of mongoloidism and of congenital malformations also rises with age and parity. It is reasonable to expect that with the anaemic status of women in Pakistan, prolonged lactation and multiple pregnancies present an even greater threat at even younger ages than in the West.

Doubts About A National Population Policy

The first doubt is whether a government-sponsored, government-directed

²⁷ The food self-sufficiency aim of the national development plans would be the most obvious and immediate beneficiary of a drop in fertility.

²⁸ Ansley J. Coale and Edgar M. Hoover, *Population Growth and Economic Development in Low-Income Countries: A Case Study of India's Prospects*. (Princeton, New Jersey: Princeton University Press, 1958), pp. 277-294.

national population-policy can at all be effective or, at least, whether it is the best way of tackling the problem. Some writers trace the first drops in fertility in England (1870)²⁹ and in Japan (1880)³⁰ to the introduction of a whole gamut of progressive steps, such as universal education, female emancipation and extention of franchise, but others see a strong causal connection in England with the Bradlaugh-Besant trial of 1877-1878 when the birth rate started dropping from 35 until it reached 15³¹. According to this view, many circumstances made the time ripe for the spreading of family-planning information, but chief among them was "no doubt" the notoriety of the Bradlaugh-Besant trial³². A student of Japan sees in the hostility of the military government and the consequent criticism in the press the take-off in the extraordinary drive towards lower fertility which took place in Japan³³.

Another shibboleth seldom questioned is the belief that a national population-policy, particularly a family-planning campaign, needs the support of established public leaders ³⁴. For one thing, countries which lowered their fertility in the past did so against the advice of established leaders, against the official public opinion, against the Queen, and even against their religions. For another, in Pakistan it is by no means certain that religious leaders would come out against the programme. "Islam [is] flexible enough to promote birth control ³⁵. This is not necessarily a modern attitude developing under the pressure of progressive thinkers ³⁶, but a long-standing historical process ³⁷. Even among the earliest writers the attitudes are divided towards azal (withdrawal). So if

²⁹ Royal Commission on Population, Report. (London: Her Majesty's Stationery Office, 1948).

³⁰ Irene B. Taeuber, "Japan's Population: Miracle, Model or Case Study?" Foreign Affairs, Vol. 40, No. 2, July 1962, pp. 595-604.

³¹ Margaret Pyke, "Family Planning: An Assessment", Eugenic Review, Vol. 5, No. 2, July 1963, pp. 71-79.

³² Norman E. Himes, Medical History of Contraception. (New York: Press Inc., 1963), p. 251. Lest it be thought that a similar prosecution in Pakistan would not gain the same publicity, consider that England's literacy in 1877 was not very different from Pakistan's literacy today, while mass media, except newspapers and pamphlateers, were totally absent. In terms of religious tolerance, at least formally, England was more backward than Pakistan is today (e.g., the religion clause in rules regulating admissions to universities).

³³ Taeuber, op. cit., p. 600.

³⁴ Health educationists would say that "legitimation" by "natural" leaders is necessary. These are usually quite different from elected or public figures, but this belongs to the discussion on motivation. More about it in later parts of the paper.

³⁵ Charles Issawi, Egyptian Revolution: An Economic Analysis. (London: Oxford University Press for Royal Institute of International Affairs, 1963). Conclusion in review in The Economist, November 9, 1963, p. 572.

³⁶ E.g., Dr. Fazlur Rahman, Director, Central Institute of Islamic Research, "Religion and Planned Parenthood in Pakistan". Printed paper presented to the Population Quake Seminar held in Lahore in March 1964.

³⁷ Akhtar Hameed Khan, "Islamic Opinions on Contraception", *Journal of the the Pakistan Academy for Village Development*, Comilla, Vol. 1, Nos. 3 & 4, August and October 1960, pp. 1-11 and 1-4.

hadith (tradition) is sometimes for and sometimes against, the modern attitude must be interpreted in light of current needs, especially as there is the tradition that when Prophet Mohammad was consulted by a father of numerous children the advice was to have recourse to azal³⁸. Thirdly, on the earlier argument that, judging by past experience, controversy is a good thing for a family-planning programme, religious leaders should be made to face up to the issue. Whether they support it or are against it, the programme will benefit either way. It is a mistake to try to avoid the issue.

"The desire for [birth] control is neither time nor space bound. It is a universal characteristic of social life³⁹. There is no reason to think that in the ultimate analysis the population of Pakistan is any different. The question, therefore, arises: does it take the government action to give expression to this latent desire. Before we delve deeper into this question, let us consider whether the government action can be effective at all in a field most personal and not open to communal action like, say, eradication of an infectious disease. The belief in the effectiveness of government action, in spite of repeated examples to the contrary, is widespread, particularly in the Orient, though it is also getting stronger-with perhaps better reason-in the Western world. The reversal of the decline in the French birth rate, which took place in sympathy with the reversal in all the Western world, is traced by some, without proof, to the pronatalist French policies 40. Apparently, all one needs is to pass necessary legislation. However, even if the belief in the inappropriateness and ineffectiveness of government intervention in this field were correct, recourse to GOV-ERNMENT ACTION IS NECESSARY, if no change takes place otherwise. The population is apparently not yet ready to slow down on its own. It cannot afford to wait. The sequence of steps in the developmental process got reversed or at least is different from the experience of the Western world. The population started "exploding" long before the economic base for its existence has been created. The alternative of communal action in this highly personal field, inspired by the government, must be tried in order to enable individuals to make their own decisions earlier than they would under the more traditional process of development. Many of the difficulties of the following analysis are caused by the unusual idea of government intervention in this field.

³⁸ Dr. Fazlur Rahman, Director, Central Institute of Islamic Research. Verbal statement during a question-answer period at the opening session of the Population Quake Seminar held in Lahore in March 1964. Confirmed in personal communication, dated May 3, 1964 (F. 28-3-C.-11-R.-64-1964). These ideas were further reinforced in Dr. Fazlur Rahman, "Religion and Planned Parenthood in Pakistan", *Umma—Voice of the Community*, Vol. 1, No. 1, May 1964, pp. 15-18.

³⁹ Himes, op. cit., p. 55.

⁴⁰ Rahman, "Religion . . . ", op. cit., p. 2.

Why does not the "latent desire" of the population of Pakistan get triggered off in the normal course of social evolution? Perhaps all we need is a Bradlaugh-Besant type of trial or a good religious controversy. Even without contraceptives, by the mere application of withdrawal and the rhythm method the pregnancies of one hundred fertile women exposed for one year to active copulations can be cut down to thirty. "There is substantial evidence that coitus interruptus began to be widely practised in Europe when birth rates began to fall. The failure of birth rates to fall in other parts of the world clearly turns less on lack of effective measures than on the absence of strong motivation" 4.1. But the social evolution can be helped along in several other gentle ways, hardly deserving the title of a national population-policy.

Introduce simple contraceptives into the distribution channels of the economy, along with the other items villagers receive from the outside. The condom is a highly reliable and usable contraceptive⁴², a fact lost sight of in pursuance of more unusual alternatives. It should be made as "visible" as cigarettes and bettle leaves. Sellers should be allowed a good profit on a nominal, below cost, wholesale price. Allow similar rebates to mills, factories, large offices, government departments, cooperatives. Give up the revenue raised by import duties on contraceptives. Free them of import licensing and never mind if some children toys or ladies' wigs get into the country under the guise of contraceptives. The main thing is to remove them from the sun on the customs quay. Start local, subsidized production of condoms from animal intestines (Boswell and Pepys used them). Start quality control of imports. Frightfully shoddy stuff was being produced in the West before governments imposed quality control⁴³. Get the economists in the Planning Commission to work out the economics of these proposals and reconcile the mutually contradictory ones. Introduce the teaching about modern methods of contraception to the syllabus of each medical, paramedical and social school; possibly some more general instructions in all universities and colleges on the problem as a whole, as well as in polytechnical schools, where the second echelon of superiors is being brought up. Provide free in-service or post-graduate training to all practitioners with a cash prize for passing a relevant examination. Use small things as well as big things. Go into details. Print on each government envelope "Secure health and happiness by family planning" (Indian example). Provide post-office cancellation stamps with similar inscriptions. Clear the tables of such

⁴¹ Frank W. Notestein, Dudley Kirk and Sheldon Segal, "The Problem of Population Control", in Philip M. Hauser (ed.), The Population Dilemma. (Englewood Cliffs, New Jersey: Prentice Hall, Inc. 1963), pp. 125-142.

⁴² Christopher Tietze, "The Condom As a Contraceptive", Advances in Sex Research. (New York: Harper and Row, 1963).

⁴³ Ibid.

obvious steps which enable the family planners to hark back to the unhelpfulness of others, instead of looking ahead to the results of their own work.

Basic Requirements for An Affective Population Policy

The conclusion of the previous section was that judging by available historical experience the field of fertility is particularly unsuited for government intervention, while those limited fields in which the government can act, and, in fact, could have acted a long time ago, hardly deserve the name of national policy. Nevertheless, it is apparent that A POLICY IS NECESSARY, because on its own the population of Pakistan does not apparently move. What is there peculiar in Pakistani society that requires special intervention?

To informed observers it seems that the quality of education is deteriorating⁴⁴. A "serious erosion in the academic standards" is taking place⁴⁵. Education is relevant in this context not only as a variable intimately associated with individual family planning, but also as the provider of the cadres who will implement a national population-policy. Secondly, in Pakistan society urbanization, industrialization, education, and higher income do not seem to have the usual association with fertility⁴⁶. On the contrary, the higher the income, the higher the fertility, particularly so in the case of members of the Armed Forces 47 -contrary to generally cherished beliefs—while the town of Karachi as a whole appears to have fertility no different from rural areas. The Pakistan Family Planning Association finds it impossible to raise any funds from the public⁴⁸. Pakistan businessmen refuse in this respect to follow the example of their Japanese colleagues 49. Third, newly married wives desire generally and typically

⁴⁴ Furgan Ahmed, "Fall in Standard of Education", Morning News, Pakistan Day Supplement, March 23, 1964, p. XVI.

Dr. I.H. Qureshi, "We Are Producing Generations of Degreed Ignoramuses", Morning News, May 7, 1964.

⁴⁵ Editorial article: "Examination System", Dawn, March 23, 1964.

⁴⁶ Jamila Akhtar, "Differential Fertility". A mimeographed paper presented to the First Sociological Conference of Pakistan held in Karachi in April 1964.

⁴⁷ Sultan S. Hashmi, The People of Karachi: Demographic Characteristics. (Karachi: The Pakistan Institute of Development Economics. in print).

⁴⁸ Begum Manzoor Qadir, President, Family Planning Association of Pakistan, in a statement to panel on "Government Role in a National Family Planning Programme", Population Quake Seminar held in Lahore in March 1964. In fairness to the more enlightened businessmen of Pakistan, the validity of the belief that money cannot be raised would have to be tested again.

⁴⁹ In Japan, the hundred largest firms spent on family planning ten times more annually than the government. There, it is apparently sensible to argue that family planning is good business economics for an individual undertaking or an individual firm. See:

Shinozaki, op. cit.,
Yoshio Koya, "Economic Impact of Instruction in Family Planning", Eugenic Quarterly,
Vol. 7, No. 4, December 1960.
Yoshio Koya, "A Family Planning Programme in a Large Population Group", Milbank
Memorial Fund Quarterly, Vol. 40, No. 3, July 1962, pp. 319-327.
The last two articles have also been reprinted in Yoshio Koya, Pioneering in Family Plann-

ing. (New York: Population Council, 1963), pp. 132-145.

an important segment of the programme, but the field of motivations, communications, logistics must be left to appropriate experts. Secondly, the seriousness of the government will not be judged by protestation and not even by financial allocations (which remain to a substantial degree unspent). The test of government's seriousness lies in the extent to which they are ready to break out of the routine suited to the ordinary business of the government, but unsuited to this unusual, yet vital, programme. Will those middle-grade officials in various financial and personnel branches-almost "trained in obstructionism" and for very good reasons and to a good purpose but elsewhere—be allowed to lay their strangling hands on this programme? Apart from this basic question, the test of the seriousness lies also in such facts as these: the post of the Director of Family Planning is unfilled ten months after it became known that the last incumbent would go on leave to deal with malaria in Nigeria; or seven months after he was given permission to retire, the post of the Director of the National Research Institute of Family Planning, the very fountain of all the activities and ideas in this field, has never been filled; vacant is the post of Chief of the Communications Section responsible for piloting effective programmes to motivate people to adopt family planning. Out of the 15 workers in fields such as public health, demography, bio-statistics trained abroad under the Government of Pakistan. Ford Foundation, Population Council programme, only eight work in posts for which they were trained or in posts remotely connected with the field. The remaining seven persons are either unemployed or fill in part-time jobs or posts for which they were not trained. One wonders what is going to be the fate of the 21 men and women now undergoing training or recently selected for training.

The third precondition is that economists must give up their predilection to excuse family planners or themselves for years in advance 53 for not solving the economic distributive problems. This writer still remembers the almost audible sigh of relief when a large gathering of family planners was told by the Deputy Chairman of the Planning Commission that nobody expected a lower fertility for many years to come. If not now, why in five years? Why in ten? What is there inherent in the present programme which makes it inoperative in 1964, four years after the programme has been launched, but which will make it operative in five year's time? What if the programme, as presently conceived, will not even scratch the surface of the problem after five years, after ten years? The fact that economic planners do not ask family planners these questions is part and parcel of the more general phenomenon, namely that nobody

⁵³ M.L. Qureshi, "Population Planning in the Context of Development Planning in Pakistan". Mimeographed paper read at the National Population Quake Seminar held in Lahore in March 1964, p. 4.

really gets down to actually dealing with the totality of the problem. The obvious people, the economic planners, should stop to ask themselves what can be done about the economics and logistics of import, manufacture and distribution of supplies.

Motivational Campaign

The abundance of life in its widest meaning, social, cultural, emotional and material, is the obvious message, morally superior, to be embroidered on the flags of the population policy⁵⁴. The question which arises is how to carry this message to the remotest hamlet.

It has been suggested that 6000, or so, matriculates be used as propagators, working through visits to individual married couples. These youngsters, hardly literate themselves, except in some very formal sense, tend to equate the formal illiteracy of villagers with stupidity and are particularly unsuited to influence those so condescendingly called the "common man (woman)". Training can correct much of that, but the Comilla alternative of bringing out existing natural leaders for intensive and sustained training and then sending them back into their villages may be a better alternative. In more than one fields the effectiveness of local leadership has been reported, if properly stimulated 55. There is great talent latent in Pakistan.

There is probably no one best way of reaching this latent talent in Pakistan, but it is almost certain that an exclusively medically based campaign cannot succeed in a free society. It is not the already mentioned misuse of scarce physicians which is the most relevant consideration, but the wideness of ramifications of a complete family-planning programme, which can be summarized as follows:

EDUCATION: public information; mass channels; education for adoption through natural leaders.

- SERVICES: a) supplies: distribution of conventional contraceptives primarily through private sector and nonmedical channels;
 - b) clinical-medical: sterilization; intrauterine devices; oral pills.

⁵⁴ Frank W. Notestein, "Abundant Life", in M.L. Qureshi (ed.) Population Growth and Economic Development with Special Reference to Pakistan. (Karachi: Pakistan Institute of Development Economics, 1960), pp. 318-325.

⁵⁵ Richard V. Gilbert, "The Works Programme in East Pakistan". Paper prepared for the Conference on Labour Productivity held in Geneva in December 1963. Mimeographed for private circulation in Karachi in September 1963.

In this type of conceptualization, a medical direction of the family-planning campaign is an anomaly. To be sure, the physician has an important, almost indispensible, function to perform, but only after people have been convinced that they need and desire his services. The medical emphasis in the familyplanning programme is partly the cause and partly the effect of the preference for a simple approach. The idea of a simple pattern to be implemented countrywide has stultifying effects. It is comforting to planners and to government officials to describe in neat, exact terms a single plan, multiply the personnel needs, and equipment needs, and come up with a simple "package". Unfortunately, such an approach, while it may work for the construction of hydroelectric power dams, does not work with people. It does not work because it ignores the very important human characteristic of behavioural differences, differences in the influence of various cultures and differences in the readiness of people to accept a new idea. There are, for example, some indications that the people in East Pakistan perhaps because of the visible density of the population, are more aware of the consequences of overpopulation and more accepting of family planning. There appears to be less concern for religious implications and more recognition of the economic benefits of family limitation. One could theorize that persons living in the more urban areas would tend to be more sophisticated and more easily reached, providing reliable sources of supply were available.

The fact is, of course, that no one has a magic formula to achieve widespread adoption of family planning. The plan must vary depending on the stage of readiness of the people, on the availability of medical services and on the distribution system.

In areas where there is reason to suppose that people are already interested in family planning it may well be sufficient, as is currently under trial in a small area of East Pakistan, to have contraceptive supplies widely and consistently available. In other areas, where there are resistances, or where people are unaware of the problem, let alone the possible solutions, entirely different approaches will be needed, including intensive and continuing education, support from medical and clinical resources, multiple supply channels and the like.

Flexibility is the key to any plan projected for the family-planning programme. Currently, a small number of pilot projects are under way in Pakistan and others are awaiting implementation. Within the next year answers will be known to some of the questions raised above about aspects of family-planning programming in Pakistan.

When it comes to the actual means of manipulating people's attitudes in Pakistan, communications experts have been asked to do their share only a

few months ago. One thing, however, is certain. Inasmuch as the population of Pakistan will "never"—that is not within foreseeable future—become literate, any campaign to be successful must not be based on literacy as a prerequisite. Health-education programme in this situation offers possibly the most effective returns. A layman, in the absence of expert advice based on experience and experimentation, would try all conceivable alternatives. An Israeli expert dis carding his preconceived ideas, sped a youth movement in Singapore on the way to social change with a song book 56. In Nepal, Gurkhali songs treat such matters as modes of family limitation 57. During the Second World War, jazz records on venereal-disease education were played in public places.

Apart from the myth of a "single plan", a successful motivational campaign suffers also from the myth that information is tantamount to adoption. Practice need not follow knowledge 58. Moreover, even if initial acceptance follows on awakened desire to use, the gap before persistent use is achieved may be wide indeed 59. In the early thinking about family planning, emphasis was laid on the development of clinic facilities. Few people have come to these clinics, and it is now recognized that people must be "informed", "educated", "motivated" in order that the clinics might be used or family-planning methods be adopted. An unfortunate error has crept in, however, and that is if people are simply told that too many children are bad for health, and that the family-planning clinic is at such and such a place, they will thereupon troop for advice, and thereafter consistently practise family planning.

considerable study has been made in various parts of the world of the process of learning and of the steps that people must go through for them to adopt a new idea or engage in a new practice. We know that people must go through five defineable steps: awareness of the idea, interest in the idea, evaluation of the idea ("what does it mean to me"), trial or experimentation with the idea (try and fail, then try another method) and finally adoption, i.e., consistent use, of the idea through action. Thus, it must be understood that in family-planning promotion we are asking people to go through a complex process that can succeed only if the final step in the process is taken. We need to apply

⁵⁶ The Times, "Power . . .", op. cit.

⁵⁷ R.N.W. Bishop, Unknown Nepul. (London: Luzac and Company, 1952), p. 64.

⁵⁸ Lawrence Green and Yasmin Azra Jan, "Family Planning Knowledge and Attitude Surveys in Pakistan", *Pakistan Development Review*, Vol. IV, No. 2, Summer 1964.

Jamila Akhtar, op. cit.

⁵⁹ Professor D.V. Glass, International Planned Parenthood News, No. 121, January 1964, p. 3.

The Times of India of April 14, 1964 gives under "Family Planning" a disheartening report on the gap between initial acceptance and persistent use in areas as wide apart as Andhra Pradesh, Deccan and East Punjab.

what is known of communications theory in all its ramifications backed by documentation and experience. A motivational campaign to be successful must be able to talk not only in general terms about attitude and knowledge, but should distinguish between various degrees of *intensity* of attitude and *levels* of knowledge⁶⁰. It has already been suggested that the population of Pakistan is probably no different from that of other countries and, as such, already aware o its desire to space children and limit family size.

However, whether this is already so or not need not detain the argument, because it is relatively easy to get people aware of and interested in a new idea; but to carry them through the complete process is much more difficult. One of the essentials is that the new idea be made "legitimate" in the eyes of the audience 61. This may be done by obtaining the confidence of the people in the source of the idea and by getting the support or sponsorship of local leaders to whom the people turn for advice on such matters. It has been suggested that the Basic Democrats could be helpful in getting the confidence of the people in the source of the idea. Finding the right-leadership sponsorship is, however, a complex matter. People seek support from different individuals for different matters. They tend to go to the religious leader for religious matters, but they may go to a very different person for matters relating to health or family welfare. Women who have confidence in the local dai (midwife) would certainly be inclined to listen to her advice on matters relating to family planning. In many areas the local dai can play an important part in the distribution of both supplies and information. The frequent statements about alleged female ignorance must not be accepted without investigation. They may simply not be true in the relevant context and females are likely to be important partners in any family-planning programme 62.

There are many other factors that must be taken into account in any effective campaign to promote a new practice—too many to be accommodated in this paper. The basic concepts are, however, that adoption of a new idea is a complex process that takes time. Any promotion campaign, therefore, must be a continuing one rather than episodic; it must be channelled through relevant local leaders whom the people trust and must be accompanied by the availability of a choice of methods so that the individual can experiment for himself and make a choice of the method he wishes to adopt. It is only at the

⁶⁰ Green and Jan, op. cit.

⁶¹ Donald J. Bogue and Veronica S. Heiskanen, How to Improve Written Communication for Birth Control. With the consultation of Christopher Tietze and Elinu Katz. (Chicago: Community and Family Study Center, University of Chicago, 1963).

⁶² Green and Jan. op. cit.

very end of this process that the necessary degree of consistency and perseverence in application will emerge.

The Mechanics of A Family-Planning Programme

A description of the feasibility and cost, based on principles of industrial costing, of a national family-planning campaign involving various plausible methods is badly needed in Pakistan and should be urgently solicited from persons knowledgeable in the field. The description should make an estimate of effectiveness within one, two and three five-year plans, extending possibly throughout the length of the perspective plan. The description in its assessment of feasibility and effectiveness should cover not only the clinical mechanics, but also the field of supply distribution, communications and acceptance 63. Until such a description becomes available—and better more than one—all national programmes of family planning or for that matter any family-planning activities must be viewed as hanging in the air without a firm support.

Interesting proposals to influence rapidly a population through the market mechanism have been formulated by economists ⁶⁴. The essence of the proposals are payments to males for vasectomy operations and/or to females (but not females from the same married couples) for refraining from becoming pregnant. It is claimed for the proposal that it competes for no resources required under other headings of national development plans ⁶⁵, though this obviously cannot be true with vasectomies even if the Indian example of the efficient vasectomy camps is followed ⁶⁶. It has been pointed out that such transfer payments from a section of the community to another one are poor welfare economics when all the costs of upbringing of children are borne by the responsible parents ⁶⁷. In fact, only a fraction of the immediate costs of an extra child falls upon young married parents ⁶⁸ in a society based predominantly on

⁶³ In particular, the description would consider the adequacy of the provision in the Third Five-Year Plan for the family-planning campaign. The Rs. 15 crore envisaged, while a five-fold increase over the sum allocated (but not spent) in the current Five-Year Plan, is less than one per cent of all the sectoral allocations. The conclusion would probably be that the existing organization will not be able to spend the sum allocated.

⁶⁴ E.g., Stephen Enke, "The Economics of Government Payments to Limit Population", Economic Development and Cultural Change, Vol. III, No. 4, Part 1, July 1960, pp. 339-348.

Stephen Enke, "Government Bonuses for Smaller Families", Population Review (Madras), Vol. 4, No. 2, July 1960, pp. 47-50.

⁶⁵ Stephen Enke, "The Gains to India from Population Control: Some Money Measures and Incentive Schemes", Review of Economics and Statistics, Vol. XLII, No. 2, May 1960, pp. 175-181.

⁶⁶ K. Dandekar, "Vasectomy Camps in Maharashtra", *Population Studies*, Vol. XVII, No. 2, November 1963, pp. 147-154.

⁶⁷ Anne O. Krueger and Larry A. Sjaastad, "Some Limitations of Enke's Economics of Population", *Economic Development and Cultural Change*, Vol. X, No. 4, July 1962, p. 423-426.

⁶⁸ Stephen Enke, "Some Reactions to Bonuses for Family Limitation", *Population Review* (Madras), Vol. 5, No. 2, July 1961, pp. 33-40.

the extended-family system. Parents in such a system additionally equate having children with an old-age insurance scheme. The bonus payments are intended to counteract the economic and psychological advantages of having children.

Without considering the moral side of the issue and its political practicability, particularly when the idea is propagated by foreigners, a demographer and economist may legitimately ask a question about the effectiveness of this proposal. As usually construed, vasectomies are limited to men over 35 years of age and (not "or") with three sons. By the time men are 35, with early marriages and in the absence of birth control, they must have acquired large families. Moreover, with a flat age-pyramid the proportions over 35 are small relatively to those below. Three sons also mean, even in a society with strong preferences for boys, up to four and half children per married couple with husbands just qualifying for vasectomies and more children, or much more, per husband not yet qualifying. The most important disadvantage is, however, that it is a temporary palliative. Its effectiveness is lost as the men operated upon leave the "reproductive" ages without having changed the attitudes of the society in a more fundamental way⁶⁹. It may also lower the masculinity ratio of⁷⁰ the generation following the generation subject to vasectomies, if it is fathers of a satisfactory number of sons, and not fathers of daughters, who will submit themselves to such operations. The social consequences of such a development would be rather unpredictable, though probably resulting in a further worsening of the position of women. On balance, it is doubtful whether a national population policy could be based on vasectomies, though it would benefit from their effectiveness as a method of propaganda for family limitation. They should, though, be freely available to those who want them, probably without the restrictions described earlier.

⁶⁹ Whatever will be done must, however, be done with some purposefulness. The author understands that the mere spreading of a rumour of the possibility payments has decreased the number of volunteers coming for vasectomies. They prefer to hold back until the payment will be instituted. Such clumsiness in introducing the system produced results directly opposite to those anticipated by the proposer when he considered the news value of the system (Stephen Enke, "Some Misconceptions of Krueger and Sjaastad Regarding the Vasectomy-Bonus Plan to Reduce Births in Overpopulated and Poor Countries", *Economic Development and Cultural Change*, Vol. X, No. 4, July 1962, p. 431). It is difficult to get a clear picture of the procedure in Pakistan. Officials have different versions. Apparently, the payment is made to the hospital at the end of a year. It is then up to the hospital to trace the beneficiaries. One can easily imagine the ineffectiveness of this procedure.

⁷⁰ It has been shown that the sex ratio is unaffected by parental sex preferences with a constant and equal probability that a child will be of a given sex.

Mindel C. Sheps, "Effects on Family Size and Sex Ratio of Preferences Regarding the Sex of Children", *Population Studies*, Vol. XVII, No. 1, July 1963, pp. 2, 3, 66-72. In the present paper, the possibility of removing the italicised assumption is being hypothesized. Another interesting result in the paper quoted is the finding that parental sex preference results in itself in higher expected average family size.

In fact, those who agreed with the foregoing argument that there is no one approach in this field involving most intimate human actions and feelings will have foreseen that the next step is to suggest that there is no "one single gadget", which could solve the issue. The quite prevalent and rather naive conviction that "if only we had a cheap, effective method, the family-planning problem would be solved" must now be considered. Its corrollary is that the coil or loop⁷¹ is that "gadget".

Like any conviction that is part true and part false, this myth of the single method is doing great harm in family planning in Pakistan. There is no single method known today that can work for all people. The coil or loop cannot be worn by 15 per cent of Pakistani women because of anatomical or physiological or pathological reasons or conditions. So long as acceptance of intrauterine devices is voluntary, and it cannot be suggested that it should be otherwise, another group of couples will reject the coil for aesthetic, psychological, moral or religious reasons.

Suppose that 70 per cent of women (and their husbands) found the coil acceptable, there is still the problem of the logistics of insertion⁷². Few countries could afford the medical/paramedical time required to insert that number of coils and to maintain the follow-up needed for each wearer. It has been proposed that lady health-visitors can be taught to insert coils—but actually insertion is the least of the problems associated with the use of coils. Much more important is the medical judgement that a woman is, or is not, a suitable candidate for wearing the device; and the follow-up needed after insertion so that the woman who bleeds excessively or who has other difficulties gets proper care promptly.

It has also been proposed that male physicians be used under conditions that assure the privacy of the woman (including proper draping and a screen

⁷¹ Christopher Tietze and Sarah Lewit (eds.), Intra-Uterine Contraception Devices. Proceedings of Conference held during April 30-May 1, 1962 at New York City. (Amsterdam: Excerpta Medica Foundation, no date).

⁷² Small beginnings have been made in Pakistan. It is said that persistence of bleeding among Pakistani women is affecting a larger proportion than elsewhere (say 8 per cent as against 4 per cent). Roshan Manekia, National Study of Intra-Uterine Plastic Coils. (Karachi: National Research Institute of Family Planning. Mimeographed for circulation to participating groups, January 10, 1964).

The 70 per cent of women taking up the coil is suggested in the text merely for the sake of argument. It appears to be a gross overestimate in view of the recent findings, according to which it can be hoped that probably no more than 10 per cent of all fertile women in child-bearing ages will take it up. Should this finding be confirmed and should it be nationally applicable, a method important to many organizers of the family-planning campaign will have to be relegated to a less critical role in the national plan. It is to be hoped that at this crucial time when the population problem of Pakistan is being debated all relevant information will be published as soon as available.

between the upper part of the patient and the physician). The use of mobile teams has been proposed—feasible only where there are at least jeepable roads, or ready access by water. There is, however, this fallacy about the use of mobile clinics: that they are not wanted after they did their first insertions. If they are to return frequently for the re-examinations then the problem of identification of patients arises and in any case, if they are to return frequently they may just as well be turned into permanent stationary clinics or at least semi-permanent camps. And, this is, in fact, what happens, though for different reasons. Physically, a mobile clinic obtains a telephone connection and becomes immobile.

Until all these proposals, and others yet to be made, are tried, it is impossible to know how far it is feasible to extend the use of the coil, or how much physician and paramedical personnel time will be required.

In the meantime, the services of physicians living in the centres of population concentration are not yet utilized fully. Students are still being graduated from medical, nursing and lady health-visitor schools having never seen a coil, let alone been taught its use. No real effort has been made to inform the private physician about it, or to make the device available to him/her. Only about a dozen lady doctors have been trained in the entire country for coil insertion and follow-up.

The same kind of objections can be levied against the oral pills as "the method". To-date, they are not available in Pakistan for widespread use. But suppose they were. Oral contraceptives must be taken on a precise schedule—20 days, stop for a number of days and resume. There is evidence from a very small study that if the schedule is made to coincide with the phases of the moon, then illiterate village women can keep track of their schedules. The importance of this schedule becomes apparent when one realizes that missing two days could result in loss of protection and consequent pregnancy. In order to manipulate the menstrual cycle so that it does coincide with the moon, medical supervision is necessary. We do not know what is needed for the woman to be sufficiently motivated so that she never misses a day. And again, there are a percentage of women (and we do not know how many in Pakistan) who are unable to use the pill.

No other country in the world has so far lowered its birth rate because of a "gadget". Withdrawal and abortions have been responsible for the decline in the French and Japanese birth rates and have had important effects in Great Britain and the United States. Birth rates are lowered when people become aware that excessive children are a burden and that something can be done to avoid

the burden. The key to the problem of family planning is information accompanied by service, the distribution of supplies and the availability of medical methods—not any one gadget.

The question has earlier been posed how far the programme should be medically and clinically oriented. Since for success it depends primarily on nonmedical aspects medical operations should form only a small fragment of the campaign. Let this issue be reconsidered from the point of view of the actual birth-control methods to be introduced into Pakistan. If we consider family planning a medical-health problem to be solved primarily by doctors in clinics, their scarcity must be realized. It takes five years or more to train doctors. Yet we waste the time of the doctors we do have by expecting them to be responsible for instruction in and distribution of conventional contraceptive methods (condom and foam). Doctors working in clinics are already seriously overburdened by the demands of sick patients, even granted that many are not actually practising medicine in the one minute or less they spend with a patient. (The patient would probably be just as well off if he talked to the compounder directly.) The use of doctor's time in the clinics needs to be rethought not only for family planning but for all other programmes as well.

Certain methods require doctors in clinic settings: the coil and sterilization in particular. All the clinics should be equipped to provide these medical services. Such clinics should be part of an integrated education programme so that people do seek their services. (On the average only one patient every week comes to a family-planning clinic now.) It has been proposed that one clinic session per week be reserved for coil insertion—no other type of patient will be seen at that session by the physician. Perhaps 25 coils per week can be inserted per lady doctor including private practitioners as well as those employed in government clinics and hospitals, with a maximum potential of 1,250,000 per year. (This total assumes the cooperation of 1,000 of the 2,000 lady doctors in Pakistan working 50 sessions per year on coil insertion.)

But what about the person who will not tolerate the "stigma" of going to the family-planning clinic, or who is afraid of the doctor, or who wants to experiment privately, or who lives too far away, etc.? Shall she (or he) be ignored for the next ten years while more and more doctors are trained and clinics built? And, in a country where epidemics of smallpox, cholera, typhoid, diarrhoea, tuberculosis are commonplace, how much of the clinic and doctor time can be pre-empted by family planning before the government gets into the politically untenable position of ignoring the sick in order to prevent more babies?

We can quite seriously ask: are clinics necessary. It was not clinics that lowered birth rates elsewhere—in fact clinics were notable failures regarding their impact on the total birth rates of nations. The current experience in underdeveloped countries is not dissimilar. In Cevlon "a program based exclusively on clinic services was found to be ineffective"73. In Taiwan in line with "the experience of many countries" it was found that "family-planning clinics .. are not efficient vehicles for the kind of action which will need to be embodied in a population programme"74. In the West, "planned parenthood" movements did much to make contraception respectable—but the number of persons actually getting advice through clinics has always been small. And, interestingly enough in various studies elsewhere of the reasons given by people who limit the number of their children, the major reasons given have been economic, not health⁷⁵. Over and over again the responses have been—"to be able to send the children to college", or "to afford a better life for my kids than the one I had", or "so we could afford music lessons, a nice house and the other advantages we wanted our kids to have". These people are not thinking in health terms or medical terms, nor are they associating family planning with the clinic setting. Perhaps Pakistanis are different, but judging by the experience with clinic services to-date it would not seem so.

We tried to explode in the foregoing argument some of the myths surrounding family planning: the myth of the single gadget, the myth of the clinic and others ⁷⁶. We also tried to indicate a number of steps which can be taken immediately, without promoting them to the level of a national policy. They need not be effective, but can do no harm, such as involving the private distribution systemd. They cost little and may possibly do some good. Let us now try, in turn, to explode the myth of government facilities for distribution of the orthodox supplies.

At present, the distribution of contraceptive supplies to 85 per cent of the population, those living in the villages, is through government clinics. Since the rate of revisits to these clinics is 1.5 or the average person returns less than

⁷³ Population Council, Studies in Family Planning, Number Two, December 1963, p. 12.

⁷⁴ Professor D.V. Glass quoted in *International Planned Parenthood News*. (London), No. 121, January 1964, p. 3.

⁷⁵ J. Mayone Stycos, "A Critique of the Traditional Planned Parenthood Approach in Underdeveloped Areas", Clyde V. Kiser (ed.), Research in Family Planning. (Princeton, New Jersey: Princeton University Press, 1962), pp. 477-501.

If not economic reasons, psychological and social motives (e.g., parent's educational responsibilities) are reported. Andree Michel, "The Frenchwoman's Role in Urban Married Life", International Social Science Journal, Vol. XVI, No. 1, 1964. p. 104.

⁷⁶ Caroline Wishik, Five Myths in Family Planning Promotion. A personal communication to the author dated April 24, 1965.

twice, and since they distribute a month's supply at a time, it is obvious that the present clinics are not very successful at distribution of supplies. Obviously, there are problems of easy accessibility, of waiting in turn sometimes for several hours, of possible social stigma, etc. In addition, clinics are sometimes either out of supplies or the supplies are so outdated as to be unusable—foam tablets are obviously foaming in their jackets. The entire logistics of supply ordering, inventorying, reordering and proper storage need reorganization.

Alternative and more accessible distribution should begin. Recently in India⁷⁷ it was announced in one government ministry that a certain office would be open two hours a day for the distribution of supplies. The response was so great that the hours had to be extended. These same employees had clinics near their homes where they could get supplies, but they did not. The reasons given were the long waits, the inconvenient hours, and the fact that detailed records were kept on each person. At the ministry distribution-point, there was no waiting because there was no competing service and the hours were extended to cope with the demand, no records were kept except for name and office, and the man could go to the depot during working hours. A sample study to ascertain the use of the contraceptives shows that of the first 50 examined three persons had passed on some of their supply to a friend or relative, 47 had used the supplies themselves, no one had resold them.

The need to involve the private sector in distribution has been noted above.

CONCLUSIONS

The family planner can entice the economic planner with no immediate gains. He can promise a higher per-capita consumption due to smaller family size, or the alternative of higher savings, but under the circumstances in Pakistan there are no items in the national bill for the development plans, which can be pointed out as requiring less expenditure for the next fifteen years, that is, until the first decreases in additions to the labour force will be felt. The need for overheads, social and others, in the meantime is so insatiable that no matter what population policy adopted, they have to be met to the maximum of domestic and foreign efforts. However successful a family-planning campaign may be, it provides no immediate "savings" elsewhere in the budget to be used for financing the campaign.

Inasmuch as the payoff comes with a time lag, expenditure on national population-policy campaign would not be different from almost any other expenditure. The case for directing resources to population control does not

⁷⁷ Personal communication from Mrs. Caroline Wishik relating to an interview with Dr. Moye Freyman of the Ford Foundation in New Delhi, March 1964.

rest on "immediate budgetary gains". Few types of national expenditure could be justified in this way. There is, however, this important difference: with other types of expenditure we have the classical economic problem of choice, and give up an alternative with regret in the hope that at a later time the abondoned alternative can be taken up. (If there were no regrets the choice would be only too obvious.) In this case, a population policy is an alternative, which if selected, disposes of the need for other alternatives, that is if the needs of Pakistan were not so insatiable. Because they are, it is not possible to point out immediate savings. In some general sense, of course, all economic needs are "insatiable", the more so the more acquisitive the society is. However, the difference of degree in the case of Pakistan is so great, that it becomes a difference of kind. Until all children receive primary education, the budgetary item for school provision cannot be cut, however successful a family-planning campaign may be.

Embarking on a discussion of the problems of a family-planning campaign, one immediately runs into a group of simple commonsense things which could be done with little trouble to anybody. These usefully switch attention away from reliance on government channels and the pursuit of modern gadgets, without trying first, or at least at the same time, time-honoured methods, which alone were effective elsewhere.

The unusual situation of Pakistan must be underlined, inasmuch as Pakistan wants to achieve aims which elsewhere population reached on their own without government sponsorship.

The process of building up an effective family-planning campaign is an involved one of which the availability of a "gadget" is only a lesser and a later worry. The designers and leaders of the campaign must describe the results they expect. It is no use embarking on a campaign the desired outcome of which is unknown to the very organizers. The PGE experiment can provide almost immediate verification—with only nine months delay—of the success of a family-planning programme. The desire to have a method of measuring conceptions rather than births is a red herring resulting in delay, if not designed to delay the launching of an action programme. At the high birth rates prevailing in Pakistan there cannot be much room for fluctuation in conceptions without affecting the birth rate.

Before the actual contraceptives can be spread in the country the very idea and their usefulness have to be "sold". In discussing the motivational campaign, an attempt has been made to dispose of a number of shibboleths which distort the formulation of a national population-policy and none of

which may be true. To recapitulate briefly, they are the belief that government support is essential⁷⁸, the support of established—particularly religious—leaders is essential, the mistake of the medical bias resulting in one single approach, the myth of the effectiveness of the clinics, the belief that information is equivalent to adoption and later persistent use. The communications theory—ignored in Pakistan—with its well-documented findings and theoretically sound approaches must be brought in to bear a predominant influence on the formulation of methods, not clinical gadgets.

The ineffectiveness of the government distributional channel has been pointed out and the misuse of the scarce physicians, in actual conflict with their other duties, has been stressed. The resource requirements of the nonclinical approach are nonconflict creating.

The goal of the national population-policy should be to reduce the birth rate by 10 per *mille* points before 1971 (from, say, 55 to 45). To do so requires that from one-third to one-half the fertile couples must be practising family planning within the next five years, a total of between seven to ten million couples to reach. It requires mounting a campaign of dimensions and with a *content* beyond the reach of the few doctors of Pakistan. Their scarce and essential services must be concentrated at the few points of the programme where they can play a full role worthy of their true value. The national policy must be formulated with the (short-term) aims kept firmly in view.

⁷⁸ Though it is essential in the circumstances of Pakistan, so that the population has the benefit of the earliest possible stimulus, conceivably before it moves on its own, that plans must be drawn in full awareness of the unusualness of the campaign proposed. The hitherto effective methods and so far the only effective ones, barring policies admitting abortions, were individually inspired, nonpublic. "But population problems are so great, so important, so ramified, and often so immediate, that only government, supported and inspired by private initiative, can attack them on the scale required". John D. Rockefeller III, People, Food and the Well-Being of Mankind. Second McDougall Memorial Lecture, 1961. (Rome: Food and Agriculture Organization of the United Nations, 1961), p. 12.

ADDITIONAL REFERENCES

- (References in this list have not been quoted in this paper. They may be used as helpful background reading. Some general economic titles have been included for the benefit of workers in the field of family planning. References astericked are concerned specifically with Pakistan.)
- *Afzal, "Why Population Planning", in M.L. Qureshi (ed.), Population Growth and Economic Development with Special Reference to Pakistan. (Karachi: Pakistan Institute of Development Economics, 1959), pp. 326-331.
- *Beryl J. Roberts, William Griffiths, Gilbert M. Shimmel and Elizabeth Clark, "A Post Operative Study of Ligatees in Dacca, East Pakistan", Journal of the Pakistan Academy for Village Development, Comilla, Vol. 4, No. 3, January 1964, pp. 93-113.
- Chandrasekhar, S. "A Comment on Dr. Enke's [Sic] Article", Populaton Review, (Madras), Vol. 4, No. 2, July 1960, pp. 51-54.
- *Cobb, John C. and Harry M. Raulet, Suggestions on Family Planning for the Third Five-Year Plan of West Pakistan. (Lahore: November 13, 1963. Mimeographed for private circulation).
- Demeny, Paul. "The Economics of Government Payments to Limit Population: A Comment", *Economic Development and Cultural Change*, Vol. IX, No. 4, Part 1, July 1961, pp. 641-644.
- Enke, Stephen, "A Rejoinder to Comments on the Superior Effectiveness of Vasectomy-Bonus Schemes", Economic Development and Cultural Change, Vol. IX, No. 4, Part 1, July 1961, pp. 645-647.
- *Fazalbhoy, Zarina A. "Fertility and Attitudes to Family Planning in Karachi", Population Growth and Economic Development with Special Reference to Pakistan, op.cit., pp. 332-336.
- *Journal of the Pakistan Academy for Village Development, Comilla, July 1962. Special Issue on Rural Social Research. Contains a number of articles related to family planning.
 - *Mauldin, W. Parker, A Summary of Selected Studies on Family Planning in Underdeveloped Countries. (Karachi: Pakistan Institute of Development Economics).
 - *Mauldin, W. Parker, "Population and Population Policy in Pakistan", Marriage and Family Living, Vol. 25, No. 1, February 1963.

- *Raulet, Harry M. and John C. Cobb, "Population Problem and Family Planning in Pakistan", Journal of the Pakistan Academy for Village Development, Comilla, Vol. 3, No. 1, July 1962, pp. 17-27.
- Sadiq K. Hussain, "Medical Aspects of Family Education", Sixth International Conference on Planned parenthood. (London: International Planned Parenthood Federation, 1959), pp. 186-191.
- *Sanaullah, M. "Family Limitation Projects and Control of Fertility", *Trade and Industry*, Vol. 6, No. 2, February 1962, pp. 101-104.
- *Sharif, M., "Pakistan Prepares to Meet the Challenge of Uncontrolled Population Growth with Family Planning", Population Growth and Economic Development with Special Reference to Pakistan, op.cit., pp. 337-347.
- *Sharif, M., "Outlook for Government Action in Family Planning in Pakistan", in Clyde V. Kiser (ed.), Research in Family Planning. (Princeton, New Jersey: Princeton University Press), pp. 141-146.
- Splenger, Joseph J. "Population Threatens Prosperity", Harvard Business Review, Vol. 34, No. 1, January-February 1956, pp. 85-95.
- *Splenger, Joseph J. "Economics and Demography", in Philip M. Hauser and Otis Dudley Duncan (eds.), The Study of Population: An Inventory and Appraisal. (Chicago: University of Chicago Press).
- *Social Sciences Research Centre, University of the Panjab, Knowledge of and Attitude Towards Family Planning. (Lahore: Family Planning Association of Pakistan).
- *Social Sciences Research Centre, University of the Panjab, Attitudes of the Union Councillors Towards Adoption of Family Planning Programme as National Policy. (Lahore: Family Planning Association of Pakistan).
- *Waheed, Saida "The Role of Government in Family Planning Programmes in Pakistan", The Sixth International Conference on Planned Parenthood, op.cit., pp. 291-293.
- *Waheed, Saida, "The Family Planning Association of Pakistan for 1958", The Sixth International Conference on Planned Parenthood, op. cit., pp. 361-364.
- Whitney, Vincent Heath "Population Theories of Economic Development", International Population Conference, Wien 1959. (Vienna: Union Internationale pour L'etude Scientifique de la Population), pp. 149-157.
- Wishik, Caroline, "Five Myths in Family Planning Promotion", personal communication, April 24, 1964.

- *Yaukey, David, "Some Designs for Rural Section Studies on Family Planning", Journal of the Pakistan Academy for Village Development, Comilla, July 1962, pp. 48-55.
- *Zaidi, Wiquar Husain, "An Action Research Program on Family Planning", Journal of the Pakistan Academy for Village Development, Comilla, Vol. 1, No. 4, October 1960, pp. 57.
- *Zaidi, Wiquar Husain, A Survey of Attitude of Rural Population Toward Family Planning. (Comilla: Pakistan Academy for Village Development).
- *Zaidi, Wiquar Husain, "Attitudes of Rural Population Towards Family Planning", Journal of the Pakistan Academy for Village Development, Comilla, Vol. 1, No. 6, February 1961, pp. 36-42.
- *Zeidi, Wiquar Husain, "Progress of a Family Planning Section Research Project", Journal of the Pakistan Academy for Village Development, Comilla, (forthcoming Issue).