

BIRTH CONTROL IN ASIA

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Hygiene & Tropical
Medicine
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PREFACE



WHEN the Birth Control International Information Centre undertook the heavy task of organising the Conference recorded in this volume, and in preparatory work extending over several months achieved the supreme diplomatic triumph of bringing together, in amicable discussion, experts belonging to countries whose armies were at that very time engaged in settling problems for which birth-control is sometimes prescribed as a remedy, its purpose was to obtain, and as far as possible itself to provide, answers to a series of questions which had an important and direct bearing upon its propaganda in the densely populated countries of the East.

For instance: in what sense was it true, if at all, that these countries were over-populated? India had increased its population by over thirty millions between the censuses of 1921 and 1931, and Japan was growing at the rate of over one million persons a year; but if such rates of increase were excessive, then excessive in relation to what? In relation to the actual or to the potential economic resources of the territories in which they prevailed? Were indeed these and other countries of the East overpopulated even in a relative sense (that is, relative to their economic development at the moment), or was the poverty of their inhabitants due primarily to an inequitable distribution of what were in fact sufficient resources? Granted an affirmative reply to the latter question, were there any other grounds—medical, social, or personal—on which birth-control propaganda in the East could more effectively be based?

There were also a number of practical problems. What were the chief impediments to the practice of birth-control in India, China and Japan? Were the masses of working people in these countries too poor to use contraceptives, or was one reason for their poverty

the fact that they had not yet learnt to use them? If the propaganda for birth-control succeeded in creating a public opinion in its favour, would the contraceptive methods and materials that have proved suitable in the West be equally so in the East? What should be the first aim of birth-control clinics and teachers in the East, mass-production or perfection? In short, should the methods imparted be those conferring the completest attainable security against undesired pregnancies, or less efficient methods which, by reason of their cheapness or simplicity, had the best chance of being adopted on a large scale?

It is to such questions as these that the speakers addressed themselves and to which this volume supplies what I believe to be the most accurately informed replies at present available. What perhaps was most striking in the proceedings of the Conference was the large measure of agreement that existed with regard to remedies among speakers who differed sharply on the subject of diagnosis. Those who held that no considerable cultural progress could be looked for in India, China, and Japan except as a sequel to drastic changes in their economic systems were not less convinced than the exponents of the view that "over-population is the cause of poverty" of the immediate need for pressing forward the propaganda of birth-control in these territories. The general view was admirably summed up in the *British Medical Journal*: "Even if birth-control alone would not serve as a complete remedy for the economic problems of Asia, granted even that the difficulties in the way of its dissemination were created by the very miseries it aimed at relieving, it yet offered, all speakers were agreed, a contribution to the solution of these problems; and they differed only in their estimates of how important (in relation to other measures) this contribution might be."

The Conference had one outcome that was even more gratifying. Its effect on public opinion in India was such that leading social workers invited the Birth Control International Information Centre to send a representative to the All India Women's Conference to put

the case for birth-control before the delegates there assembled. As I write these lines Edith How-Martyn, Honorary Director of the Centre, is in India in response to this invitation. Thus the Centre is continuing the work begun by its President, Margaret Sanger, whose pioneer propaganda tour is generally recognised to have been the most important single factor responsible for the establishment of the birth-control movements of India and the Far East. Some faint conception of the magnitude of the task thus brilliantly initiated and pursued may be obtained from a study of the data recorded in this volume.

MICHAEL FIELDING.

First Session

FRIDAY AFTERNOON, 24TH NOVEMBER, 1933

Subject

“POPULATION PROBLEMS IN THE EAST”

Chairman

LORD HORDER

President of the Conference

THE CHAIRMAN: I will first say how pleased I am and how gratified the conveners of this Conference are to see you here this evening.

This is the first session of a Conference on birth-control in Asia, and the Conference is convened as you know by the Birth Control International Information Centre. This organisation began its activities after a Conference at Zurich three years ago, organised by that great pioneer of the birth-control movement, Margaret Sanger [applause]. The object of the International Information Centre is—using the word in its widest and best sense—missionary; that is to say, it aims at making known as widely as possible, and therefore in as many countries and languages as possible, the gospel of birth-control.

This is the first International Conference held under its auspices. I do not propose to-night to deal with the gospel. I shall take it for granted that the phase of the movement which has been concerned with establishing the principle of contraception is over, and that contraception as a controversial matter has now an historical rather than a practical interest.

The two things that remain to be done with regard to birth-control are, in the first place, research into methods of contraception, which should be the paramount activity of those scientifically minded among us who put their hands to this particular plough; and secondly, to disseminate such knowledge as we have—and this knowledge is growing from day to day—of the practical methods of contraception. It is this question of dissemination that we are especially interested in in this country.

There are three sessions in the Conference and it will be noted that the subjects dealt with at these three sessions follow a sequence which has a definite meaning. The subject for discussion this evening is “Population Problems in the East”; the subject for discussion at the second session to-morrow morning is “Standards of Living in Asia”; and at the third and last session it is “The Practical Problem of Contraception in the East.”

There are certain messages of interest which I shall not read because they are printed in the Conference programme; they are messages from Margaret Sanger, Bertrand Russell, and *The New Generation*. In respect of the first message, seeing that Margaret Sanger is in this matter of contraception *the* pioneer, or a great pioneer, I thought it might be nice to send her a message [applause], in which I propose that we say:

London Conference on Birth-Control in Asia sends greetings, and thanks you for your inspiring message. It regrets your inability to attend and remembers with gratitude your pioneer work. **HORDER**, President of Conference.

I take it that is agreed [applause]. It is my pleasing duty to declare this Conference open and to proceed to the business of to-day's session, which is the discussion of population problems in the East.

PROFESSOR A. M. CARR-SAUNDERS: This conference has for its general topic birth-control in Asia, and this session has for its special topic Population Problems in the East. What status has a Westerner in such a conference? He can have little knowledge of the contemporary situation in the East and less of its past history. Even if there were general agreement in the West on population theory and population policy, it would be presumptuous for him to offer advice to Easterners. But there is no general agreement. What then can he do? He can come forward and offer his own reflections on theory and practice derived from Western experience. These cannot be irrelevant to Eastern problems because at the bottom the population problem is one and the same for all peoples. But the inferences to be drawn from what he has to say can never be applied directly to other civilisations; and he may well think that in some important respects the experiences of the West afford a warning rather than a guide to the East.

When men three or four centuries ago once again began to reflect upon social problems it soon became apparent that the human power of increase was such that, if it continued "unchecked" as Malthus was subsequently to call it, the world would soon be over-run with people. Moreover this power of increase was no new gift—some fatal attribute that man had acquired late in his history. As a writer of the late sixteenth century put it: "The virtue generative is without doubt to this very day the same or at least such as it was three thousand years past. So that if there were no other impediment or let therein, the propagation of mankind would increase without end and the augmentation of cities would be without term." By this author the problem is properly posed; we start from the fact that the

capacity for increase is of almost incredible potentiality and that, if it has changed, it has grown rather than diminished. Consequently there must always be impediments or checks to increase.

Before the time of Malthus the discussion of population had always been incidental to other matters. He performed the great service of focussing the attention of men upon the problem. In his view checks to increase were always operating. Though he admitted that a certain number of people in civilised countries refrained from marriage or delayed marriage for prudential reasons, he held that the increase of all people in many countries and of most people in all countries was only checked by means which took the shape of "misery"—war, pestilence, and so on. Malthus never speaks of over-population. To him there could be no such thing. The checks, the greater part of them being subsumed under the genus "misery," were only too efficient. "Misery" was not due to over-population, in his view, but to the manner in which excess of numbers were prevented.

We have come to think in terms of over-population. We realise that for any country at any given time there is a density of population which is more desirable than any other from the point of view of economic welfare. If the actual density fails to reach or exceeds the desirable density, then the community fails to attain that degree of economic welfare that is within its grasp. And there may be huge degrees of failure on either side. Just as one man may inhabit a whole continent and be poor in consequence, so an excessive number may inhabit a country and live in dire poverty.

How does our view lead us to think of past and present human experience? To Malthus human history was a sorry tragedy. He himself speaks of his essay as having a "melancholy hue." Only by the utmost effort, by the universal exercise of "moral restraint," could man rise above his fate. Needless to say, Malthus did not discover any country where man had freed himself of his shackles, and he was clearly not very optimistic that he would attain freedom in the foreseeable future.

To us human experience tells a very different tale. The labours of anthropologists have given us a picture of primitive society—of social conditions, that is to say, before the rise of civilisation. One feature in that picture is that the small family habit prevailed. By small family habit I mean that customs and practices were everywhere employed which kept the number of children small, whether they took the form of prolonged abstention from intercourse and prevented children being born, or whether they took the form of infanticide and reduced the number after birth. These customs and habits were

regularly employed—not merely when famine or other disaster threatened but as a normal practice.

As a result of the small family system population was kept within bounds. We cannot say how nearly the desirable density was usually approached. But we can say that the picture which Malthus painted of the past was out of drawing. Already in early times man had succeeded in freeing himself from the shackles which, according to Malthus, had always bound him and from which he did not think mankind was likely to escape.

It is a fascinating task to speculate upon the origin of the small family system. But it is the later rather than the earlier phases of the story which concern us. The small family habit broke down. In the East it seems to have lasted until fairly recent times. Japanese authors have described the system at work in the earlier part of the last century in their country, and the breakdown has occurred within the last hundred years. The history of the matter in India and China is to me more obscure. The important fact is that the unlimited family now prevails in the East.

In the West there is abundant evidence of the prevalence of the small family habit among peoples such as the Greeks, when the primitive conditions were evolving into the beginnings of what we call civilisation. The final blow to the small family habit was the prohibition of infanticide by Christianity. In medieval Europe there was no small family system. But for the mass of the people there was not unrestricted multiplication. In a variety of ways pressure was brought to bear upon the poorer section of the population, forcing them to postpone marriage—often for many years. Finally, under the influence of the industrial revolution, this pressure was relaxed and the West entered upon a period of unrestricted multiplication.

This was the period at which Malthus wrote. In his day there was nothing to prevent the poorer part of the population marrying early and letting children come as Nature determined. Some people from prudential motives, but not from external constraint, delayed marriage. It is clear that Malthus generalised from his own times and supposed that these conditions had always prevailed.

This extraordinary phase in European history—the phase of unrestricted multiplication—passed off without disaster because it coincided with the prodigious industrial development which provided work for many times as many people as there had been before. Then in the last quarter of the nineteenth century Europe entered on a new phase—that of the small family system once more, but this time it was a small family system willingly adopted without external constraint. Hitherto the small family habit had always been forced upon

people because they were bound to employ certain practices which kept the family small, just as they were bound to conform to the numerous other practices which regulated all sides of social life.

The difference between the voluntary and the involuntary small family systems is immense. But before I discuss the difference I must draw attention to the fact that what I have said implies the belief that birth-control is the main, if not the only, important cause of the decline of the birth-rate. Such is my view. I do not think that anyone, whose opinion deserves serious attention, attributes the decline of the birth-rate in the West to any loss of reproductive power. But there are persons, with serious claims to be heard, who insist that birth-control is not the only factor and that other factors, such as changes in marriage habit, play a part. Without denying this, my view is that birth-control plays so large a part that the other factors may be ignored when painting a broad picture of the situation.

The reasons for the spread of the new small family system are in many respects obscure. But perhaps we shall not go far astray if we attribute it to the age-long desire of women to be free from continuous child-bearing, the rise in the status of women to a point where they could aim at fulfilling their wishes, the appearance of an effective method which they could adopt—and the disappearance of religious objections to the use of the method. In any case the new small family habit took its origin in Western Europe, spread to the white lands overseas and is now penetrating Southern and Eastern Europe. It has spread independently of any stage of economic development, in old industrial countries and in young agricultural countries. It has spread independently of economic prosperity; the birth-rate fell rapidly in America in the golden days of prosperity before 1929. It has spread like the many other habits which pass over a group of countries with similar social conventions—much as the bobbed hair and plus four habits have been propagated.

The peculiarity of the modern small family system is its voluntary nature. When the habit prevailed in former times it was forced upon people. Therefore in former times when room was made for more people, whether owing to war or plague or by reason of economic improvement, the constraints were temporarily relaxed and more people appeared. Under the modern small family system this does not happen. When America was absorbing a million immigrants a year the birth-rate was falling. If a new England awaiting settlement appeared in the North Sea would the birth-rate rise? I doubt it. If we liken reproductive power to a spring we can say that in former times it was consonant with the desires of the average man that the spring should expand though it was prevented from doing so by ex-

ternal forces. Now those forces are removed; but it falls in with the wishes of the ordinary man that the spring should not expand and he is able to keep it contracted.

In its present phase the small family system due to birth-control means limitation of numbers having regard only to personal reasons which may often be selfish. The needs of the community are left out of account. Birth-control is already so widely practised by the nations of Northern and Western Europe that they are not replacing themselves. If the present state of things continued indefinitely they would die out. If they are continued only for a few decades they will diminish considerably in numbers, and while some diminution of numbers in Western Europe may not be unwelcome, it ought not to go far, and it is an increase rather than a diminution of numbers which is demanded in the white countries overseas. The pressing question is whether the voluntary small family system can be brought into harmony with communal needs. Otherwise it will prove to be a disaster for those who adopt it. Is birth-control, in other words, a method with which the human race can be trusted?

So far as there is evidence of the results of trying to guide the voluntary small family system they are not very encouraging. I do not quote Italy and France because I think that the communal needs of these countries in relation to population density have been rightly assessed by those who have attempted to influence the course of their birth-rates. I quote them merely because attempts have been made to influence the birth-rate and with little or no result, even though the arguments used have been those of crude nationalism. But if nationalism, which works such wonders in most spheres to-day, is powerless here, what can be anticipated from an appeal to the less compelling ideal of mere social stability? We need not be cynics to put our anticipations low.

The position of the Western world seems therefore to be as follows. Having abandoned the small family system by external constraint, it has, after passing through a brief period of unrestricted increase, adopted a new type of small family system. Whereas the old system adjusted itself more or less automatically to the economic needs of the community, there is nothing inherent in the new system which ensures this connection. The great task which faces the Western world is to learn how to bring the functioning of the voluntary small family system into harmony with the requirements of the social and economic situation of the community. One lesson at least can be learnt by the East from the recent experience of the West. Birth-control is not just a heaven-sent solution of the population problem as some of its advocates would have us suppose. Nor does the experi-

ence of the West show that alone through birth-control can increase be effectively regulated under modern conditions.

This last point deserves a little elaboration and then I have finished. The argument of the advocates of contraception runs as follows. Unregulated increase is disastrous. To this we may give our fullest assent. The argument goes on to say that regulation by external constraint is incompatible with modern ideals of social organisation. We may assent again. The argument then asserts that the only effective way of regulating numbers, when external constraint is absent, is by contraception. This is not in accordance with the facts. Those who say this have only to look across the Irish Channel to find a system of population control, without external constraint and without the employment of contraception, which is completely effective. In Southern Ireland population is and has been regulated for more than half a century by a system of few and late marriages; but when marriage is contracted the family is unlimited. In consequence the birth-rate has been reduced and is held down to a point where natural increase is small. The interesting feature about this method is that, should more people be called for, we can be sure that they would appear. There is no fear of racial suicide under such a system. If another Ireland awaiting colonisation was raised out of the Atlantic, we may be sure that it would be rapidly peopled.

This brings me to my conclusion. It is an essential condition of orderly and prosperous social life that numbers should be kept in check. The system of checks by external restraint is incompatible with the elementary conditions of freedom. The voluntary small family system therefore commends itself. With the solitary but significant exception of Southern Ireland this system has only been put into operation with the assistance of contraception. But though our experience of contraception is limited, the evidence available shows that there is real danger of its employment in a fashion and to an extent that is anti-social and which threatens the future of Western civilisation. The task of Western nations is to bring the employment of contraception into harmony with the population need of Western society of the future. If they fail the future of the Western world will lie with such of its component parts as follow the population system of Southern Ireland.

These seem to me to be the most significant facts to be drawn from the experience of the West. It is for the members of the conference who possess expert knowledge of Eastern conditions to say what their relevance is to that part of the world. But I should not like to sit down without saying that my remarks have been largely dictated by a desire not to appear superior. We have had, as the East now has,

a period of unrestrained multiplication. Indeed it is largely to a copying of our bad example that the present troubles in the East are due. We have led Eastern peoples astray. Lately we have found a means of restraining multiplication, but we are not yet out of the wood. We must not pose as having found a solution of the problem. Nevertheless, though we still have our difficulties, we believe that our modern method of restraining numbers is one that in general should be universally copied.

MR HAROLD COX: I do not propose to detain you very long because we hope many people from the body of the hall will join in the discussion, but I want particularly to deal with the urgent need for birth-control in India.

You have got in India a gigantic population rapidly increasing. Among the causes of this increase is the practice of very early marriage. I remember in that connection an experience when I was living in India. I went to a grocer's shop in the town to buy some things, and while the grocer was packing up the things for me I noticed a tiny little girl running about the shop. I went up to her and began to chat. Presently I took her up in my arms, and she seemed very happy and chatted freely. I noticed the shopkeeper was rather scowling at me, so I said: "How old is this little child?" and I received the reply: "She is only three, but she is married." So I put her down quickly. Of course consummation of marriage does not take place even in India at that early age, but it does take place at a very young age with the result that a large number of Indian women die in childbirth. In addition a large number of children die within a few days of their birth. I was looking at some figures published in the *Calcutta Statesman* the other day—the mortality at birth, that is to say within a few hours of birth, is 174 per thousand live births. I can see no way of getting rid of excessive births in India except by teaching the women how to prevent babies that they do not want to have. I doubt very much whether the religious objections that exist in European countries would count for much in India. The difficulty is that the means of obtaining the information are not yet available, but there is a distinct movement on foot in various parts of India to establish birth-control clinics. I hope that movement will spread. It has already begun in China also, and personally I believe it is an absolute essential for the whole human race. We cannot trust to chance in the matter of births when we are living in over-crowded countries.

In a big country with only a small population one need not worry. But when a country is over-crowded—as so many countries now are

—the only way of dealing with the difficulty is to teach women how to prevent conception when they do not want to conceive. No better movement could be organised in Western countries than to help the Eastern countries in this matter.

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DR C. V. DRYSDALE: It gives me great pleasure to take part in this important discussion, as although I have never had an opportunity of visiting the East, I have devoted some attention to its population problems, and am convinced that they are of the most vital importance for the future of humanity.

All discussions on population are however confused by a fundamental misconception as to what really constitutes over-population. The almost universal idea is that a country can only be overpopulated if it has too many people for it to be able to support if all its resources were utilised to the full; and, as there is no country in the world which could not extend its production, it is concluded that over-population is at most a possible menace for the future, and that it cannot be a cause of present poverty.

This idea and conclusion are completely false, and if we turn our minds from large national problems to those of ordinary every-day family life, we can easily see where the fallacy lies. If a young couple marry and start a family, their immediate concern is not what their income may ultimately be, but what it is now and how it is likely to increase during the next few years; and if their children arrive faster than the increase of their income allows them to provide adequately for, that family is reduced to poverty by over-population, and it is futile to speculate on what their income may be in the distant future.

Nations are only collections of such families, and the same simple common sense principle applies. Whatever their possible future supporting power may be, most long-settled nations, and certainly all Eastern nations, already have as many inhabitants as their present productive powers can support; and their real population problem is simply whether they can increase their total production next year and in succeeding years fast enough to provide for all the children which will arrive in those years or not? Now when the bulk of the cultivatable soil in a country has been brought under cultivation, as it certainly has been in Eastern nations, the increase of food production from one year to another can only be very small—generally less than one per cent—so that as we know that the rate of increase of unrestricted population would be at least four per cent. per annum (birth-rate 50, and death-rate less than 10 per 1,000), either births must be restricted, or poverty, under-nutrition, and a high death-rate are inevitable.

For centuries past the birth-rates in India and China have been so high that all their laborious efforts have been quite unable to provide for the annual tide of children, and they have been chronically and hopelessly over-populated. The extent of that over-population is simply measured by the excess of their death-rates over that of a well-fed population having a similar birth-rate, which should be not greater than 8 per 1,000 as shown by New Zealand. The present birth-rate of British India is about 36 per 1,000 and the death-rate about 27, which means an excess death-rate of 19 per 1,000. This figure represents the intensity of overpopulation, and on the total population of 350 millions, it implies that nearly seven million lives are annually wasted in India, due to its excessive birth-rate. It will be noticed that even this birth-rate is considerably below the 50 per 1,000 we assumed for unlimited fertility, but this is explained by the fact that the average duration of life in India is only a little over 30 years, so that a large proportion of its women die before completing half their full period of fertile life.

Unfortunately we have no figures for China, but there can be little doubt from all accounts that the conditions there are at least as bad as in India.

Japan, however, does publish its vital statistics, and they are of immense interest and importance, as they give the clearest proof of the correctness of the view above expressed. This view was in the minds of the early Neo-Malthusians from the commencement, and their advocacy of birth-control was based on their belief that reduction of the birth-rate was the only means by which the high death-rates of last century could be reduced. As birth-rates have declined, death-rates have fallen with them as they predicted; but this has been ascribed by all others to the great developments in medicine, hygiene, sanitation, and social services.

The great interest of Japan lies in the fact that she is the only nation which has increased her birth-rate, while at the same time eagerly adopting all advances in Western science. Before the Meiji restoration of 1867, a feudal system had prevailed under the Shoguns, who were hostile to westernisation, but who appear to have realised the importance of restricting the population to the resources of the land.

How this was done is not recorded, but when the first statistics were published in 1881, the birth-rate was given as only 17, and the death-rate as only 11 per 1,000—figures which compare well with those of the majority of European countries at the present day. But, with the new regime, Western science and industrial methods were encouraged, together with German militarism and zeal for expan-

sion. To-day the Japanese birth-rate has risen to about 34 per 1,000, or to nearly the same figure as our own before the fall of the birth-rate commenced, and the Japanese death-rate has risen to about 21 per 1,000, or to practically the same figure as our own in 1876; which means that the average duration of life has fallen from over 60 to under 45 years. This clearly shows that all advances in medicine, hygiene, etc., are powerless to prevent wastage of life if over-population due to an excessive birth-rate exists; and indicates that our own death-rate would not have fallen if we had not adopted birth-control. Japan has now an excess death-rate of about 12 per 1,000, representing the intensity of its over-population, and which on its total population of 70 millions represents an annual wastage of over 800,000 lives. No wonder she is hungry for increase of territory, and is trying to extend her sphere of influence over China, besides fiercely competing in the markets of the world. Unless she reverses her population policy and encourages her people to adopt birth-control, she is bound to become an ever-increasing menace to the peace of the world.

Fortunately the great pioneer mission of Margaret Sanger to the East has already led to a recognition of the importance of this problem by many of the most enlightened and influential people in India, China and Japan; and we may hope that their efforts will soon bear good fruit. Nothing but birth-control will bring relief to the starving peoples of Asia.

MR D. V. GIRI [*India*]: With regard to this question of population in any country there is one very important thing which seems worth underlining, and that is, that birth-control is a sort of double-edged weapon. The ignorant masses cannot resort to it not only because of their ignorance, but because of their inability to provide themselves with the means of contraception. Well-to-do people, either from selfish motives or from fear that their children should decline in the social scale, take great precautions to restrict the size of their families. In European countries education has been permeating all social classes for years and years, with the result that even the crossing-sweeper reads the newspapers and takes an intelligent interest in the movements of the day. Such a man is to some extent capable of understanding what contraception is and of employing it intelligently.

When it comes to countries like India and China and Japan, the main effect of birth-control will probably be to produce fewer children of the kind that should come into the world without affecting the multiplication at the wrong end of the biological scale, and I sug-

gest that this tendency will probably continue for a number of years. The first thing to do is to improve the education of the people of these countries, so that they may appreciate the value of contraception. Ignorance hampers them in employing methods of contraception, but also they have customs which preclude them from employing these methods.

MR E. EGUCHI [*Japan*] : In considering the population problems of the Far East, one cannot escape the obligation of reviewing the actual economic and political conditions under which Asiatic people exist to-day. It is my opinion that, although control of numbers is indeed an everlasting need for Asia, the immediate solution of the population problems of the Far East is in the economic and political fields.

It is common knowledge that parts of Asia are thickly populated. In the case of Japan, the ever-increasing population has constituted a difficult and urgent problem, both to statesmen and the people as a whole. The birth-control movement in Japan is not relaxing its activities. Heads of families, among the rich and poor alike, take a serious view of the population question, not because of their immediate experience of the consequences of unrestricted multiplication, but because of the gloomy future they see for their country. In fact, the birth-control movement in Japan appears to be even more active than in this country. Its purposes are being advocated and explained in the daily press, in magazines, and at public meetings. So pressing is the need for controlling the volume of population, that the movement has assumed a national character rather than that of a preserve of an enthusiastic intelligentsia. It may surprise you to hear that Mrs. Margaret Sanger, President of the organisation responsible for this Conference, the Birth Control International Information Centre, is well known in Japan, and that the writings of Dr. Marie Stopes have circulated widely among the Japanese people for some years. But birth-control does not, I suggest, offer a fundamental solution for Japan's population problems; for, though it can certainly alleviate human misery, there is little hope of its coping with the widely-spread pauperism and low standard of living. 1/.

Japanese population has been increasing in the past few years at the rate of between seven and eight hundred thousand per year, and in the last year the net increase was over one million, equivalent to a rate of 114 per hour. That figure gives you a measure of the rate of increase of Japanese population! Yet, despite this alarming fact, Japan has no outlet for her excess of population, nor is she rich in natural wealth. How she will feed and clothe her population thus remains her great problem. We all know that the doors of all the

empty lands, which should be developed and cultivated, are closed against Asiatic immigrants. In recent years, Brazil admitted Japanese immigrants for the cultivation of her hinterland, but this concession is manifestly too small to ease the Japanese population problem to any great extent.

Man-made expedients, such as political frontiers and economic barriers, are obstructing the free movement both of people and wealth, though it is a commonplace that the world is large enough to accommodate in comfort many more people than are in it to-day. Controls and restrictions are the order of the day: we are controlling births, exchanges, currencies and imports, and we are restricting production of sugar, rubber and tin, and even burning coffee and cotton to protect the market price. Abundant supply is better than famine, yet the poor are deprived of the means of existence by a deliberate destruction of natural products. We may well doubt if these controls and restrictions will bring happiness and peace to the peoples of the world.

Wars, epidemics, famine: these were the natural checks on excessive population in the past, but medical science has conquered epidemics and the world has realised the follies of war.

Lately there has been ugly talk in this country about the cheapness of Japanese cotton goods. Selling manufactured goods by re-export is Japan's only economic means of supporting her population. What will be her fate if her means of existence as a nation are denied? What use is there merely in denouncing the cheapness of Japanese goods and the lower standard of Japanese life? Is Japan to blame? How is it proposed to raise her standard of living to that of the British people? I am sure Japan would be only too glad to accept any concrete answer from anybody on this question. Japan is struggling for her existence with an ever-increasing population, overcrowded almost beyond the limit. The Japanese people is taking a serious view of birth-control, but birth-control alone will not solve these problems. Economic and political factors are primarily concerned in their solution.

CHEN TA [*Tsing Hua University, Peiping, China*]: Competent observers frequently remind us of the parallel economic and social problems in contemporary China and those that prevailed in north-western Europe during the eve of the Industrial Revolution. But they fail to point out a fundamental difference, i.e., the difference in population pressure. In north-western Europe over a century ago, the population was relatively sparse, whereas in China to-day the density of population is already too high. Chinese civilisation still

rests on agriculture, but the nation has a redundant population, to which only a highly industrialised country could hope to give adequate support. Therefore, in attempting to seek solutions for her vital problems, China should not blindly follow Europe's example during the earlier period but should rather try new methods. One of the new methods is the control of population. If China neglects to control population increase, it is feared that she could hardly make any headway in other social reforms. True, her rate of population increase is rather low; or 5 persons per 1,000 population per year. But even at that rate, Chinese population will be doubled in about 139 years. China cannot afford to have this increase and still maintain the present standard of living (low as it is), if no material progress is made in economic technology and social organisation.

Old customs of China encourage numerous offspring, and the average individual prefers to bring up a large family. Nowadays, however, Chinese *mores* are gradually being modified, especially among educated persons and in the cities. There is an increasing desire for the limitation of families. But against the bulwark of social inertia, this change of attitude is bound to be slow. How can this rate be hastened? Is there need to quicken this change? Why?

To begin with, China seems to be overpopulated if this term is taken to mean the inability of the great masses to maintain a reasonable standard of living. Although direct evidence on over-population is yet meagre, indirect evidence is ample. Famines are of frequent occurrence in China. In fact, during the last two thousand or more years there has been on the average about one famine per year somewhere in the country. Manifestations of social unrest are increasing, such as labour strikes in the cities and farmers' disputes in rural areas. Social disturbances and civil wars unmistakably indicate the severity of the struggle of existence, which is working havoc among the populace. Millions of people are without occupations to-day, and the last resort of the unemployed is to be enlisted in the army, thus swelling the troops to ridiculously large numbers.

Among those who are fortunate enough to be gainfully employed, earnings are barely sufficient to maintain a minimum existence. In the industrial and commercial centres the daily wage of an average factory worker is about fifty silver cents. This small sum is enough only to keep himself alive according to local standards, but insufficient to take care of his family if there be one. In the rural communities where the cost of living is lower, the wage rates are far below the city level.

In recent times (between 1917 and 1932) a number of cost of living surveys (totalling 88) about the working families have been

made. Although these surveys have small scope and do not use similar methods, they nevertheless throw some light upon the deplorable economic and social conditions of large sections of Chinese populations, mainly the working classes in the cities. The total earnings of these families vary from 100.0 dollars to 400.0 dollars, Chinese currency, per year, and their expenditure varies somewhat within the same range. For the average working family, food costs constitute more than half of the total expenditure. Among the foods, cereals alone occupy over 50 per cent. of the food expenses. Vegetables are of lesser importance in the ordinary dietaries. Fish, eggs and meat are eaten very sparingly. Clothing, housing and other necessary expenses are hardly more than what is absolutely indispensable for bare existence.

Living conditions of the farmers in parts of China are no better. Land holdings are usually small. It is estimated that the average size of the farms in China is only 24.0 mow, or about 3.6 acres per farm. The produce of this small acreage is sometimes the only source of the livelihood of five or six persons. During good times, each one is able to eke out a humble living. But in lean years or in calamities of one kind or another, suffering, due to the want of food, commonly ensues. Thus for a period of about 100 days from July to October, 1931, about 130 districts in the Lower Yangtse Valley were affected by a disastrous flood, causing great distress to 4.2 million farm families or 25.2 million individuals. Each family lost one and half year's income, or about 450.0 dollars Chinese currency. During the flood about 40 per cent. of the population had to leave their homes. Of the individuals migrating, one-third found work, while one-fifth begged on the way. Disease, deaths and cases of starvation were numerous among the migrants as well as among those who stayed at home.

The above sketch depicts the high pressure of population that is operating in China to-day. The chief sufferers are of course the city labourers and agricultural workers, the two most numerous groups in the entire population. If the labourers and farmers limit their families, poverty will diminish and misery will decrease. Therefore, birth-control may pave the way for a new and better social order in China.

Not only are the lower classes suffering from the high pressure of population as above shown, but also are certain educated groups in the country. Among the people who came to the Peiping Committee on Maternal Health for birth-control information are teachers of the primary and secondary schools and government employees, whose incomes vary from 50.0 dollars to 100.0 dollars per month, Chinese

currency. Depending upon this modest income, each family brings up an average of 3.9 children. As the duration of marriage of these families is only 8.8 years, it is likely that more children will be born to them later on. It goes without saying that the larger the family size, the harder it will be for the people to maintain a reasonable standard of living in relation to their social status.

Fragmentary as the above information is, it is nevertheless indicative of the severity of the life struggle that is going on in China, as a consequence of the high pressure of population. What should be done? Evidently several answers may be suggested. But as stated above, this brief paper urges the adoption of birth-control as an effective solution of the problem. Although the idea of birth-control runs counter to Chinese tradition, it is beginning to dawn upon the educated classes that unrestricted population is a hidden motive force to the political, economic and social chaos in the nation to-day. Our brief experience with birth-control work in Peiping has shown that even the lower classes quite keenly feel the need of family limitation and are usually receptive to the idea of birth-control if it is patiently explained to them. To millions of the poor, but honest, people, life is made bitter by having too many children. Their happiness will be increased if their families are made smaller. The quality of the population will be improved if the numbers are under control, so that the struggle for existence is made easier and sanitation, education and social welfare may proceed along wider scope and at faster speed.

(The control of population as here conceived should be advocated through the efforts of voluntary organisations as a first step. They should educate the people as to the general laws of population, particularly with reference to the health of the mother and child, and the economic and social consequences of the big family. They should create a public opinion in favour of the smaller families, first among the middle and upper classes and ultimately extending to the lower strata of society. Eventually government co-operation should be secured, both relating to legislative measures and financial assistance for the promotion of birth-control on a national scale.)

DR B. DUNLOP: I wish to say, in the first place, with regard to Professor Carr-Saunders' interesting address, that I can never believe that, although there was infanticide and separation of the sexes at times, there could really be so few children and such a low birth-rate amongst the primitive peoples as to give them little or no pressure of population. Their food supply was increasing very slowly, and consequently families of even three or four children would be enough to produce a pressure of population. I regret the way Pro-

fessor Carr-Saunders seems to suggest that Malthus's principle did not apply to these peoples because they practised infanticide. Infanticide must be included in the death-rate, and therefore Malthus was still right in maintaining that if you have a high birth-rate you have a high death-rate. I was very glad to hear Dr. Drysdale emphasise the fact that the Malthusian doctrine is that if you have a high birth-rate you get a high death-rate and a great pressure of population, and that the criterion of the well-being of a population is a low death-rate and a high longevity.

Then with regard to Mr. Eguchi's interesting remarks: Japan's population is increasing at the rate of 13 per thousand a year; I hope he will appreciate Dr. Drysdale's point that in view of the fact that Japan's birth-rate is 35 per thousand, the Japanese population ought to be increasing much more rapidly than by 13 per thousand a year because 35 *minus* 10 equals 25. It is, as he admits, really shortage of food and the necessities of life that makes the death-rate much more than 10 and prevents the Japanese increasing very much faster than by 13 per thousand a year.

Mr. Eguchi said birth-control will not solve the over-population problem of Japan. I take it he means that even if the Japanese population now stopped increasing they could not attain a high standard of life, so dense is the population? It is quite a proper proposition to put forward, namely, that even if the birth-rate were to fall immediately now to practically a two-child system, still there would be a population problem in Japan because of the density of the population. I would point out of course that a strict two-child system would bring about a reduction of the population, and raise the standard of living. But perhaps that is too much to ask of Japan; and certainly the Imperialist Party in Japan would not favour that solution. I admire the efficiency of the Japanese and their unity and their determination. I expect that Japan is going to expand and be the great Empire of the Pacific. They will have the Chinese to reckon with of course. We are certainly going to see the working out of the Malthusian principle in the Pacific.

Supposing the Asiatic birth-rate were to fall as rapidly as the most enthusiastic of us would like, what would happen? I believe there are two things that would happen. Firstly, there would very soon be a tremendous boom in world trade. The increased purchasing power that the small family system would bring in Asia would bring a tremendous boom in world trade which we should all rejoice over. But I fancy there would also be another result. The Asiatics would become so rich and strong that they would turn the Europeans out

of their countries altogether. That perhaps some of you will think is a serious matter on the debit side.

In recommending birth-control to the Asiatic peoples we are really very altruistic I feel. We are asking them to raise their standard of living and also to put themselves in a position to say that they are not going to have any domination or dictation from the European peoples. I think they should realise what a great advantage birth-control would be to them.

DR MABEL BUER: I was interested in the point that Dr. Drysdale raised as to the historical fact that a reduction in birth-rate always preceded a reduction in the death-rate. I think that was the statement. I am not altogether convinced that that contention could be maintained. The difficulty is that before 1876 for this country we have no satisfactory statistics of the birth-rate and no very exact statistics even of the death-rate.

The only thing I feel I can usefully add from the historical point of view is this: I should like to stress that the rapid increase of population to which we became accustomed in the 19th century in Western Europe, and particularly in this country, is essentially a modern thing. Up to the end of the 18th century population increased very slowly, and probably over centuries hardly increased at all, and sometimes—for instance, at the time of the Black Death—decreased very rapidly. But people have such short memories that the idea that a very rapid increase of population such as took place during the 19th century was a normal thing soon took root and for a population to become stationary was considered a very terrible state of affairs. But if one thinks for a moment it is fairly obvious that population could not have gone on increasing indefinitely at the rate it did during the 19th century.

Further, if world population were to increase rapidly as population is now doing in Japan and India, the limit of anything possible would be reached very much more quickly than when it was only Europe or a small part of Europe. Therefore, the point at issue seems to be as to the most desirable way of checking population growth. Population can be kept down by a high death-rate as it was until the 19th century, or by a low birth-rate, which can be associated with a low death-rate.

MR HAROLD COX: I understood Mr. Giri to say there was a danger that birth-control might result in the best families reducing their numbers, while the inferior families still continued to multiply. That is a very common argument. It is a danger that can be got over

by people of the better classes assisting the unfortunate women of the poorer classes to learn methods which will save them from having large families.

If you do not reduce the population by restricting the birth-rate, the population will go on increasing until war becomes inevitable. We have seen that in Europe. Before the Great War the German Emperor bluntly said that Germany must go to war to make room for her increasing population. The same consideration applies to China, India or Japan, if they continue to increase their population without regard to the means of subsistence and the capacity of their country. If war ensues, how about the relative merits of those who survive? The best men will go and fight and will be killed, the worst will stop at home and live.*

DR RAJAIN KANTA DAS [*India*]: According to the census of 1931, the population of India is 353 millions out of a total of the world's population of 2,024 millions, or 17.4 per cent. as compared with 18.8 per cent. in Europe, excluding Soviet Russia. With the exception of China, which is supposed to have a population of 453 millions, India is the most populous country in the world.†

Since 1921 the population has increased by 10.6 per cent., as compared with 1.2 per cent. in the decade of 1911-1921, which was the lowest decennial increase in India during the past fifty years. The heavy death-rate during the period was the result of the plague of 1918-1919, as will be discussed later on. The last decade was generally free from plague and famine in the country as a whole, with the result that the growth of population was comparable to that of the decade of 1881-1891, when the natural increase was 9.6 per cent.‡

Taking into consideration a larger period, the increase of population in India cannot be said to be very great. In sixty years, from

* When war is delivered, as in all probability the next will be, on our doorsteps, we may hope that the bombs, gases and bacteria will not discriminate as closely between the best and worst people as the speaker suggests.—Error.

† In preparing this paper, I have utilised material in my addresses on "Population and Food Supply in India" (*vide Proceedings of the World Population Conference 1927, London*) and "The Problem of India's Over-population" (in the International Congress for Studies regarding Population Problems in Rome 1931); my articles in the *Modern Review* on the "Wastage of India's Man Power" (1927) and the "Problem of India's Poverty" (1929); and my books on *Production in India* (Calcutta, 1924) and *The Industrial Efficiency of India* (P. S. King and Sons, London, 1930). Of the other sources, the most important are the following: *Census of India, Agricultural Statistics of India, Statistical Abstract for British India, Annual Statistics, Paris, International Agricultural Statistics, and Statistical Year Book of the League of Nations.*

‡ The population increased by 1.5 per cent. in 1872-8; 1.4 per cent. in 1891-1901 and 6.4 per cent. in 1901-11.

1871 to 1931, the population has increased only by 30.7 per cent. in India as compared with 54.6 per cent. in Italy, 75.6 per cent. in England and Wales, and 97.2 per cent. in Japan. More or less similar increases have taken place in most other countries. It is only in France that the population growth was slow, being only 15.6 per cent. in sixty years.

The recent growth of population in India has, however, been much more rapid and has surpassed the increases in several countries. In 1926-30 the quinquennial rate of excess of births, for instance, was 9 in British India as compared with 1.5 in France, 4.9 in Belgium, 4.9 in the United Kingdom, 6.6 in Germany, 10.8 in Italy, and 13.9 in Japan.

The most remarkable feature in the vital statistics of India is that both the birth and death-rates are very high. During the same period as mentioned above, the quinquennial averages of birth and death-rates per thousand were respectively 33.2 and 24.2 in British India as compared with 18.2 and 16.7 in France, 18.6 and 13.7 in Belgium, 17.2 and 12.3 in the United Kingdom, 18.4 and 11.8 in Germany, 26.8 and 16.0 in Italy, and 33.4 and 19.5 in Japan. It is thus seen that both the birth and death-rates were almost twice as large in India as compared with those in France, Belgium, the United Kingdom and Germany; in comparison with Japan the birth-rate was slightly lower, but the death-rate was about 20 per cent. higher.

Not only was the growth of population in India in the last decade the highest recorded, but there is every reason to believe that in the future the natural growth of population will be almost as high, if not higher. The reason for such an assumption is the fact that the death-rate has decreased much faster than the birth-rate during the past generation, as indicated by the decennial averages. From 1891-1900 to 1921-30, while the birth-rate decreased from 35.33 per thousand to 32.95 per thousand—i.e., by 7.2 per cent.—the death-rate decreased from 31.31 per thousand to 25.10 per thousand, i.e., by 19.8 per cent.

PROSPECTS IN THE IMMEDIATE FUTURE

There is scarcely any possibility of a substantial decline of the birth-rate in India unless steps are taken to secure it. The universality of marriage and the cult of ancestor worship are likely to remain for a long time to come, especially among the masses. The recent Child Marriage Restraint Act, which prohibits the marriage of boys and girls before the ages of 18 and 14 respectively, will have little effect on the rate of birth in the immediate future, for although child marriage had been prevalent in India, very few boy-husbands and girl-

wives undertook conjugal relationship before the ages of puberty, which practically correspond to the above minimal ages of marriage. The main effect of the Act will be a gradual increase in the age of marriage, as has been the case in other countries, but this result can only be brought about by a high standard of cultural progress, which will take a long time to be realised in a country like India.

There is on the other hand a much greater chance for the decline of the death-rate: first, the growth of health movements all over the country, such as baby weeks, child welfare work, maternity benefit, and anti-malarial campaigns and the establishment of hospitals, clinics and sanitary measures, are bound to reduce the death-rate; secondly, gradual abolition of such practices as pre-puberty sex relations as afforded by early marriage, prolonged lactation, abortion, infanticide and continence among married people after a certain age, and enforced widowhood among high caste Hindus, will have some effect upon the population growth; and finally, the increasing control of famines and epidemics will also be a factor in the more rapid growth of population.

What will be the future growth of population is a question for conjecture; but at the present rate of growth the population will rise to over 470 millions by 1960—i.e., an increase of 33 per cent. in a generation.

THE INCREASE OF PRODUCTION

The main question in connection with the growth of population is that of increased production, which is ultimately a question of sufficient land and capital as well as efficient labour.

Of the world's land area of 57.2 million square miles, India occupies 1.8 million square miles, or 3.2 per cent. Excluding the uninhabitable regions of the earth, the comparative land supply in India is however much higher. In 1931, for instance, the density of population per square kilometre was 75 in India as compared with 76 in France, 134 in Italy, 139 in Germany, 171 in Japan, 194 in Great Britain, 240 in Holland, and 268 in Belgium.

What is more important to a country is the proportion of its arable land, in which advantage naturally lies with the new countries like Canada, Argentine, Australia and the United States, where the *per capita* arable land varies from 2.3 hectares to 1.1 hectares. The *per capita* arable land is about 0.45 hectare in India, as compared with 0.52 hectare in France, and 0.66 hectare in Spain, but it is much higher than that in Italy, Germany, Belgium and Japan, where it varies from 0.33 hectare to 0.09 hectare.

Among the other natural resources must be mentioned forest,

fisheries and minerals. In the supply of forests, including permanent grass and pasture, countries like Australia, Canada, Brazil and the United States have the advantage. The forests in India are rich in variety but limited in quantity, being only about 0.12 hectare *per capita* as compared with 0.30 hectare *per capita* in Italy, and 0.53 hectare *per capita* in France. India is fairly rich in fisheries. The freshwater fisheries of India are surpassed only by those of the United States. Besides, there are extensive stretches of brackish, foreshore and deepwater fisheries along her 4,500 miles of coastline. Minerals in India are also rich in kind but poor in quantity, except iron and water. India possesses over 3,000 million tons of iron ore and 27 million horse-power of water resources, thus standing fourth in the world in the possession of the former and third in the possession of the latter.

In spite of these resources, the production has not kept pace with the growth of population. The new area sown and the area under food crops have increased respectively from 197 million and 182 million acres in 1900-1901 to 229 and 213 million acres in 1930-1931—showing an increase of 16 and 17.6 per cent. respectively—as compared with the population growth of 18.2 per cent. during the same period.

There has, however, been some intensity in cultivation as a result of the application of increasing capital to agriculture. From 1900-1901 to 1930-1931, for instance, the number of cattle and buffaloes, as well as goats and sheep, increased respectively from 84 millions and 37 millions to 153 millions and 61 millions, that is 82 and 65 per cent., and the number of ploughs and carts increased respectively from 13.8 millions and 2.8 millions to 25 millions and 6.7 millions, that is, 78 and 138 per cent. During the same period the area of irrigated land increased from 30 million acres to 50 million acres, or 66 per cent.

The importance of irrigation lies in the fact that it intensifies cultivation and increases production. In 1926-7, for instance, the yield per acre of irrigated area as compared with that of non-irrigated area in the United Provinces increased by 18 per cent. in the case of grain, 30 per cent. in the case of rice, 47 per cent. in the case of wheat, 50 per cent. in the case of barley, 77 per cent. in the case of cotton, and 91 per cent. in the case of peas and beans. Moreover, the improved variety of crops has also contributed to the quality of foodstuff, and increased its nutritive value, and a great stimulus has also been given to the production of sugar by the recent policy of protection.

As to production in the other industries, some progress has also been made. From 1900-1901 to 1930-31, for instance, the area and

yield of forests have increased from 81 million acres and 260 million cubic feet of timber to 87.9 million acres and 322 million cubic feet of timber, or 7.4 per cent. and 24 per cent. respectively; the mineral production increased in value from £7.6 million to £17.7 million or about 132 per cent., the cotton yarn and woven goods increased from 353 million lbs. and 99 million lbs. to 754 million lbs. and 394 million lbs. respectively—showing an increase of 142 and 300 per cent., gunny bags increased from 202 million to 434 million, and gunny cloth from 365 million yards to 1,271 million yards, showing an increase of 113 per cent. and 248 per cent. respectively. Even the handloom industry increased from 884 million yards to 1,355 million yards, showing an increase of 75 per cent. and supplying 28 per cent. of the total cloth consumption of the country in 1930-1931. In other words, as indicated by the index number, the production of these industries increased by 110 per cent., or doubled in a generation.

This increase in production of industry other than that in connection with agriculture, and specially food supply, is however insignificant, as it plays a comparatively small part in the productive processes of the country. In 1921, for instance, only 11.2 per cent. of the population depended upon industry in India, as compared with 24 per cent. in Italy, 28.4 per cent. in France, 38.1 per cent. in Germany*, and 39.7 per cent. in England and Wales. In India 66.4 per cent., or about two-thirds of the people, depended upon agriculture for their livelihood. Handicraft—which next to agriculture was the most important industry in India, and supplied all the national needs of manufactured goods—has undergone deterioration and disorganisation. For a large part of manufactures India at present depends upon foreign countries, as indicated by the fact that about three-quarters of her imported goods are manufactures. Moreover, India exports a large quantity of raw material and foodstuffs as payment for manufactured goods, as salaries and pensions of British officials, and as interest on foreign investment. In 1931-32, for instance, the value of her exports of grain, pulse, flour and fruit and vegetables amounted to 13.68 per cent. of the total export value.

EXTENT OF OVER-POPULATION

What is more significant is that India has long been over-populated. In my paper on "Population and Food Supply in India" in the World Population Conference in 1927, I showed that, on the basis of her food requirements of one million calories a year per person, India produces food for only 75 per cent. of her population.

* Refers to the year 1929.

In my paper on the "Problem of India's Over-population" to the International Congress for Study regarding Population, in Rome in 1931, I also showed that, taking into consideration physical and cultural factors, a person would need at least 1.5 acres of arable land in India, as compared with the estimated need of 2.6 acres in the United States, 2.5 acres in the United Kingdom, 2.3 acres in France, and 1.83 acres in Denmark. On this basis the optimum population which India could support with her 480 million acres of arable land would be 320 millions. Since only 55 per cent. of the present arable land is cultivated, the present optimum population which India could support would be 176 millions, or 50 per cent. of the present number. The extent of over-population in India would thus amount to one-third from the point of view of absolute necessities of life and to one-half from the point of view of a more liberal standard of life.

EFFECTS OF OVER-POPULATION

The first effect of this over-population is frequent famine. From 1860-61 to 1900-1, there were seven wide-spread famines, affecting an area varying from 54,000 square miles to 475,000 square miles and a population varying from 20 millions to 68 millions. The famines of 1895 and 1899-1900 alone caused the death of a population of 5 millions.

Although no widespread and severe famines have occurred in India since the beginning of the present century, local famines and scarcities are always present in some part of the country or other. What is still worse is the extreme poverty, both absolute and relative, to which the vast majority of the population is perpetually subject. This is best indicated by the comparative national income. In 1924, for instance, the *per capita* national income was only Rs.74* in India as compared with Rs.294 in Japan, Rs.351 in Italy, Rs.537 in Germany, Rs. 741 in France, Rs.1,319 in England, and Rs.1,717 in the United States. It is a well-known fact that the *per capita* amount of food consumed by the masses falls far short of that of the prisoner. According to the inquiry of the Bombay Labour Office, even the industrial workers in Bombay, who are much better off than the rest of the masses, consume the maximum of cereals allowed by the Bombay Famine Code, but less than the scale prescribed for jails.

Another effect of over-population is periodical epidemics. The influenza of 1918-19 alone caused the death of 8.5 millions. That

* Refers to the year 1921-22. The national income of India has been put as high as Rs. 116, but the accuracy of this estimate has been seriously questioned.

there exists a high rate of mortality among the masses has been already noted. The infant mortality is similarly high. During the quinquennial period of 1926-30 it was 177 per thousand live births in India as compared with 66 in the United Kingdom, 89 in France, and 94 in Germany. The most important effect of the high mortality is low longevity, which is only 24.75 years in India as compared with 40.4 years in Japan, 46.2 years in France and 48.7 in England and Wales.

Widespread illiteracy is still another effect of over-population. Out of a total population of 353 million, only 28 million or about 8 per cent. were literate in 1931. Of the 72 million children of the school-going ages, i.e., of the ages from 5 to 14 in British India, only about 12 millions were attending the schools in 1930-31.

REMEDIAL MEASURES

The most important question is how to solve the problem of India's over-population. There are three possible remedies: (1) increase of productivity; (2) emigration of surplus population; and (3) conscious control of birth-rate.

That there is a considerable possibility of increasing productivity cannot for a moment be doubted. In my works on *Production in India* and *The Industrial Efficiency of India*, I have shown that owing to industrial inefficiency, or inability to apply modern technique to productive processes (as is done in most other modern countries), India wastes about two-thirds of her land, labour and capital resources. With increasing efficiency India can no doubt increase her productivity three times or even more, and can make up for her food shortage and supply the other necessaries of life.

But increase in production is not easy to achieve. More than half of the arable land—including, as may be expected, the most fertile part—is already in use, and the remaining part can be exploited only under the condition of diminishing return. In 1930-31, for instance, per hectare production of rice was only 15.2 quintals in India as compared with 37.6 quintals in Japan or 40 per cent.; that of wheat was only 8.3 quintals in India as compared with 21.7 quintals in Belgium or 40 per cent.; and that of cotton was only 0.9 quintals in India as compared with 4.1 quintals in Egypt, or 22 per cent. In fact, the production of agriculture in India, which is by far the most important industry, is only 45 per cent. of the average of Belgium, the United Kingdom and Germany.

As to capital resources, the low national income does not leave much margin of saving for supplying national capital. There is no question that a large part of savings is either hoarded or invested un-

productively. Although the nationalisation of the Government and the Indianisation of the army might relieve India of a large part of her military expenditure, which amounts to 58 crores (or 580 millions of rupees), India has to pay a large amount of interest on her £387 million foreign public debts*, and also on her £600 million foreign investment.

The greatest difficulty in India's productive system is, however, inefficiency of labour, which arises from ill-health and ignorance. Some idea of the extent of ill-health in India can be had from the fact that 70 per cent. of the population in Bengal and practically all the rural population in Madras are afflicted with hookworm. More, malaria, from which no part of India is free, causes over a million deaths and devitalises many more millions every year. What is equally detrimental to the growth of industrial efficiency is colossal ignorance among the masses, over nine-tenths of which are illiterate as noted above.

Even if India immediately adopts a strong policy of national economy and begins the reconstruction of her industrial system, it will take several decades before she can acquire enough efficiency and capital for the full utilisation of her resources and for the solution of her problem of food shortage. A nation, however, needs other things besides food. It must provide all the necessaries which are required for the moral and intellectual development of a progressive people. Moreover, a nation must maintain its standard among other advanced nations. The standard of life in India may not be raised to the same level as that in Europe and America, but it must be a comfortable and respectable one. In short, it will take several decades before India can secure a decent standard of living for her people. During this period, the population, if unchecked, will grow faster than the increase in productivity.

The second method of solving the question of over-population is the emigration of surplus population. That emigration cannot solve the problem can be easily imagined from the fact that India is already over-populated by at least one-third of her people, that is over 100 millions, and there is no place on earth which can absorb such an immense population. Moreover, at the present rate of growth, the increasing surplus population of India is over 3 millions a year. India has neither her own colonies nor the financial power to secure any in the near future. The number of Indians in British and foreign colonies amounts to a little over 2 millions after 100 years of emigration.

* These figures refer to the year 1930-31.

BIRTH-CONTROL THE ONLY IMMEDIATE REMEDY

The third and only remedy for the solution of the problem of India's over-population is therefore the conscious control of her birth-rate. This implies both a desire on the part of the people to take to voluntary limitation of the family, and a familiarity with the means of achieving this end.

That the active participation by government in a country of different customs and creeds is difficult will be readily admitted, but government can, nevertheless, be indirectly helpful to the growth of such an attitude and remove all obstacles to the progress of the birth-control movement. It must be remembered that most of the prevailing religions in India raise no obstacles to the principle of birth-control. An experiment has already been started by the Indian State of Mysore, which sanctioned the establishment of birth-control clinics in the four principal hospitals of the State in 1930, and the last census report also strongly advocated the necessity of birth-control in India. Moreover, the Government of Madras is also contemplating the introduction of birth-control clinics in Madras municipalities. Although it has provoked a storm of protest in the Catholic Church, it will be welcomed by the majority of the people who are not Catholics. Moreover, the widespread practice of birth-control by the French women, who are mostly Catholic, indicates that there is no practical difficulty in the way of introducing birth-control in India.

The creation of an attitude in a country where religion inculcates that every woman should marry and every man should have a son implies a complete change both in the religious doctrine and philosophy of life as well as in the social, political and industrial background. In order to bring about such changes, India needs compulsory education, universal suffrage, abolition of caste and other social evils, industrialisation of production, and the raising of the standard of life. It is only a new awakening among the masses and a higher appreciation of the moral and intellectual values of life and the greater desire for material goods which may lead them to adopt the conscious limitation of the family, and thus to secure welfare to themselves and to their posterity.

MISS ELEANOR RATHBONE, M.P.: I should be glad to make one or two comments upon the last paper because I have recently been studying very closely the newly-issued volumes on the Indian Census, and feel much exercised over the rather alarming facts that Prof. Das has brought forward. They make one realise the extraordinary difficulty in raising the standard of life which arises from this huge increase in population. We have an increase in popu-

lation of approximately 10 per cent. and an increase in the actual number of literates of 25 per cent.; but, because of this much greater increase in gross population, the considerable improvements in educational facilities during the last ten years have been practically neutralised, so that the percentage of the population who are literate, in the sense of being able to read and write, has increased only from 7.1 to 8 per cent.—that is a rise of under one per cent.

Another curious figure that struck me is the steadily growing disparity between the numbers of men and women in India. That has been going on for the past three censuses. The women are in a minority in India, though *suttee* and female infanticide have been put down, and the disproportion between the sexes continues to grow census after census, and is now higher than it has ever been in any previous census. It is due to various factors, one of which is the terribly heavy toll in the lives of young girls from infancy and up to about 25 or 30. This is attributed by the census authorities partly to the early marriage of the girls and the dreadful maternal mortality resulting from early marriage, especially under *pardah* conditions, where it is impossible to have sufficient light and ventilation. This is seen particularly among the lower middle-class Mohammedans. Another contributory cause is the terrible lack of trained midwifery.

One might have thought that these known results of early marriage would have caused a raising in the age of marriage, but according to the Census Report the result is the opposite. The two evils—a shortage of women and early marriage—act and react upon each other, because it is becoming difficult to obtain brides. In the words of the census the girls are “snapped up in early childhood for fear they will be snapped up by somebody else.” The recorded number of wives under 15 has risen in the last ten years from 8½ million to 12¼ million. It is believed that this enormous increase in child wives is mainly due to that fatal six months between the date when the Sarda Act was placed upon the Statute Book and the date when it became effective. Apparently something like five million children were hustled into matrimony during that period—3 million girls and 2 million boys. Owing to this vast increase in child marriage, the number of widows under five has more than doubled—from 15,000 widows under 5 to about 30,000 widows under 5—and that has almost entirely taken place in the one year between the passing of the Sarda Act and the taking of the census. What is the addition going to be like as time goes on? Unless the re-marriage of widows can be greatly accelerated, it means that an increasing proportion of the female population is going to be practically sterilised. That will possibly have a good effect upon the population figures, or it may

only result in increased prostitution and in still more child marriage and over-use of wives.

I would like to suggest that the Government should pay far more attention to this subject than it is apparently doing. The expense would be repaid over and over again if the Government would spend more on education in hygiene among the masses. In a country where prudery about sex is perhaps less bad than in Western countries, it ought to be possible to extend a knowledge of birth-control and a knowledge of the evils of child marriage among the people. We know that in the last few years, because of the economic stress, educational expenditure has been considerably cut down, yet so far as training in hygiene, training of midwives, and all those forms of education are concerned, there could be no more extravagant kind of economy.

I noticed the Census Commissioner dealt courageously with the question of baby weeks in India. For a long time I have been wondering whether it is not a very doubtful benefit to India simply to try to keep more babies alive when the motto should be: "Fewer and better babies," and this is endorsing the Census Commissioner's view also. Many Indian women are devoting their lives to child welfare. If they would spend their time educating the women, preventing child marriage, struggling against maternal mortality, and teaching methods of birth-control, it would be far more preventive of human suffering than simply trying to keep alive babies who ought never to have been born, because they are the offspring of immature parents or of parents who are so desperately poor that they cannot feed them properly.

The Census Commissioner quotes a figure of 200,000 deaths in child-birth per annum, or something like 20 per hour, and a vast number of these deaths occur to girls in their teens or their twenties. Sir John Megaw estimates that of every thousand young mothers, one hundred are destined to die in child-birth before they cease having babies.

Prof. Das suggested as one of the remedies in India, universal suffrage. May I say I do not think that is likely to come for some years, but at any rate we want a bigger woman suffrage in India, so that we may have the influence of women themselves brought to bear upon this particular problem—we want a much larger women's electorate than is being proposed in the White Paper.

Mrs HAIDRI BHUTTACHARJI [*India*]: One speaker remarked that the over-population in this country arose during the time of the

industrial revolution. The same cause is largely responsible for the over-population of India. You cannot dissociate over-population from economic causes. This country, in order to raise its standard of living and give an increased prosperity to its people went in for family limitation; but certain suppressed countries consider that a large population is an asset. Take the case of Germany or of Japan—countries which increase largely with the desire of expansion. This population growth has been exploited in the past and to-day we read that Japan is capturing the trade of the world. This would not be possible unless Japan had a large and increasing population. From the human aspect every woman would desire a limited family, but until the economic and political problems are solved it is impossible effectively to solve the closely related problem of over-population. Countries like Germany and Japan would regard birth-control as an interference with their political point of view. There will have to be a desire to live and let live.

India's over-population is our greatest problem because of the terrible suffering of the people. The evils of early marriage in India have been pointed out. I would just like to remark that educated and well-to-do Indians have as small families as in any other country, and Indian women of these classes live to as great an age as the women of other countries. Early marriage and over-population are directly due to the ignorance and the illiteracy of the people, and some attempt to deal with these must be linked with the movement for birth-control.

PROFESSOR CARR-SAUNDERS: We all set out from this standpoint, that there is set to the human race the problem of controlling multiplication. All peoples at all times have to face this problem; and if they do not solve it, disaster comes upon them. In this matter the West has no superiority over the East. It was we who first gave up what I believe to be a sort of system, crude as it was, of controlling numbers. We entered on the system of unrestricted multiplication and it was our bad example which led the East to follow suit. You can see that in the case of Japan and what has been related here this afternoon. It was our luck and not our virtue which enabled us to pass through this period without serious disaster. It so happened that industrial inventions were made at that time and that industrialisation could proceed at once to accommodate the extra people. We passed through this period without disaster, but it does not reflect special credit upon us. Owing to a lack of material resources many other countries are not in a position to accommodate many times their former numbers. They have not got the coal, the

sources of power and the minerals which affect industrial development. Therefore they are likely to suffer in a way we did not.

In the West we have the small family system which was chiefly motivated with the desire not to seem superior to the East. It is not as though we found this a perfect solution, we still have our difficulties. Birth-control presents great difficulties; we are struggling with them, and we shall have more trouble than most people realise, but I do not want to give the impression that on that account we have entered upon a phase that we shall regret. I think we shall find means of using the small family system so that birth-control may not be anti-social, but we shall only do that if we realise the danger that it may be anti-social.

Birth-control can be used anti-socially and we must see that it is not so used. I do not want to leave any doubts that we are on a path that will bring benefits to us and if carried on in the East may bring benefits there. I have hardly time to make suggestions as to how we can make our small family system become social and not anti-social, but the matter requires great consideration and, obviously, the regulation of social services and adjustment of incomes with the family under consideration is one of the things we have got to take up.

THE CHAIRMAN put the Conference Resolution, which was carried unanimously, and the proceedings terminated.

Second Session

SATURDAY MORNING, 25TH NOVEMBER, 1933

Subject

“THE STANDARD OF LIVING IN ASIA”

Chairman

PROFESSOR H. J. LASKI

THE CHAIRMAN: The Agenda of this second session of the Conference on Birth-Control in Asia is devoted to the problem of standards of living in Asia. Looking round the audience I notice that we have the privilege of having with us Dr. Kuczynski, who is perhaps the most distinguished living authority on problems of population. I take it I am expressing the wishes of every member of this Conference present if I say that we hope very much that during the course of this discussion we shall have the benefit of his special knowledge in relation to these matters. Mr. Krishna Menon will read the opening paper.

MR V. K. KRISHNA MENON [*India*]: My purpose is to discuss the problem of population in India, in its relation to the standard of living of the masses of the Indian people, and to consider the necessity and character of measures for the limitation of population as part of a deliberate social policy.

The total population of India (including the Indian States) according to the census of 1931 is 352,986,876. British India alone has 271,749,312 inhabitants. Barring the probable exception of China, India is the most populous country in the world, and if an immense and increasing population were an index of social well-being, India is entitled to a high place among socially advanced nations. Facts, however, point to an entirely opposite inference. Behind these phenomenal population figures, and giving them birth, lies a set of conditions of sordid squalor and misery, wherein hunger and pestilence are the principal features, and death and disease their necessary concomitants.

India has a high birth-rate (nearly twice that of the United Kingdom). The average for the five years ending 1930 was 35.19 per thousand. In 1929 it was 35.47, and in 1930, the last year for which I have figures, it rose to 36.99 per thousand. This high birth-rate is set off by an equally high death rate, which averaged 25.58 per thousand in the five years ending 1930, and stood at 25.95 in 1929 and 26.85 in 1930.

The census of 1931 shows that there is a net increase of 30 millions in the population of India. During the last half-century, however, the increase of population in India, relatively to some of the countries of Western Europe and Japan, has been small, and the figures for the last five ten-year periods show violent jerks in the increase of population curve. The following are the figures:—

INCREASE IN POPULATION BETWEEN 1881-1931					
1881-1891	1891-1901	1901-1911	1911-1921	1921-1931	1881-1931
33,418,341	7,046,385	20,795,340	3,786,084	33,895,298	98,941,448
ACTUAL PERCENTAGE					
13.2	2.5	7.1	1.2	10.6	39

The decades in which the rise in population is relatively small are periods of famine and epidemics, a fact which at once draws our attention to the checks on population in India. These fall easily into the Malthusian categories. Prolonged lactation and child marriage are the main preventive checks in modern India. Positive checks include famine, epidemics, low standard of living (in other words, hunger and destitution). The preventive checks are limited both in regard to their application to the total population and their future efficacy.

Prolonged Lactation: The Punjab Census Report of 1921 refers to this topic. It notes that in cases of prolonged lactation the interval between childbirths averages three years. The low standard of living, under-nourishment of the mother, the demands of the house, field, and cattle-shed, limit the operation of this check as far as the vast numbers of the agricultural workers are concerned. The recruitment of women in factories, with long hours of work, operates similarly in the case of the town proletariat.

Child Marriage: It is usual to regard child marriage as the cause of the high birth-rate, the large infantile mortality and the undue increase in the population. This view is erroneous for the following reasons:—

(a) Child marriage is not a universal custom, as these figures from the last census show:—

GIRLS BETWEEN THE AGES OF 0 AND 15					
		Total	Married	Unmarried	
All-India	...	67,481,284	12,377,018	55,209,690	
Hindus alone	...	45,284,158	9,049,079	36,235,079	
Moslems alone	...	15,377,302	2,876,801	12,500,501	
Christians alone	...	1,660,911	161,225	1,499,686	

(b) Child marriage results in a large percentage of deaths among

girl wives. In North Bihar, where the custom is most prevalent, the ratio of women to men in 1931 was approximately 85 to 100.

(c) Child marriage leads to sterility. The Punjab Census Report, 1921, states that the marriages of women below 15 and above 30 were relatively infertile.

It will be thus seen that from the point of view of the increase of population child marriage has acted as a preventive check. The awakening of social conscience in India is removing this check with great rapidity.

Famine: The British authorities claim that famine has decreased in India in recent years. It is argued that there is no such thing as food famine as the country produces enough to feed all the people. It is argued that present-day "famine is a money famine," or, in other words, lack of purchasing power. From the point of view of killing people or of lowering their vitality the distinction is not of importance, although it becomes very important when we consider remedies.

Low Standard of Life: It is admitted that the masses of the Indian people subsist on less nourishment than the amount laid down for convicts in the Jail Manuals. There are at least seventy million people in India who are hungry each and every day of their lives. These belong mainly to the agricultural and industrial labouring class, including the lower ranks of the peasant farmers. In the United Provinces I saw at first hand starvation conditions in the villages; the villagers lived on a kind of resin from the trees.

Dr. A. C. Bentley, Director of Health of Bengal, in his Report of 1927-28, states that "the peasantry of Bengal are in a very large proportion taking to a dietary on which even rats could not live more than five weeks. Their vitality is now so undermined that they cannot stand the infection of foul diseases."

The average income in India is stated by Indian economists as about £3 per head per year, although the Simon Commission places it much higher. Arithmetical averages are misleading, as the average of income of the masses is very much lower. In the towns and the villages the people are heavily debt-laden. It is impossible for people to subsist on their earnings alone. In the villages taxation and rents and exactions make cultivation uneconomic. In the towns, according to the evidence placed before the Whitley Commission, the lower income groups of the proletariat have an average expenditure of 50 per cent. over their average income. Sixty per cent. of the expenditure is on foodstuffs. Only 9 per cent. of the population can read or write. The problem here again is economic. Children at seven or eight are labourers, even though they may work on their fathers' land only.

They have to be withdrawn from schools even where there are schools in the villages.

The sanitary conditions in the villages and, even more, in the towns, defy description. The problem is one that can be met only by collective effort. In the industrial areas of Bombay, Cawnpore and Delhi there are tenements of working people into which a human being can hardly crawl. In Bombay there are at least a thousand tenements where six families live in one room, where all the cooking is done, the babies are born and the parents die. Seventy-five per cent. of the babies of working class mothers in some urban areas are drugged with opium.

Epidemics: Apart from occasional outbreaks which levy a heavy toll in human lives, fevers, abdominal, lung and skin diseases normally cause heavy mortality. It is estimated that a million people die, two millions are maimed and fifty millions suffer from malaria each year. In 1929 3,612,903 died from fevers, including malaria, 399,049 from respiratory diseases, nearly 300,000 from cholera, about 150,000 from smallpox and plague; and a quarter of a million from dysentery. Dr. Bentley, in the Indian Malaria Committee Reports, points out that there is a high correlation between poverty and starvation conditions on the one hand and the fatalities from malaria and affections of the spleen on the other.

Infant Mortality: The infant death-rate in 1930 was 180.83 per 1,000 live births, as against 173.37 in 1929, and an average of 176.34 for the five preceding years. Forty per cent. of the deaths occur in the first week after birth and 60 per cent. in the first month. In the urban areas the infant death-rate ranges from 230 to about 600. Some representative figures are the following: Bombay, 556; Calcutta, 386; Rangoon, 303; Madras, 282; Karachi, 349; Delhi, 233.

In some years the infant death-rate in Bombay has been as high as 800. One-fifth of the children born die in the first year. The birth-rate is highest in areas where there is a high infant death-rate.

Child marriage, again, is usually regarded as the cause of infant mortality, but the figures for Burma, where there is no child marriage, disprove this. In that country the total infant mortality is 340, ranging in rural areas from 175 to 264, and in urban areas from 108 to 633.

Child marriage is a reprehensible custom, cruel and inhuman to the girl victim and deleterious to the race. Public opinion is fighting the evil, and the Indians forced an unwilling Government to legislate against it. Our abhorrence of a particular social evil should not lead us, however, into making a wrong analysis of the causes of others.

The causes of infantile mortality are mainly economic. The poor physique of parents, the squalor into which infants are born, malnutrition, absence of maternity services, overcrowding, and infectious diseases, are the most important causes.

Remedies: From analysis we must now proceed to a consideration of remedies. It is true that India, which is about fourteen times the size of the British Isles, has only seven times the latter's population, but under present conditions the population has far exceeded the optimum. While birth-rates show a tendency to fall, the land in most areas, under present conditions of cultivation and agricultural organisation, has reached a stage of diminishing returns. India must therefore make up its mind to prevent the growth of its population. The operation of present natural checks can only lead to further deterioration in standards and the increase of human misery. The present anarchy in regard to population problems has to be replaced by scientific measures.

A Policy of Regulation: I have pointed out that even such preventive checks as now operate are likely to lapse in the near future, and the consequence is that the burden of limitation will be thrown on positive ones. In other words, the balance must be redressed by famine and disease. The alternative is the operation of new preventive checks, the deliberate limitation of population by modern methods, carried out on a mass scale.

The effect of the adoption of such a policy is not to be measured in terms of actual quantitative results. It imports the factor of deliberate policy to regulate social life. Alongside such measures, education, self-respect, sanitation and maternity hygiene must inevitably grow.

The immediate result of such an awakening of social conscience would probably be to retard the effective operation of positive checks, and from the point of view of quantitative results the limitation of population may appear more remote than ever. But the qualitative gain more than makes amends.

Standards of Living: The raising of the standard of life of the masses of the people who are already born depends on factors and measures which are perhaps outside the scope of this Conference. It may be mentioned, however, that India to-day has about 200 million acres of land under cultivation for food crops and that the total produce of wheat and rice alone in 1929-30 was 42,667,000 tons. There is thus in modern *British* India a supply of approximately 540 pounds of wheat and rice per head of the adult population (above 15 years of age) or 350 pounds per head of the entire population. I have not got accurate figures of the total supply of other

food grains, such as millet, but the conservative estimate with regard to these, is that the total yield is almost the same as the total of wheat and rice. The total supply of food grains in India therefore yields over a thousand pounds per head of the adult population or over 700 pounds per head of the entire population. But the vast majority of the population exists on the margin of starvation. The doctrine that with every mouth there comes a pair of hands, must be read in India with the amendment that the hands of the Indian peasantry, including those of children of tender years, are now engaged in feeding mouths other than their own.

The problem from this aspect is one of re-distribution of purchasing power, and of the transformation of the present "police state" into at least a social service if not a socialised state. Agriculture, which supports 72 per cent. of the population directly, must receive more than the present attention from the State, which spends a total of £800,000 from central and provincial revenues on agriculture as against nearly fifty million pounds annually on the armed forces. The total expenditure on agriculture in a country of nearly 300 millions is less than the cost of the upkeep of the twelve Government Houses in India! Public health must receive greater attention than is indicated by one hospital for every 400 square miles, and one for every 77,000 of the population, as compared to one policeman for every 7 square miles, and one for every thousand of the population in normal times.

A further exploration of this aspect of the standard of living will probably outrun the scope of this Conference. For the introduction of measures to bring about a limitation of population the country appears ready, though the obstacles are great. These obstacles are not religious or even psychological. In India there are always enough Pundits who can quote the scriptures on the progressive side, and in any case religion is less organised and collective than in the West. Public opinion, as represented by Indian doctors, economists, and publicists, is overwhelmingly for progress. The women of India are in the vanguard of the campaign for progress in every direction, and are to-day in a position, barring the limitations that jails impose, to compel the march of events.

There is a new India, to which progressives in all countries must turn for co-operation. It has carried a great deal before it in the last few years—far more than is realised in this country. Its best leaders are now muzzled and hand-tied, but their power is the real writ that runs in the country, so far as radical measures of social regeneration are concerned.

The real difficulties are economic and arise mainly from a low

standard of living. In a country where the smallest coin is a twelfth of a penny, and a handful of rice is wealth, methods will have to be devised to place social services, such as birth-control, within the reach of all who need it. For the rich there are ample facilities in India, and for a religious or other rule that the rich break, a penance in terms of gold and silver is at hand. The difficulties, insurmountable as they appear, will remain till a first attack is launched against it and maintained.

PROFESSOR H. H. CHEN [*China*]: I believe that the combined efforts of workers in a number of branches of science, particularly of economists and statisticians, are essential if we are to arrive at valid conclusions about the effects of birth-control. My own contribution is designed to explain the attitude of many of my compatriots to this subject, and also, I hope, to stimulate a more profound interest in the problems of birth-control as they concern my country.

I must begin by referring to the general population problem of China. Exact knowledge about the total figure of Chinese population is lacking, but we have to admit that as matters stand this Great Empire is heavily over-populated. During the past few decades there has been evidence of the severity of this problem in migrations into various parts of the world; but population problems existed in China long before she came into contact with the West.

To form any adequate appreciation of the nature and magnitude of China's population problem, the following facts must be borne in mind. First of all, the rate of increase of China's population during the past century has been insignificant in comparison with that of the industrialised countries, both occidental and oriental. Secondly, the high Chinese birth-rate has so been set off by a heavy death-rate that the total population has been practically stationary. Thirdly, if we exclude the dependencies, the average population density is not high, the figure for 1929 being 254 persons per square mile, as compared with 192 in France, 352 in Germany, 483 in the United Kingdom and 630 in Belgium. Fourthly, while it is true that some parts of China are far too densely populated, this constitutes rather a problem of unequal distribution than of absolute over-population. Fifthly, it must be recalled that less than 2 per cent. of the total Chinese population lives outside the Chinese Empire, an insignificant figure when one compares it with the volume of European emigration during the past 100 years.

Finally, I would suggest that the charge brought against China's people of clinging to traditional habits which "put a premium on the growth of population" is untrue. The social and ethical forces,

which once compelled part of the Chinese population to beget more male children than they could support, have tended to break down in the face of modern industrial development. In fact, the deliberate restriction of births has long been practised among the poorer classes. Their methods have been brutal and violent, but the fact that they have been used should be borne in mind, as a corrective to a false impression that has been conveyed by some Western students of Chinese conditions. I must repeat my belief that, even when due allowance is made for the factors I have just enumerated, the conclusion is inescapable that, if no measures are taken to remove various conditions that have, so to speak, aggravated the problem, China is at present an over-populated country.

In considering the relation between population density and the standard of living, and thus indirectly the economic effects of birth-control practice, there are certain fundamental facts of which you must take notice.

I suggest, in the first place, that over-population resulting from a failure to exercise deliberate control upon the birth-rate aggravates labour problems and intensifies the competition for land, and thus leads to a lowering of the standard of living. In families of limited means, which are burdened by more children than they can adequately support and educate, such a lowering of the standard of living affects not only the present generation but also generations to come. When we come to consider the social and economic chaos and the consequent economic problems created in China by disequilibrium of population, we are bound to realise that attempts to solve them must fail unless their cause is first dealt with.

As regards the future industrial development of China, which, to many minds if not to all, is what offers the key to the problem of raising the standard of living in backwardly developed countries, it should be realised that as long as over-population continues to provide cheap labour, the mechanisation of industry cannot but be retarded: it simply would not pay. Moreover, the co-existence of more highly industrialised countries with those that are less so, results in an international competition which tends to threaten the high standard of living in the former countries. In other words, control of population volume has a direct bearing on the economic welfare of humanity as a whole.

I fear I shall not be able to examine fully the considerations I have just outlined, but there are a few questions I should like to raise before summing up my views on birth-control.

First, a question of cause and effect. Is the high standard of living which some countries have gained, at least in part, by the economic

exploitation of other countries, the cause or the effect of world-wide economic dislocation? Again, is Western civilisation, as expressed in terms of economic expansion, a menace to Eastern population, or is Eastern population, the "Yellow Peril," a menace to Western civilisation?

My next question deals with mere palliatives and radical cures. Would a radical change or reconstruction of the entire social and economic system offer the most fundamental solution of the problem of population; or alternatively, would a solution of population problems result automatically in solution of the others also? Birth-control is sometimes regarded as *the* fundamental remedy; on the other hand, some suggest that it merely side-tracks the fundamental issues that really demand attention. Which is the palliative and which the remedy?

Lastly, a question about space and time. Suppose we grant that birth-control offers a solution to the most acute world problems, how shall a more rational distribution of population be effected? By force or through co-operation? Which nation should be the first in time to adopt a radical birth-control policy? Or must we wait for concerted action in a distant future?

My own view is briefly this: As an individual I have no hesitation in advocating birth-control, but I find myself in perplexity when I have to consider it as a national or social policy. In its medical and economic aspects, birth-control may and should present purely scientific issues; but when it touches national or social policy it becomes involved in politics, the elements of which are conditioned by important and complex underlying factors.

I would say, in conclusion, that in the questions I have raised there is nothing to prevent my being a loyal supporter of the birth-control movement in China, provided that it is associated with a carefully considered programme in the light of the present world situation.

MR P. K. WATTAL* [*India*]: The promoters of this Conference deserve to be congratulated on the opportuneness of the time they have chosen for its session. The recommendation in favour of instruction in birth-control contained in Dr. Hutton's most interesting report on the Indian Census of 1931, followed by the announcement of the decision of the Madras Government to start birth-control clinics, have led to a quickening of thought on the subject, and it is marvellous how little dissent has been evoked in the country. To me this

* Mr. Wattal is a member of the Accountant-General's Department of the Punjab.

is a matter for very special gratification when I recollect the somewhat different nature of the reception accorded in India to a similar suggestion I made in a booklet published in 1916. And I am sure that this feeling of gratification will be shared by all members of this Conference, as well as other persons interested in the prosperity and welfare of the people of India.

There is another reason why the holding of this conference at the present time is particularly fitting. The question of Japanese trade competition, which is engaging special attention at present, raises considerations broad enough to include the future relations of Europe and Asia. Everybody recognises that the tremendous growth of population in Japan is furnishing the real drive behind the severe struggle for markets in which Japan is engaged nowadays. Japan has shown that cheap labour is not necessarily inefficient labour, and the West is now faced with two alternatives: either it must lower its own standard of living or it must bring about a rise in the standard of living of the people of Japan and other Asiatic industrial nations, like China and India. The former seems almost impossible and the latter will not be achieved unless there is an appreciable decline in the birth-rate in the countries in question.

THE PROPOSED BIRTH-CONTROL CONFERENCE IN INDIA

I understand that it is the intention that this conference should be followed up by another conference in India next year. I wholeheartedly welcome this idea and am confident that such a conference will meet with extensive support in India. It is, however, in the spirit of true sympathy that I desire to invite attention to one point. I have frequently come across statements that unless birth-control becomes universal the white races will be swamped by coloured peoples. And it is suggested that the next great task for birth-controllers is to convert the backward countries of the world—China, India and Japan, and the coloured peoples of Africa and South America. I appreciate the sincerity and the frankness of such statements, but am more than doubtful of their wisdom. In my humble view the case for birth-control should not be mixed up with questions of race and colour, but should be based on the conditions and requirements of each country, eastern or western. It is not necessary to say more, but I trust that no countenance will be given to the idea that the proposed conference to be held in India next year is inspired by the feeling that the enormous increase in population that is taking place from year to year in India constitutes a grave menace to the superiority of the western peoples and their standards of living. The political repercussions of such a feeling would be most un-

fortunate and might imperil not only the success of the conference but also the birth-control movement itself in India.

PRESSURE OF POPULATION ON THE MEANS OF SUBSISTENCE

The population of India at the census of 1881 was 254 millions; to-day it is 353 millions. Making allowance for inclusion of new areas at each successive census and the progressive increase in accuracy of enumeration from census to census, the real increase in the population during the last 50 years has been officially estimated at 39 per cent.; or about 8 per cent. during a period of 10 years. During the decade 1921-31, there was an unprecedented increase of 34 millions, or 10.6 per cent. As this decade was free from abnormal visitations such as famine, plague or influenza, it is held that the normal rate of annual increase of population is 1 per cent. It is extremely unlikely that this rate will be maintained over a number of years, but should such a thing happen the twenty-first century would commence with a population of 700 millions in India—a truly staggering prospect.

With the population increasing at the rate mentioned above, are the means of subsistence increasing in similar proportion? It is not possible within the limits of a paper like this to examine this question in detail, but the broad facts supported by figures from official sources are given here. About 72 per cent. of India's population is supported by agriculture, and about 10 per cent. by industry. As this covers 82 per cent. of the total population, it will be sufficient for the purposes of this paper to examine the figures for these two occupations only.

Taking agriculture first, the population supported by agriculture, the acreage cultivated, and the acreage per head of agricultural population for British India (complete figures for Indian States are not available), are as follows:—

Census Year	Population supported by agriculture	Acreage cultivated	Acreage per head of population supported by agriculture
1901	155,476,788	199,708,422	1.28
1911	173,695,022	215,981,603	1.24
1921	183,700,000	212,259,506	1.155
1931	190,000,000	228,160,853	1.20

The acreage cultivated in 1921 was abnormally low, being less than that for 1911, in spite of a larger number supported. Otherwise, the trend of the figures for acreage per head of agricultural population is steadily downward. For European countries Sir Daniel Hall has

calculated that 2 to 2½ acres of land under cultivation are required to provide food per head of the population; whereas in British India an area of 200 million acres under food crops supports a population of 250 million people.

About a month ago Mr. B. Viswa Nath, Government Agricultural Chemist, stated in a lecture that, owing to the shortage of 500,000 tons of nitrogen in the country, India was producing food sufficient for only two-thirds of the population. According to his calculation, to feed the whole population, the area under cultivation should be 353 million acres: in other words, the population supported by the land is at present excessive.

When we consider the average income of the agriculturist, the figures are even more depressing. According to the estimate made in 1931 by the Indian Central Banking Enquiry Committee, the total gross value of the annual agricultural produce would amount to about £900 millions on the basis of 1928 price levels. For the year 1928, the index number of wholesale prices in British India stood at 145 (the figure for 1913 being taken to be 100), whereas it is 91 to-day, or a drop of 37 per cent. So, on the basis of price levels now, the gross value of the produce would stand at less than £600 millions. Or, in other words, the average gross income of an Indian agriculturist is about £3 per annum. Out of this he has to pay interest to his money-lender at a rate not less than 18 per cent. per annum on the amount borrowed, besides the land revenue and the expenses of his own feeding and clothing.

Industry is, in present conditions in India, not affording any relief. Instead of taking off the growing pressure of population on land, it is aggravating it. The percentage of population supported by industry is diminishing from census to census. It used to be 12 per cent., and is 10 per cent. now. In saying this I do not wish to suggest that the case for employing every legitimate method of promoting industrial development in India is in any sense weakened. On the contrary, the more diversity of occupation there is the better. But taking into consideration every possibility of expansion of resources, it seems idle to expect that industrial development would in any circumstances absorb the large addition to population that is now taking place.

GROWTH OF UNEMPLOYMENT

A further indication of the increasing pressure of population on the means of subsistence is afforded by the growth of unemployment. The ratio of non-working dependents to workers is rising steadily. In 1911 it was 53:47. In 1921 it was 54:46. In 1931 it rose

to 56:44; in other words, 56 per cent. of the population is not contributing anything towards its upkeep. If we exclude children up to the age 15 and aged persons over 50, we find that the able-bodied unemployed amount to 25 millions. This is a high figure considering that the total number of unemployed for all countries for which the International Labour Office keeps figures is 30 millions, not including India. This figure of 25 millions is an under-estimate, as there is so much seasonal unemployment in India and the average agriculturist is employed for only about 150 days in the year. Of this no account has been taken in the figure given above. The problem of unemployment is most acute in Bengal, where the proportion of non-working dependents to workers is as high as 71:29. Might one look for a possible explanation of the disturbed condition of that province in this circumstance, which would go to show the significance of the problem of population in Indian affairs?

REDUCTION IN THE DEATH-RATE

I hope I have succeeded in showing that population in India is increasing much faster than the means of subsistence. But, strange as it may seem, I do not base the case for birth-control on this ground. I know that there is no unanimity of opinion on the point and I do not wish to raise an economic controversy and thus confuse the issue. My main plea for birth-control is on a different ground altogether, and that is the urgency of an immediate and appreciable reduction in the high death-rate in India. On this point there is no difference of opinion. What is the problem before us? It may be briefly stated as follows:—

(1) The death-rate in India is about 27 per 1,000, when in other Asiatic countries like Japan and Java it is only 18.2 and 20 respectively.

(2) The infantile mortality in India is as high as 181 per 1,000 live births, when it is only 124 per 1,000 in Japan and 60 per 1,000 in England and Wales.

(3) The maternal mortality per 1,000 live births is 24.5 as against 4.5 in England.

(4) The average expectation of life in India is 22.59 years for males and 26.56 years for females, whereas it is more than double that in England, viz: 55.62 years for males and 59.58 years for females. Even in Japan it is much higher, viz: 42.06 years for males and 43.20 years for females.

(5) The majority of the population in India is badly nourished and badly fed. In a note recently published by Sir John Megaw, Director General Indian Medical Service, he states that, taking India

as a whole, the dispensary doctors regard 39 per cent. of the people as being well nourished, 41 per cent. poorly nourished, and 20 per cent. as very badly nourished.

What we therefore have to aim at is chiefly a reduction in the death-rate. And here I may at once make a personal confession of faith. I should not be satisfied until the death-rate was brought down to 16 per 1,000. That this is not an impossible figure will be clear from the fact that in the State of Travancore, in Southern India, the death-rate already stands at this figure. And what is possible in Travancore should be equally possible in the rest of India.

How is this goal to be achieved? The public health services of the Government of India have already been successful to a small extent, but it must be obvious that unless their efforts are supplemented by a large reduction in the birth-rate, no striking results will be gained. We cannot possibly conceive of a birth-rate of 36 and a death-rate of 16. The increase of population resulting therefrom would be absolutely insupportable. Moreover, under present conditions, millions are born who have no chance of a decent existence or a normal span of life. I contemplate a birth-rate of 20, and when that is reached, a death-rate of 16 might be possible.

How the birth-rate is to be reduced to practically one-half of what it is to-day in a country of such large size, with an ignorant and poor population which has an intensely conservative and fatalistic outlook on life, is an immensely practical problem, towards a solution of which I hope this conference, and particularly the one proposed next year, will succeed in showing the way.

LEONARD S. HSU and CH'ENG-HSIN CHAO [*Yenching University, Peiping*]: It is not an easy task to consider the question of Chinese population because as yet there has been taken no complete scientific census in the Western sense. In this paper, the preliminary question of population estimates will be taken up first as precursory to the discussion of population pressure. Birth-control will be considered in the light of the various checks to population increase, which have existed at various times or are becoming important. The paper will conclude with a critical examination of the diffusion of birth-control knowledge in the country.

It is quite unnecessary to repeat here that estimates of the gross size of the Chinese population vary from 300,000,000 to 500,000,000, with a difference of 200,000,000. Space does not permit any detailed discussion. Suffice it to say that general consensus seems to indicate that a gross figure of 450,000,000 represents

the approximate size of the population of China proper (including Manchuria) with an area of about 2,000,000 square miles.*

Whatever figure one may take for the general size of the Chinese population, authorities disagree but little on the relative densities of the various regions or provinces of China. Population clusters, as everybody agrees, in the alluvial plains, deltaic regions and the narrow strips of the sea-coast.† Taking the 1920 estimates of the Chinese Post Office for the 18 provinces of China proper, and the 1929 estimates of Franklin L. Ho for Manchuria‡ as the basis of calculation, a little over 60 per cent. of the total population live in the 10 coastal and Yangtse provinces|| which comprise only 35 per cent. of the total 2 million square miles. Such concentration cannot be said to be insignificant.

Is China over-populated? The question cannot be well answered. Take, for instance, the index of density. According to the Post Office estimate of 1920, Kiangsu shows the highest density, with Chekiang the second, and Shantung the third. But the general standard of living in the first two provinces is certainly better than that in many of the other provinces. With the exception of Honan,

* A general study on Chinese population is in preparation. For reference to the question of estimation, see Leonard S. Hsu: "Population Problem in China," *Sociology and Social Research* (University of Southern California, Los Angeles, Calif., U.S.A.) Vol. XIII, No. 5 (May-June 1929), pp. 426-434; Chang-Heng Chen: "Some Phases of China's Population Problem," *XIXeme Session de l'Institut International de Statistique*, Tokio, 1930; Chen, Chungshen S.: "The Chinese Census of Population since 1712," *ibid.*; Lieu, D. K.: "A Brief Account of Statistical Work in China," *ibid.*; Rockhill, W. W.: "Inquiry into the Population of China," *Smithsonian Miscellaneous Collections*, Vol. XLVII (1905), pp. 303-321; Willcox, W. F.: "A Westerner's Effort to Estimate the Population of China, and its Increase since 1650," *Journal of the American Statistical Association*, Sept. 1930, pp. 250-268.

† See, in addition to above references, Roxby, P. M.: "The Distribution of Population in China," *The Geographical Review* (American Geographical Society, New York City), January, 1925, pp. 1-24; Cressey, George B.: "The Geographic Regions of China," *The Annals*, November, 1930, pp. 1-9.

‡ The 1920 estimates of the Chinese Post Office for the 18 provinces are used, because they are fairly close to the independent work of the China Continuation Committee. The three provinces of Manchuria have increased population since 1920 due to migration and high natural increase. Hence the 1920 estimate of the Chinese Post Office cannot be used. Prof. Ho has made a rather thorough survey of the economic conditions of the migrants in Manchuria and this estimate is as good as any others. Population changes for the 18 provinces since 1920 are believed to be within the errors of estimation for 1920. This subject is treated in detail in Ch'eng-Hsin Chao, *An Ecological Study of China from Segmentation to Integration* (Doctoral Dissertation, University of Michigan, Ann Arbor, Michigan, U.S.A., 1933), Chapter III and Appendix II. For population estimates, see "Post Office Estimate of Chinese Population by Hsien District," *The China Year Book*, 1921-22; China Continuation Committee, *The Christian Occupation of China*, Shanghai, China, 1922; Franklin, L. Ho, "Population Movement to the North-Eastern Frontier" (Peiping, 1931), p. 372.

|| The 10 provinces are Anhwei, Chekiang, Chihli (Hopei), Fukien, Hunan, Hupeh, Kiangsi, Kwangtung, Shantung, and Kwangsu.

population density is higher in the coastal and Yangtse provinces than in the inland provinces. Indeed, the density of the first group is more than twice that of the latter group. Peculiarly enough, however, famine usually occurs in districts of the latter, and their average standard of living is far worse than the former.*

The better standard of living in the coastal and Yangtse provinces is due to many factors: the fertility of the soil, climatic conditions, industrialisation and better facilities for communication. The factor of migration has been mentioned in many places, but one of its significant aspects, which is also one of the characteristics of the Chinese, has not been given very much attention. Migration *per se* may not be an effective relief of population pressure, but its corollary, the remittances of the migrants to the mother country, is quite an effective relief of population pressure, especially in the case of the Chinese. According to one estimate, the Chinese emigrants in foreign countries, specifically those in North America and South Sea Islands, in 1928 sent a gross sum of 242 million silver dollars home.† Furthermore, there are not a few big corporations and modern factories and schools built on funds invested by Chinese emigrants. And, besides, the proportion of 1,487 million silver dollars' worth of merchandise exported from China in 1928 must have found no small market among Chinese abroad. It is no wonder, then, that the people of Fukien and Kwangtung are much better off than their brethren in neighbouring provinces, since these migrants in foreign lands are mostly from the two above-mentioned provinces. The total number of Chinese in foreign countries has been estimated as 10 million.‡ The total population of Kwangtung and Fukien is 50 million, so that there is almost one migrant to every 5 persons at

* There is as yet no systematic and comparative study of the standard of living in the various provinces and regions of China. Fragmentary studies are, however, many, in both Chinese and foreign languages. For general references, see Leonard S. Hsu: "Problem of Poverty in China," in *The China Outlook*, Vol. I, No. 3, Feb. 1, 1928, pp. 2-8; R. H. Tawney: *Land and Labour in China*, New York, 1932; *The People's Livelihood—Papers and Abstracts of the Proceedings of a Conference held in Shanghai*, February, 1931, Shanghai; National Christian Council, 1931; Bruno Lasker (editor), *Problems of the Pacific*, 1931 (Chicago, 1932). Part II; John L. Buck, *Chinese Farm Economy*, Chicago, 1930; Mallory, W.H., *China, Land of Famine*, New York, 1926; Sidney D. Gamble, *How Chinese Families Live in Peiping*, New York and London, 1933.

† This estimate was made by Professor Charles F. Remer of the University of Michigan. It appeared in *Nankai Weekly Statistical Service*, Vol. V, No. 4, Jan. 25, 1932, p. 18.

‡ Ch'eng Hsin Chao, pp. cit., pp. 51-55; C. C. Wu: "Chinese Immigration in the Pacific Area," *Chinese Social and Political Science Review*, 1928, pp. 543-60, 1929, pp. 50-76, and 161-82; Migration in the Pacific Area, Data paper of *The Institute of Pacific Relations*, Honolulu, 1931; Ta Chen, *Chinese Migrations, with Special Reference to Labor Conditions*, U.S. Department of Labor, 1923.

home, because practically all the Chinese emigrants in overseas are from the two provinces. Undoubtedly, the return of thousands of overseas Chinese because of unemployment abroad, will have an adverse economic effect on these two provinces.

The lower standard of living in the inland provinces, especially the north-western section, including Kansu, Shensi and Shansi, on the other hand, can be largely explained by the inefficient transportation, irregular rainfall, deforestation, drought and flood occurrences, and unbearable taxations of different sorts.* Famines have occurred repeatedly in these provinces largely because of these natural calamities, aggravated by human inactivities and political oppression. Famines have certainly reduced the size of the population of these districts but whether "over-population" has been a cause of these famines has yet to be discovered.

Many students of Chinese population problems argued that China was "over-populated." They arrived at their conclusion by a comparison of the standards of living of the Chinese masses with that of the working public of highly-industrialised countries. Some proved their statement with statistics, while others drew their conclusions from general observations. Whatever proofs may be advanced, no one will dispute the lower standard of living of the Chinese, not excluding those in Kiangsu and the three South China coastal provinces, in comparison with the United States of America and other industrialised countries.

This is not the place to criticise the logic of this comparison. The point is this: if so many feel that improvement of the Chinese standard of living is so urgently needed, the existence of population pressure, at least psychologically, can hardly be questioned. This state of mind, i.e., the consciousness of population pressure, is bound to be intensified with the spread of education. The feeling of population pressure is shown in the increasingly great amount of literature written on population and birth-control.

Assuming that there is a pressure of population in China, and that, therefore, the size of the population should be reduced, the question is, then, can birth-control be an effective means to this end?

Before we take up the question of birth-control, let us consider for a moment some of the prevailing checks to population increase. There are generally two types of checks: one increases deaths and the other decreases births. Of the first, famines, civil wars, pestilences and poverty are the most common in China. Deaths due to famines and floods usually are estimated to be "over a million."

* W. H. Mallory, *China, Land of Famine*, New York 1926.

Civil war might have killed "millions" too. The loss of population resulting from the Taiping Rebellion (1854-64) was estimated as 20 million.* The number of deaths due to poverty and pestilence cannot be estimated as there is no systematic death registration in China. One wonders how many have really died of so-called natural causes since the conditions of poverty and pestilence are so prevailing in China.

Infanticide, especially the exposure of female babies, is also a common practice in China.† Abortion (the killing of life before its birth) has also been reported as not uncommon. There is no record nor estimation of the cost of life due to these social practices. The number, however, cannot be very small.

One of Malthus's checks to population is moral restraint. In China there are very many convents and nunneries where the monks and sisters pass their single life. Hence the greater number of monasteries and nunneries, the smaller the number of births. There are also not a few "away from home" husbands who leave their wives in their village homes to work in cities or to engage in business abroad. They might be away from home for years. This condition is especially true to emigrants from Kwangtung and Fukien, hence this absence is an important factor in the reduction of births.

Prostitution, which Malthus classified as vice, is also universal in Chinese cities. The greater the number of prostitutes, other things being equal, the smaller the births will be.

Deaths through poverty, famines, pestilence, floods and civil wars are undeniably heartless checks to population increase. The practices of abortion and infanticide are brutal and barbarous and are now made illegal in most of the civilised nations. While prostitution should be reduced to its minimum, the old institutions of monastery and nunnery cannot hold their own in the modernisation of China. This way of "moral restraint" is no longer a reliable check to population pressure.

With the spread of education and the emancipation of women, the number of bachelors and spinsters increases also. It is, however, very questionable whether this phenomenon of singleness will be-

* For the loss of population from extraordinary causes from 1846 to 1895, see W. W. Rockhill: "An Inquiry into the Population of China," in C. F. Remer, *Readings in Economics for China*, pp. 463-495. For deaths due to famines and floods in recent years, see reports of the China International Famine Relief Commission.

† Maggowan, D. J.: "On Oriental Family Limitation," *China Review*, 1885, Vol. XIV, p. 205; Matignon, Dr. J. J.: "Infanticide et Avortement en Chine," *Annales d'Hygiene Publique*, 1899, Vol. 42, p. 467.

come permanent or not. It is, furthermore, a very unnatural way of living; its presence is rather something involuntary.

Birth-control can thus make a timely contribution to the solution of China's problems. Referring to the Occident and humanity in general, Professor E. A. Ross has said the following:—

Owing chiefly to the discovery of practical methods of birth-control, the last half-century has witnessed nothing less than a revolution in the vital history of Western Europe, the United States, Canada, and Australasia. This revolution is destined to spread over the earth in time, relieve population pressure, and pave the way for a universal sharing of the blessings of civilisation. This discovery of means of birth-control may well prove even more momentous in the life of humanity than the discovery of the germ origin of disease.*

There is no space here to put down the arguments for and against birth-control. It is quite sufficient to note here that birth-control knowledge, if made easily accessible to the public, can be but a substitution of the old checks of famine, pestilence, infanticide, etc. Its effectiveness as a factor in the reduction of population can hardly be over-emphasised, since deaths through the positive checks—to use Malthus' term—are so considerable at the present time.†

The success of contraception as a measure to check population pressure hinges largely upon the diffusion of birth-control knowledge. The latter, in turn, depends upon governmental attitude, public opinion, organised activities, communication, tradition and customs. The following pages will be given to a brief discussion of these factors.

So far as governmental attitude—national, provincial and local—is concerned, there is neither any legislation prohibiting, nor any promoting activities for the spread of birth-control knowledge. Mr. Chang-Heng Chen in *San Min Chu I and Population Policy* (in Chinese) advocates birth-control and attempts to show that birth-control is an effective means to accomplish the aims set forth in *San Min Chu I* (Dr. Sun Yat-Sen's *The Three Principles of the People*). In this volume many favourable forewords are written by high officials of the National Government. Does this indicate the favour-

* E. A. Ross, "Standing Room Only" (New York and London, 1927), p. 208.

† The death rate and infant mortality are believed to be very high in China. There is, however, no sufficient data to make it advisable to state the question in more definite terms. For a brief summary, see Leonard S. Hsu: "Population Problems in China," *Sociology and Social Research*, Vol. XIII, No. 5, May-June, 1929, pp. 431-2. For vital statistics of Chinese municipalities, see *The Statistical Monthly* (Section on Population), The Directorate of Statistics, National Government, Republic of China, Nanking, China. See also C. M. Chiao: "Population of Shansi, China, 1923," in *Nankai Weekly Statistical Service*, July 13, 1931.

able attitude of the Government toward birth-control? The time is, however, too immature to make speculation.

What is the general tendency of public opinion on the question of birth-control? The literate public is still too much engaged in the political situation of the country. Among educational leaders who have expressed their opinions on this question, the tendency seems to be to side with the spread of scientific birth-control knowledge. The educated class is beginning to give serious thought to this subject. The Chinese Sociological Society devoted their first annual meeting to the discussion of the various aspects of Chinese population problems. The article on birth-control was favourable to the spread of this new culture pattern.*

The traditional conception of life of the Chinese may serve in time as one of the greatest obstacles to the spread of birth-control knowledge. One of our cultural historians has ably summarised this traditional conception in the following words:—

This attitude (towards life) could be best represented by what has been said, or been attributed to have been said by the great sage Mencius, that "of the three great filial sins that a man may commit, failure in providing a male heir is the greatest." It may be pointed out that this is not a mere formal doctrine, but it has been one of the most vital moral forces in the Chinese nation for thousands of years. So much so that even a beggar is afraid to die heirless! For no curse in China could ever be compared in its cruelty and intensity than that which wishes a man or a woman to die heirless, "to end the posterity," as the curse goes in China.†

Strong as this traditional attitude may be in the masses of the people, nevertheless, the deep-rooted utilitarianism of the same people will break this attitude down when they learn that through birth-control the economic status of the family may be raised. Furthermore, education will eventually emancipate the long oppressed females and individualise the overburdened sons so that they will look for other higher values of life than procreation. With increasing mobility, which is one of the corollaries of modernisation, the traditional big family system will give way to the small family ideal. The latter is an important factor in paving the way for the dissemination of contraceptive knowledge.

Indeed, the young generations in metropolitan communities and university circles begin to view this new cultural trait as one of the

* Ta Chen: "Birth-control and Chinese Population Problem," in Chinese. *Proceedings of the Chinese Sociological Society*, Vol. I, January, 1931, pp. 43-62.

† Sophia H. Chen Zen: *Symposium on Chinese Culture* (Shanghai, 1931), p. 366.

necessities of life. Many of our foreign educators, medical doctors, "returned students"—university professors and men of other professions—and college graduates have taken the dissemination of scientific contraception as one of their important tasks.

The Peiping Committee on Maternal Health is one of the pioneer organisations for the promotion of scientific contraception. It was established in February, 1930, by a group of university professors, medical doctors and prominent social workers of both Chinese and foreign nationalities. Due to financial difficulty, its work is still very limited. It has a clinic of its own, one or two voluntary women doctors and one half-time paid nurse to take charge of the usual activities of the clinic. For its publicity work it has two monthlies, one for the upper society and the other for the lower classes. It has a good start, and time will relate its contribution to the Chinese community.

Providing the means of communication improve, this new culture trait will be diffused from metropolitan centres to smaller cities, towns and villages. Its adoption will begin with the upper class, and finally will get down to the bottom classes of the human pyramid. The process may be very slow, but its permeation is sure.

To sum up, the phenomenon of "over-population" cannot be well measured. The feeling of population pressure is becoming, however, very strong with the increasing desire to raise the standard of living of the individual and of the general masses. Birth-control, if successful, can hardly do more than replace the old checks. It is, however, pointed out that the old checks are either heartless and brutal or are breaking down and no more dependable. The introduction of birth-control is, therefore, very timely. The diffusion of scientific contraception, though slow, is taking root and will permeate to the general public with the spread of popular education, improved communication and organised activities. Shall we look forward to the dawn of a new era in China?

DR KUCZYNSKI: I am a little embarrassed by the reception which I have received here. I came here to learn and I know very little about the subject which we are to discuss to-day, the population situation in the Far East. I can only, from a little general knowledge which I have, make a few remarks on what has been said about India. We have heard that the birth-rate is 35 per thousand and the death-rate 25 or 27; we were told to-day that India might have a death-rate of 16 per thousand, and yesterday we were told that New Zealand has a death-rate of 8 per thousand. "Why should not India have a death-rate of 8 per thousand?" Well the answer is

very simple. Even if mortality were as low in India as in New Zealand, the death-rate of New Zealand would be much lower than in India because the age composition of the population of New Zealand is very much affected by immigration.

On the other hand, there is no doubt that the death-rate of India can be reduced below 25 to 27. The best method would be to spend money there for hygienic purposes. Of course we must not imagine that we can easily wipe out those deaths which occur in India through epidemics, and the gentleman from India gave us a very interesting figure; he told us that only $1\frac{1}{2}$ million deaths occur in India not from epidemic diseases. It is of course out of the question to reduce the mortality in India to $1\frac{1}{2}$ million per year; we must realise that many of the people who would be saved from epidemics would die from other causes before having reached old age. But there is a very big margin which could be made use of if epidemics were reduced.

Whether the birth-rate in India is high or not is hard to say. It is a birth-rate which existed all over Europe in the greater part of the 19th century, and it is always difficult to say what is normal and what is not. Against one use of the word "normality" I must protest. This was the use of the word "normal" in the last paper we heard, because to say that in India years which are free from famine and epidemics are normal is contrary to the facts. It is very misleading to speak of a normality which is so far from the average. If the average rate of increase in India was something like six per thousand per year in the last fifty years we cannot possibly say that ten per thousand is normal. If we take a period of 50 years this shows us what is normal in India, and an increase of 39 per cent. in half a century is not a population growth which is so very large.

There was a tendency on the part of the first two speakers to-day to emphasise that there is over-population in India and in China. The gentleman from India said "under present conditions," and repeated this twice; and the gentleman from China repeated twice also "as matters stand." This after all does not mean very much, because we have had examples in history where countries were very much over-populated under the conditions of the time—"as matters stand"—and where it has been proven by the facts that a few decades later there was no question of over-population. Take a country like Germany. Germany round 1880-85 was certainly a country which "as matters stood" was over-populated. The standard of living was decreasing; hundreds of thousands of people were emigrating every year. Germany had then about 45 million inhabitants.

Thirty years later Germany had 20 millions inhabitants more, the standard of living had continuously risen, there was an excess of immigration and no one could then say that Germany was over-populated. So that though we have the condition in China and Japan and probably in other countries in Asia "under present conditions," or "as matters stand," of over-population, to say that this difficulty can only be solved through birth-control is, I think, to state rather a rash conclusion.

Birth-control is one of the means, but I cannot admit that it is the only means of overcoming the present over-population in those countries. We must not look at these things from a static standpoint. We are told to-day there are 200 millions of acres under cultivation in India; in order to well feed the population we need 353 million acres, but why do we need as many, and under what conditions do we need them? We need them if we do not apply fertilisers, if we do not improve agriculture. No person who knows anything about modern agriculture can deny that we might have plenty of food for all the Indians on 200 million acres without even any education of the Indian farmers which would go beyond what they would easily learn in a year or two. Just as it is possible to do away with the high mortality in India by hygienic measures, so it is possible to do away with the lack of food by the improvement of agriculture.

We were told yesterday that if birth-control were introduced in India with the effect of reducing the population by a hundred million, this would be a very good thing for England because exports to India would increase. Let us suppose that India had a hundred million people less, and let us suppose—a thing of which I am not sure at all—that the standard of living would then be higher in India than it is to-day. Would this actually give a chance for additional exports from England? The first thing those people would do would be to improve their diet. But this would not affect British exports, and it is very doubtful whether those 250 million people in India would import more manufactured products from England than the 350 millions to-day.

I may perhaps conclude by saying birth-control is one of the means which might overcome the present over-population in China and India, but it is not the only means. Birth-control will be a very good thing for millions of individual women in India and China, but this does not imply that it will necessarily be the best solution for the community of India and China as a whole, or that it will have an appreciable effect upon the economic chaos which now reigns in all the countries of the Western capitalistic world.

DR DUNLOP: Dr. Kuczynski says that India and China might cease to be over-populated if conditions changed. So I should like again to emphasise the Malthusian principle that a high birth-rate is bound to cause food shortage and a high death-rate. Humanity is only going to have prolonged suffering if you ignore that. The use of fertilisers will only make another difficulty, because they cost money. Dr. Kuczynski added that 100 million fewer people in India would not raise the standard of life. Surely it is a fundamental principle of the economics of agriculture that the sparser a population is the greater are the returns per worker.

I should like to turn to a point which was raised yesterday, and bears on the standard of living which we are discussing to-day. Mr. Eguchi suggested that birth-control would not solve Japan's problem. I put it to him: I take it you mean that even if next year Japan's population were to stop increasing, there would still be a problem because the population is so dense; and he nodded his head in agreement. He holds that Japan needs more land and that there should be a redistribution of land. But that is not a reasonable proposition on the part of a country which has a high birth-rate. I feel that so long as a country has not adopted birth-control, it is not entitled to demand more land or a redistribution of land. I should like to know what the feeling of this Conference is on the question. I would submit that until a country's birth-rate is reduced to 20 per thousand or less, it is not entitled to demand any redistribution of land. If a people with a high birth-rate were to be given land by the League of Nations they would simply swarm further and create a new over-population problem. The process would go on until all the countries of the world were reduced to the lowest standard of living.

THE CHAIRMAN: Mrs. C. B. S. Hodson, Secretary of the International Federation of Eugenic Organisations, asks me to emphasise that she is speaking as a person, and not as a representative of her Federation.

MRS C. B. S. HODSON: I am not really competent to deal with economic questions at large or with the really intricate question of population. But I was very much struck by some of the points raised in the early speeches—namely, the stress laid on economic conditions. That of course is extremely important, but I want to suggest, from the much simpler and humbler standing of the biologist, that for birth-control the biological situation is the really important one. Dr. Kuczynski has rightly suggested to us the fact of which we often lose sight, that is that the birth-rate has had in the past very little real effect in any part of the world—the actual conception rate (per-

haps that is a truer way to put my point) has been really the maximum of which the fertility of that particular population was capable. Family limitation is not new. There was not a large increase of populations anywhere in the world till quite recently, except short, spasmodic ones, which were again quickly reduced; for, although the birth-rate everywhere was as high as it is now in quite a few of the remaining regions of the world which we are apt to characterise as backward, because they have this very high birth-rate, either infanticide or methods of abortion, or in some areas casually found methods of contraception or very early abortion (which takes the place of contraception), kept the population down. In addition to those, of course we had epidemics and the constant little wars which went on between one group and another. Now the small warfares have more or less ceased. Instead of these we have had a very great war. The way in which one family got rid of the members of another family by feuds all over the world is almost wiped out. Certainly in India, and I believe also in Japan, the major epidemics have been wiped out.

Famine again is nearly wiped out in India, and we might say that famine is wiped out over every part of the world where the social organisation of the moment admits of it. Of course you cannot prevent a famine by throwing in food into a chaotic condition where the food could not be distributed, but up till a short time ago, when certain areas of the world became socially chaotic, we were actually wiping out famine. This sudden increase of population may not be due to any increase in birth-rate, but simply due to the fact that death-rates have been very greatly reduced. Of course it is entirely due to the reduction of the death-rate that our own population practically quadrupled in just over a hundred years.

If you look at birth-rates the world over you will find they have responded in an extraordinary and remarkable degree to social or economic changes. I venture to think Europe is the only area for which we have sufficient data over a considerable period. Sir William Beveridge recently called attention to the fact that as legislation with regard to child labour has been introduced, the birth-rate has gone down. By birth-rate I do not mean the constant rate, but the number of children in the average family of the population. In other words, the moment that children throughout Europe became not an economic asset to the family but an economic burden up to twelve or fourteen years, then the number of children in the population immediately dropped. The point I want to make is that you have evidently some very sensitive connection between conditions and numbers in families.

I want to make one other point, that is that a State cannot by decree raise or lower its birth-rate. You see attempts at different times to do it and they always fail. It is no use to say we will give so much money for every third or fourth or fifth child in the hope of raising the number in the family, it makes no difference. The intimate question of parenthood depends on two factors, and I would regard them both as biological: first, the innate fecundity of your stocks; and secondly, the sociological outlook of the individual couples concerned. However much you offer rewards for large families or penalties against small families, it is the desire of the husband and wife for children or the dread of having more than a certain number of children which is really going to govern the situation. The biological facts are really the dominant facts in population problems. Economic and social conditions will have a very great effect, but your population may rise or fall under any type of economic or social conditions. The political situation may be the same in two countries, and in one may tend to a reduction of the birth-rate and in another to an increase of the birth-rate.

But the vital biological point for us to recognise in regard to birth-control is this: in Western Europe it has been the improvement in life conditions, the improvement in hygiene, and a humanitarian sense of the value of individual life and of the desirability of reducing all possible suffering. Those were ideals which came in in Western Europe without any idea of the population being affected at all, and they tended to such a tremendous survival rate, particularly in infant life, that it has meant with a lower birth-rate a great population increase. The interesting point is that we might say the world desires to see these hygienic improvements in the humanitarian sense operative the world over. I venture to suggest it is actually that point of view which has led to the enormous population increase recently in India. We have heard a very terrible description, to our thinking, of conditions in India to-day, though that probably compares very favourably with the conditions of the Indian population a hundred or two hundred years ago. Everywhere in the world Western nations are pre-eminent in the most intimate form of hygienic and humanitarian interference in the population problem in public welfare work.

In England we know to our cost what mere humanitarianism not sufficiently far-seeing has done. It has meant that we have lowered our infant mortality rate without any consideration of the other side of the picture, natural selection, and we have an enormous number of children saved as infants which we should have rejoiced to see saved, but that they are children with poor constitutions who are doomed to a life of considerable suffering themselves and to be a

burden to the community so that their survival simply depresses the conditions of life for the community, and what is far more important, holds up improvement. Therefore, many of us hope for the great alliance between birth-control and a true eugenic outlook. We desire to look after infant welfare because it is one of the things that affects the population problem, but where we enable a woman to look after her children, we should also take that fundamental step of teaching her how she can say how many children she can look after properly, and we should also give to the community that sense of biological background, of the necessity for good stock; wherever that is found in any section of the community there will be a steady diminution of stocks which are either mentally or physically hereditarily unsound.

It has been said that it is impossible to introduce birth-control into the Indian agricultural population living under very difficult conditions and in ignorance. That I am quite sure is not true, because we are short-sighted if we only refer to forms of birth-control which are current in our own country and which are rather complicated. Only four years ago I happened to meet two Indian Medical Officers of Health at a Health Conference. They both spoke to me about problems of registration in their own area, where they had been struck to find certain villages not giving the normal birth-rate or the average population increase. They found in these two areas two very crude, very primitive, old-time methods of controlling birth being used by the women; one was simply a method of birth-control, the other was a method of very early abortion, even before the woman knew whether or not she had become pregnant. That convinced me, as experience here and there in Europe has convinced me, that a very simple method taught to the women can and will go forward, because they will teach each other if the method is simple enough, and if it is sufficiently successful for them to feel that they are not just making an experiment which may not have the results they desire.

DR DUNLOP: I believe one speaker said it was the Malthusian doctrine that two hands come with every mouth. That is not the Malthusian doctrine, that is what the anti-Malthusian was pleased to tell us.

MR GIRI [India]: I do not know whether Mr. Krishna Menon is going to deal with the points which the previous speaker made. She made a few statements which, whether consistent with biology or not, were inconsistent with facts. She spoke of the practical removal of famine and epidemics from India. When about 70 per cent. of the

population are always starving, their powers of resistance are such that no amount of sermons and lessons will ever wipe out epidemics, and famines naturally occur because the country does not produce enough food, and what is produced usually goes out of the country. To compare the present state of India with what it was two hundred years ago is again something for which no basis could be very well found.

DR P. K. SEN [*China*]: There are one or two points that emerge from the discussion which I should like to deal with. The first is, why inevitably when we begin to talk about questions of population and birth-control in India does there arise the question as to whether the means of subsistence available to the people can be increased or not? Also, why is it that directly we come to the question of improvements in hygiene and sanitation, things that are absolutely essential, we have again to turn to the question of economics? Very often the discussion, instead of being on birth-control, is diverted to politics, because improvements of hygiene and sanitation are so greatly neglected in this country. I would not wish to lay the fault at this or that door, but everyone of us here should realise that the fault lies somewhere. We cannot get good sanitation and hygiene at the present moment. They are transferred subjects under the present system. It is well known that enough money cannot be got from the finance department to look after these things. If we are going to talk about facilities for birth-control in India and the provision of proper sanitation and hygiene also, we have to realise that sufficient funds must first be made available for these purposes.

The second question is education—I do not specify up to what standard—but general education for the purpose of enabling every citizen to understand his domestic and civic duties properly. Such education is absolutely essential. There again we are trenching somewhat upon the political situation, because we have no money for education at all. Very little is available when one has regard to the immense need and also to the immense population of India. At the present day the ministers in charge of education sit with their arms folded and say: "What can we do, there is not money enough for education and therefore education must take care of itself." Birth-control is not only for educated and enlightened women, but if birth-control is really to gain ground in India some education as well as propaganda must be carried out.

The third point for the consideration of the Conference is this: that the propaganda necessary, apart from the question of the education, involves very elaborate machinery in India. It is not for the

purpose of throwing cold water on the scheme I say this. I say this because I am an advocate of birth-control, but at the same time it is proper that we should realise the difficulties in our way. The immense number of villages that there are in India and the inaccessibility of those villages, the difficulty in the matter of any news travelling to those villages, the difficulty of transport, all these must be considered. The danger of various crude methods of birth-control must also be realised because we have had cases in the courts which showed that attempts of that kind had resulted in deaths. I have in my own experience come across many such cases of attempts at abortion which have resulted in death.

If proper methods of birth-control are to be placed before the people they must be placed by means of very elaborate machinery. It means a tremendous fund and enormous organisation of energy and labour. I do not say that it would not be worth the trouble, it certainly would, but at the same time I think we ought all to realise the magnitude of the task, and therefore when we speak about birth-control in India—I am only speaking of my own country because I am quite familiar with the conditions—we have to think of the great caution that has to be exercised, and the great need for funds, and the tremendous amount of work to be done. An army of workers is necessary, intelligent, ardent, sincere workers, who will take up this cause and work at it in a manner which will benefit the people.

MRS LASKI: I have been sitting all the morning watching the map and I see the part of the map which is painted white, that is Russia. Russia has not been mentioned this morning. I feel all that has been said was true of Russia before the war. Most of us know the enormous strides that have been made under the soviet system for the emancipation of women, particularly in relation to poverty and distress which cursed Russia before the War. Before the War we used to say the death-rate was highest in Russia, China and India. Now we have been left with India and China, simply because the people of Russia have decided for themselves that production for use rather than for profit was more important to their men and women and their people generally than anything else.

In India, too, the women are beginning to be emancipated in a small way. We feel the first step to be taken after they gain their emancipation is that they should be able to choose the size of family they wish to have. We do feel that this is the moment when birth-control should be put on a firm basis in India simply because women have come out of *purdah* and begun to understand what emancipation means. Now is the time to press forward with our propaganda

and not allow them to go back into squalor and famine. They will desire better conditions for themselves and that the standard of life for the children should be improved. I feel we do not realise sufficiently in Europe that women in India have faced this problem for themselves. Nor is the movement merely at the beginning. They have made rapid strides in the last five years even in birth-control. We in this country ought to help them to the best of our ability, as well as show them that we are in sympathy with them.

I know nothing about population, but I do know the health conditions of the women in the East. It is through these that we have the high maternal and infant mortality and morbidity; and it is only by teaching the women proper methods of birth-control and showing them the danger of abortion, that we shall really help them, and make the women of India realise that we are standing behind them in their efforts to raise the standard of life in their country.

MRS DANTRA: I stand as an Indian woman emancipated for very many years, but I have lived many years of my life in Burma and therefore I am more in touch with the lives and conditions of women in Burma than I am with the women of India, which is, after all, my own country. We find women in the different villages feel the same; the underlying principles of life are the same for all women all over the world. I have been a worker in maternity homes and in child welfare for the last twenty years—intimate with the women of Burma who come to me with all their burdens and troubles. I stand with these women of the masses, the poorer classes, as one of them. Therefore I can feel their problems.

It is in the power of the trained nurses who go out to teach and look after child welfare and maternity homes to do a very great work. These nurses are trained in hygiene and nursing, but birth-control should be introduced into their curriculum. We, as outside workers and merely as visitors, cannot actually take it upon ourselves to teach the women what ought to be taught in a concrete way by the trained nurses. The nurses who go into the agricultural districts and villages should be able to give this teaching about the methods of birth-control.

Birth-control means that better children will be born—that is, children with a better chance. This knowledge is already available to those in the higher ranks of life; but what is known of it in the poorer ranks is so little or so misleading that it often does more harm than good to those who have it. It must be taught in the right way. Something might perhaps be done by the Government by in-

roducing it into the training of nurses who are to be sent out to India and Burma.

MISS COLWILL: May I ask what constructive policy, if any, is going to evolve from this Conference? We have heard a great deal to-day about money being required. Would any of the experts here to-day tell us what they hope to do?

MRS HOW-MARTYN: Professor Laski has asked me briefly to reply to that. We mean to send out as quickly as we can an organiser to India and later to China to consult with the workers on the spot as to the actual plan and details. Meanwhile there is a scheme being considered and we had asked the Chairman to refer to it. It is to make available in London and in New York, and perhaps other places, centres where all Oriental medical students and nurses may obtain training in contraceptive technique. That has already been begun in the birth-control centres at Walworth and Kensington. We are going to appeal to you who sympathise with this work to contribute to this scheme. The whole of the contribution you give, without any deduction whatever for overhead charges or even for postage, will be used for training oriental medical students and nurses.

Those are two practical things. We had hoped definitely next year to have a conference in India. Mr. Mehta, of the Indian Civil Service, suggested that as India was such a large country it might be helpful if we appealed to two organisations—the Indian Women's Conference and the Indian Medical Association—to grant one or two days at the end of their annual conferences for the consideration of the subject: the Indian Medical Association to consider contraceptive technique and the Women's Conference the sociological and the mother's side. Both organisations have replied favourably. Probably that is a third practical way.

PROFESSOR GUPTA [*India*]: When we are thinking of practical measures which might be adopted to propagate and to spread knowledge of birth-control, may I suggest that this Conference should try to prevail on the Indian Government to supply literature on contraceptive appliances to the post offices, which they might supply to the Indian people in the same way as they supply quinine.

I quite agree with previous speakers that birth-control is not the only way in which we can limit our numbers, but I feel that the prevention of unlimited births is just as important in India to-day as probably was the prevention of *suttee* many years ago. If we are to

reduce our birth-rate and prolong the average length of life, we must spread knowledge of contraceptive methods.

The standard of living in India is very low and probably the members of this Conference cannot get sufficient knowledge of this except from the various figures. When children are born in the villages they are often put into rags, there are no clothes available, and for the first three or four years of their lives they have no garments to cover their bodies. Of course we feel that it is necessary to make economic improvements as well. It has been suggested that money is required, but where is that money to come from? You have been told that the average income per head is £3 a year. Yet a great deal is spent on the army and navy, so you see the question has a political side as well.

It is worth realising that we often do not effectively use fertilisers to increase agricultural production for the reason that most of the fertilisers are burned to cook our food. Cow dung is burnt in our homes because we cannot get enough fuel in India.

I would suggest that what we need is political emancipation, because if we had our own government our own people probably would be able to carry out the reforms discussed at this Conference much more quickly than we can expect to do under the present Government.

MRS WALSH [*South Africa*]: May I be permitted to ask the Chairman what measure of recognition is given to the principles of birth-control in the study of economics? I know there are many who will support me in my contention that if due recognition were given to these principles in economic studies, many minds would be influenced that would be indifferent to the biological approach. I would like to know whether in India the question has been approached from the biological as well as the economic angle.

THE CHAIRMAN: I think I ought to make two answers to that question. The first is I am not an economist, but a political scientist; it is not my business, therefore, to influence the teaching of economics. Secondly, I can only speak for my own Institution* because my knowledge of what is taught in others is necessarily small. But taking the University that I have the honour to serve, I know nobody teaching there, whether in my own college or any other, who is not (whether in lectures or outside of lectures) an ardent advocate of birth-control. In dealing with bodies of students who come with

* The London School of Economics and Political Science.

demands for speakers to discuss in their own societies matters of this kind, I, on occasion, have been tempted to feel that students rarely discuss anything but birth-control.

MRS ARNOLD BROWN: Could it be made quite clear whether this qualified nurse to be sent to India has personal experience of Indian conditions? It seems to me it is absolutely essential that this qualified person should know the actual living conditions in India, otherwise her work would be wasted.

MRS HOW-MARTYN: I do not know for certain exactly what nurse is going to be sent, but the real reply is this: A fully qualified and trained nurse will be sent, but when she reaches India she will only work in connection with Indian women doctors.

MME ANDRE RIEDER: After these conferences in different countries I find it takes some time to recover from statistics, and have now rendered myself armour proof against them. I ask, how far do human activities and human conduct influence what happens? Now that woman is enfranchised, is a citizen, she can no longer be left to mere statistics, she must also be consulted in this matter, she must make her desires felt as to whether she wishes to be a mother. Woman needs education but she must also have the man to stand by her. Women in enfranchised countries can help on the lines suggested by the Eugenics Society.

MRS HODSON: Would it be in order to suggest that a practical issue would emerge from this Conference if we passed a resolution urging the teaching of birth-control to the doctors and nurses engaged in welfare work for women and children? That could perhaps be sent from this Conference to the India Office. It might have a little effect if such a resolution went to all missionary societies who have medical missions. I think it might make them consider whether it was not time to include birth-control teaching. We might say: THAT this Conference urges the inclusion of birth-control instruction in all medical and welfare work, and hopes doctors and nurses will be trained with a view to teaching those amongst whom they work.

THE CHAIRMAN: There are three things I should like to say. The first is by way of deprecation. I know nothing more dangerous in the discussion of problems of this character than an attempt on the part of anyone to postulate optimum populations. I hope I have the sympathy of Dr. Kuczynski in saying that no concept more

fantastic than this has ever been put forward by economists claiming to be regarded seriously. In recent discussions it has gone the way of most of the other fundamental laws of economics of which we once heard a good deal. There is an optimum population in Great Britain granted its resources and possibilities as at this date—November 24th, 1933—but the optimum population of Great Britain of that date will not be the optimum population of a week from now. In so far as we make endeavours in terms of statistical averages to attain fixities of that character, we omit altogether the fundamental elements of the problem. A little earlier Dr. Dunlop spoke of a birth-rate beyond which he hoped India or any other country would never go; but a birth-rate going beyond a certain figure is an interesting static conception. In a dynamic society, and particularly a society as pre-eminently dynamic as the society to which we belong, I hope that considerations of that character will not be introduced if we would keep the discussion on a scientific basis.

The second thing I want to say refers to India predominantly, but I think Professor Chen will agree that it refers to China and Japan in hardly a less degree. Do let us be clear that whatever birth-control can do for India it is confined to the hygienic side on the one hand, and to the individual well-being of Indians upon the other. The essential Indian problem is not a problem of birth-control, it is a problem of the condition of the people. That has been the fundamental Indian problem through any period within historical knowledge. If you want seriously to reduce the Indian birth-rate, on historic experience there is only one way in which you can seriously strive to do so, and that is by raising the standard of living. If you do raise the standard of living, particularly for the agricultural population, experience shows clearly that the decrease in the birth-rate will follow as an automatic function of that increase.

We have after all a very considerable body of evidence on this head, and the evidence to which particularly I wish to draw your attention concerns the history of the trade unions in this country. If you take the statistics that have been compiled of the non-trade union and the trade union parts of the population between 1830 and 1890, you will see how the higher the wage received, the better organised the type of worker, the lower the birth-rate, as against the continuance among casual labourers and unorganised workers of a high birth-rate and the high death-rate that this involves. It is clear that English experience is no different from the experience of America, or of Germany, or of France. You have to regard whatever you do by way of birth-control in India essentially as a release

for individuals, who will be able by reason of that release to devote their time and energy to insisting upon filling the vacuum in other people's lives, but not to regard it as a serious contribution to the solution of the much graver Indian questions of which the present population problem is merely a symptom and by no means the cause.

I should like to make my third point with an emphasis greater than attaches to either of the others. I am terrified when I hear people in a serious discussion talk about the quality of the population with certitude, and particularly talk of the quality of the population in terms of superior and inferior classes, as though the biological knowledge we have were sufficient to enable us to make discriminations of that kind. I am well able to understand the negative side of eugenics; the contribution that it is able to make to problems that confront us is real—that is—that it is undesirable to breed from stocks in which there is hereditary haemophilid, or lobster-claw, or hereditary feeble-mindedness. That I well understand; but until we know very considerably more than we do of the *positive* side of this picture, do let us retain a healthy scepticism.

When I hear people talking about breeding from fit stocks, I want a much more careful definition of fitness than any that I have seen in the literature that emphasises this point of view. Fitness for what? In a world of burglars, which is not unlike the world in which economically we are living, the fittest to survive are those best fitted for burglary. I do want to remind you that many of those who now take an essential part in the leadership of the British people would fifty years ago, and perhaps even forty years ago, have been referred to as the inferior stocks of the country. It seems to me a very dangerous thing in a civilisation as closed and controlled as this civilisation is by its peculiar economic forms to confound the anomalies that have arrived with anomalies that may be possible under different organisations. I have no apologies to make for the humanitarianism of the 19th century, and I have no reason to suppose that in any way that humanitarianism was misdirected. Do let me say that that humanitarianism properly analysed was not so very humanitarian after all. Anyone who has gone the rounds of English conditions, anyone who is as dissatisfied as I am with the housing conditions of Great Britain, with the medical services which are at the disposal of its people, who is as dissatisfied as I am with the educational system, who realises what immense things are still to be done by way of reasonable factory legislation, is not going to be so emphatic about that humanitarianism as seemingly it is easy to be.

When the environment has been made satisfactory I shall be content to discuss further techniques of control, but until we know the

potentialities of that environment are we justified with the knowledge that we have in going forward along more positive lines?

One final thing I may say. Speaking in the presence of Indians, and particularly of Indians who have got access to their Government, and in the presence of a Chinese professor—and knowing that the habit of Chinese students when they are dissatisfied with their professors is to go on strike and as a rule get rid of the professor—I think that the power in the hands of Indians and Chinese for the purposes that we have been discussing this morning is much greater than they know.

In the year 1906 we had been discussing women's suffrage in this country for close on forty years; hardly anybody knew anything about it, and Ministers regarded it as one of those hardy annuals that might be brought up in the House of Commons on the understanding that no one had any obligation except to be humorous about it. Then, at a meeting at which I had the privilege to be present, Miss Annie Kenney and Miss Christabel Pankhurst raised a flag of revolt, and from 1906 to 1914 the lives of Ministers in this country were rendered unlivable by a small band of women who made this country understand that they really meant what they said, that they were really going to get the thing that they demanded. If Indian women really believe in the emancipation of Indian women, if Chinese women really believe in the emancipation of Chinese women, then they have got to adopt and adapt the tactics of suffragettes in this country. They will then be taken seriously. Once this happens, let us assure them with some knowledge of the ways of governments, that government will find money for the purposes that they have in view.

I have had to spend a great deal of time in these last three years in studying the finances of the Indian Government, and particularly that very attractive subject, the finances of the Indian princes. When I know that one particular Indian prince in the year 1931-2 spent on the education of the citizens of his State one-eighth of that sum that he spent on the marriage of his son, I think there are still possibilities in India if the women will become insistent about discovering what they are. If they become active in the next year when you hold this Conference in India, the conditions will be set for bringing it to a successful conclusion.

Third Session

SATURDAY AFTERNOON, 25TH NOVEMBER, 1933

Subject

“THE PRACTICAL PROBLEM OF CONTRACEPTION IN
THE EAST”

Chairman

LORD HORDER

[*President of the Conference*]

THE CHAIRMAN: I drew your attention to the fact yesterday that the initial session dealt with the population question in the East; the second session dealt with the economic situation, both important prior questions, or questions which at any rate have an important bearing upon the question of contraception; now we come down to the more practical issue of the Conference—namely, the practical problem of contraception.

We are fortunate in having with us this afternoon men and women who have actually been in the East and have, therefore, first-hand information to give us. I was just a little anxious lest this afternoon we should find ourselves engaged in academic questions, that is to say, in discussing in general terms methods of contraception which had advantages over others, without regard to the particular missionary element that I referred to, namely, the spread of practical information in Asia. It does not of course follow that methods of contraception which are applicable and perhaps are the survival of the fittest with us, are necessarily the methods which, at least in the first instance, are likely to be of service in Asia. I think that difficulty will be solved as I see that we have among us medical men and women, and I think one or two lay men and lay women, from India, China, Japan and Ceylon, so that we shall be actually dealing with the practical question of contraception as it applies to those countries.

I am going to ask Dr. Helena Wright to open the discussion. Dr. Helena Wright is in rather a unique position in two respects to do this. She has had considerable experience over here as Medical Officer to the Kensington Birth-Control Clinic, but she has the advantage also of having been in China and having studied the problem there. As Dr. Helena Wright's personal experience refers particularly to China, I shall ask the representatives from China to follow her, then the representatives from India, and then from Japan and Ceylon.

DR HELENA WRIGHT: My first reason for talking is, as Lord Horder has indicated, that I had the privilege with my husband of working in China for five years in the province of Shantung. I started a department of gynaecology in a big university hospital, so that I was in contact with the very kind of women we are hoping to be able to reach and had an opportunity of seeing how this problem affects them. From that point of view my remarks can be practical.

In thinking about the enormous field we have before us in this Conference, the most we can hope to do at a preliminary meeting is to face the elements of the problem, and make up our minds that whatever happens our work will not be hole and corner, and that we shall have the thing so planned that it can grow to any necessary extent. For that reason I am not proposing to enter into details on any one point. For the rest I want to make as big a sketch as I can of the problem as it concerns China, which means 400 million people.

The first thing I should like to say applies to all the three big countries of the East—that is that any movement should be indigenous to that country and thus belong naturally to the conditions which it is intended to help. That does not mean that outside aid—advisory and financial—will not perhaps be necessary; but I think the control of the movement ought to be in the country in which the work is taking place.

Having laid that down as the widest possible outside programme, I shall turn to the problem as it concerns China. It seems to have five fundamental elements.

First, you have the people who have to be taught. I should like to emphasize the word “taught,” because contraception is rather technical. It is not like other kinds of medical help that you can give, such as a bottle of medicine that has to be taken so many times a day for a certain time. You have to change the lives of the patients. You have to teach them a piece of technique and to teach it to them so thoroughly and definitely that they will realise that it is to be an essential part of the rest of their reproductive life. It is a job that has in itself more elements than most other kinds of medical welfare work.

The second element of the problem is the doctors and nurses who are to do the teaching, and who obviously are equally important. The third element is the methods that are to be used. The fourth is the climate of the country, for this must be taken into account in considering the materials from which the contraceptives can suitably be made. The fifth element is the sources of help.

When I speak of "the people" I am referring only to the Chinese people. There are thousands of foreigners who have chosen to live in China, but I do not see this problem as affecting them at all. They are mostly gathered together in national communities; they have their own doctors and they should be able to look after themselves.

The Chinese women can be divided up in the broadest possible manner in two ways; a) a small minority who can afford to pay money for appliances; and b) those who at the present moment and in the visible future can afford to pay nothing. The appalling poverty that exists among well over fifty per cent. of the women cannot be too strongly emphasized. A fundamental element of the problem is that a large part of the help must be given gratis, which immediately saddles the whole thing with a heavy financial burden. Unless that fact is realised we shall never do more than scratch the surface of the problem.

The mass of the women can be divided again into, first, educated women, who have had some contact with outside ways and are very much easier to teach; and, secondly, women who have had as yet no contact with the outside world, cannot read, and have no education in our sense at all. The latter class make a teaching problem that will take a lot of facing.

Those two sets of individuals go together. The women who can afford to pay are mostly educated and there is a geographical link between the two. These women are mostly found in the large towns, so that establishing clinics in the large towns is obviously the best means of getting at them. The others, those who cannot afford to pay and who are not educated are mostly found in the tens of thousands of villages scattered up and down the country. They constitute an enormous problem, to get round which would need a great deal of organising.

With regard to the second element—the doctors and nurses—I simply state my own personal opinion. I think that far the best persons to deal with the Chinese are Chinese women. In China there is really a barrier of natural prejudice against going to a man of any sort. A Chinese man, of course, is better suited to the purpose than any other. One of my reasons for going to China is that in my hospital, though it had been in the town for a long time and had an excellent reputation, it was found impossible to start any purely women's work with a man at the head. In thinking of our personnel we should aim at providing as many Chinese women as possible. The next best thing would be to have Chinese men doctors and women nurses. I do not know how it works out in India,

but in ordinary hospital work in China the system in 1927 was men nurses for men patients and women nurses for women. It works very well in most ways, but in this work it seems to me that men nurses have no place at all. We must have women nurses, though we might be able to do with some men doctors. Third in the list of desirable possibilities are foreigners of both sexes, women being far better for the purpose than men, although some foreign men doctors have managed to have enough imagination and kindness to make themselves almost unobjectionable to Chinese women.

What are you going to do with the doctors and nurses when you have got them? The first necessity is that somewhere in the country there must be a teaching centre. This work must spread outwards from a centre, probably a number of centres; indeed, before there exists in the country a teaching centre, ably supported and in running order, the work has little hope of progressing at all. Here I have a piece of good news for you. Dr. Ling, one of the assistants of Dr. Maxwell, who is the gynæcologist at Peking in the biggest foreign hospital there, has already been over to London and has been to our birth-control clinic at North Kensington where I have been able to teach her. She is a splendid person, very keen. I took up with her this question, and she said she was prepared to be the first teacher and would do her best to get together a centre in Peking, with the idea that she would teach the Chinese from all over China.

The second necessity is for some influential body of people to approach the staffs of all the teaching hospitals in China. I think it would be good spade work if the staffs of these hospitals—and hospital staffs anywhere in the world are pretty forward-looking—could be approached in a well-thought-out letter to say that this project is on the horizon, and ask if they are prepared to take steps to teach their own fourth or fifth year students, or post-graduate internes the technique of contraception. If they reply that they are, they could be put in touch with Dr. Ling in Peking.

The third necessity is to contribute a practical article, sound and focussed to the point, in the Journal published from time to time by the China Medical Society. This reaches every medical practitioner in China, both Chinese and foreign; and would be an excellent medium for bringing the subject to their attention.

The fourth thing to do concerns us here in London. I do not know how many people realise that we have a large floating student Chinese population, some two to three hundred in residence all the time; a small proportion are doctors and medical students and there are always some of these. I think we should make it a practice

to approach the secretaries of the students' societies of the Universities of Great Britain and Ireland, and China House, which is the Chinese centre, asking to be put in touch with all doctors and medical students from the Orient as they turn up, so that their time over here should at least not be wasted from this point of view. It could be put up to them that we are only too willing to teach them, so that we can make sure that nobody goes back without at least knowing what facilities there are in this country for learning this particular subject.

What all this boils down to is this: what we should do in the next few years is to air the whole subject in as many technical and professional pamphlets as possible in China, so that we can create an atmosphere in which a birth-control movement can grow naturally.

My third element is the practical one, the methods to be used. Here again I should like to lay down a fundamental for all the movements in the Far East—that is, that no effort should be made to import material. All the material used should be manufactured in the country where it is going to be used. The minute you begin to import you put such a heavy burden of price on that you are adding unnecessary weight. When you consider that the chief material used is rubber and that rubber's natural habitat is far nearer China than England, it seems ridiculous to think of bringing it over to England, moulding it and sending it back to the Far East. We should turn our attention first of all to the factories already existing in the countries.

There is no reason why a factory started for one thing (say, for making rubber soles) should not be diverted into making rubber pessaries. I think we ought to have somebody whose job it is to look into the financial side of this question, to see that the movement is started soundly and that the prices are controlled from the beginning. Do not let us have over again the commercial exploitation that we have had in this country. We ought to be strong enough between us to prevent that happening. As far as I can see the thing to do is to get in first, get in quickly and supply so cheaply that the other people will not have a chance of competing. Surely we have enough people in the business world to put through a business proposition like that. I have here specimens of the types of caps that are used. I know nothing whatever about machinery but I cannot imagine any of these being difficult to make. When one thinks of the complicated rubber toys that are sold very cheaply, I cannot think that making a little object like that would offer an insuperable difficulty.

The only method that I think could be put immediately into practice is to use cotton waste. In our Chinese city you could get a large piece for a few pence. It is fairly clean because it goes through very few processes. Balls can be made of this material, tied round the middle with a loop of thread and then soaked in a solution of half vinegar and half water. That is chosen judiciously because every Chinese household contains vinegar. These materials are very cheap and easy to get. The ball of cotton waste—this is where the technique comes in—must be so adjusted that its diameter is roughly the same as the diameter of the upper part of the vagina, so that when it is pushed in it will stay there. It has the further advantage that if it is burnt after use (as it should be) there is no risk of infection. You have here a method which is rough, which has disadvantages, but which is more or less fool-proof and has proved to be effective.

When you come to the question of chemicals, you are again up against a fundamental difficulty. That is where the climate matters, because chemicals are roughly to be divided into heat-solubles and water-solubles. The heat-solubles, of which an enormous number are used in this country, are obviously useless in any climate that approaches blood heat. A patient of mine has an ingenious way of getting over this difficulty; she keeps her "solubles" in a wide-necked thermos flask with ice in it. The water-soluble contraceptives are unfortunately not as convenient as the heat-soluble ones, so that a great deal of work will have to be done to get over that difficulty. Again you are up against the question of importing, but this is not an insuperable obstacle, because there are already in China branches of big Western pharmaceutical organizations which could easily be approached with reference to making contraceptives on the spot.

As far as methods go, I think that is as much as can usefully be said at the moment. But I might perhaps be allowed to make one or two practical suggestions. In the first place, some one person should be deputed from this Conference or from the Birth Control International Information Centre whose duty it would be to look into the manufacture of contraceptive devices. He should submit a report on such practical matters as what sort of machinery is required, what sort of rubber, and at what prices. Such a report might be taken to Chinese manufacturers who are already working with rubber on a large scale. If there is not a factory already in being, someone over here might be approached with the idea of starting a branch in the Far East, but I foresee great difficulties there.

Having decided on one or other of these plans, a body of people

could be got together who might approach the Chinese Government directly, saying in effect—"Here is a complete scheme for the good of your country, such and such a thing might be done, will you from the beginning give it financial support?" I have reason to think such an idea would be welcomed by those in authority as long as it was made quite clear that the control would remain in Chinese hands. In addition to that I do not see why wealthy people in the West should not be approached to support this project as a purely financial proposition, not as a charity at all. We must start on a sound foundation. The scheme must support itself, it must not rely on subsidies of any sort from the outset; it must be sound all the way through.

One small point about the difficulty of getting rubber. Many people think rubber is not useful in hot climates because it deteriorates. That is not necessarily true. I have hundreds of patients living in all climates of the world, and we have had to think out ways to meet this difficulty. All that is needed is a supply of tins. Tins can be made easily to any size and any shape, but they must be air-tight. I have proved that one piece of rubber will keep for two years in any part of the world, so that you have one of your difficulties solved from the beginning. Both rubber and tins are very cheap as raw material.

We may now consider the sources of help. I have tried to collect as many ideas as I could, so that this meeting should be practical, and have got some names I should like to pass on of interested people.

First, there is Dr. Chang Po Lin, a very famous teacher, head of a technical college in Tientsin, who has a great influence. He was over here some years ago and told me, greatly to my surprise, that he had thought this question out in his own mind and had come to the conclusion that it was absolutely necessary to have a nationwide birth-control policy in China and that he would help. The second person, Dr. Maxwell, is the Head Gynæcologist of the American Hospital in Peking. Last year he sent me his first assistant asking me to see that she went back fully trained. A clinic was actually started by Mr. C. H. Lowe in Shanghai, but unfortunately it was completely destroyed in the bombardment. I have his name and address and particulars can be got as to how far the clinic was successful. With him is associated another Chinese gentleman, a Mr. Pan. Among the foreigners in China who could help are Dr. Eileen Smyly, a colleague of mine in Tsinan who might be prepared to start another teaching centre; and Dr. Elsie Towers of Shanghai, who has recently been to our clinic. Another supporter is

Dr. Wu Lien Teh, who is the Head of the Government Health Services in Shanghai.

These preliminary remarks are obviously only an outline and I should like to stop there so as to hear other views.

MRS LIU CHIEH [*China*]: I am not speaking from the medical or from the economic or from the sociological point of view, but merely as a lay woman discussing with you the most effective and most humane solution for this population problem. If I were to tackle the problem from a strictly nationalistic point of view I might easily employ statistics to argue that China is not over-populated. According to the 1926 Post Office estimates the density for the whole country is not more than 254 per square mile. It may be noted by way of comparison that the figure for Italy in 1928 was 343.9 per square mile; for France in 1926 it was 191; for Denmark in 1925, 207; and for Japan it is 407. Therefore the figure for China is not very high even for a predominantly agricultural country. I could also point out to you that a European going to China is inclined to get the idea that China is over-populated because he generally visits the coastal provinces which are the most densely populated regions. In China the population is not evenly distributed, it is concentrated in five regions: first, the coastal provinces; second, the Yellow River basin; third, the Yangtze River basin; fourth, the Central Provinces; and fifth, the province of Szechwan. These five regions form only fifteen per cent. of the land surface, but they contain 75 per cent. of the total population. A redistribution of the population would ease the situation a great deal. The very moving description we heard last night of the working conditions in Shanghai is true, but it is true only of Shanghai and a few other highly industrialised cities. I do not deny that the working conditions in Shanghai and other big cities are appalling, but they are no worse than the conditions in the West during the industrial revolution, and by and by we hope they will be improved.

I am not speaking from a nationalistic point of view. I believe in a Conference like this we should treat the problem as a scientific problem, and an international problem, each nation doing its share to solve the problem, not only to its own satisfaction, but to the satisfaction of the others.

I propose to summarise for you a report by the Peiping Committee on Maternal Health to illustrate what interest the Chinese people have taken in the birth-control movement and what beginnings have been made in that direction. The Committee was estab-

lished in Peiping in 1930 under the leadership of a group of Chinese professors and Mr. Maxwell. The Committee was established primarily for the dissemination of birth-control information and was set up because a group of people in Peiping believed that each year in China there is an unnecessary number of general deaths, approximately between four and eight millions, and an unnecessary number of infant deaths of somewhere about two millions. These people were convinced that for the improvement of the situation, and to lessen human suffering and raise the standard of living, birth-control would prove one of the most effective remedies.

Under the auspices of this Committee a clinic was opened, and an analysis of the cases treated in this clinic is very interesting from the social point of view. The most notable fact is that a large majority of the cases came from the middle and well-to-do classes. Only three out of one hundred husbands were reported to be illiterate, while fifty-five were stated to have had a college education. Among 98 wives 21 had received no education; 27 had had a middle school education, and 16 had been to college. As to occupation, 29 per cent. of the husbands were in educational work; 28 per cent. in Government service; two per cent. were labourers, and 5 per cent. were unemployed.

This analysis shows that it is the well-to-do classes that are willing to practise contraception. It is precisely the labouring and the peasant group that are not able to provide for their children who should limit the size of their families. It is evident that to enable the larger part of the population to benefit from contraception it is most necessary to conduct an extensive campaign to impart birth-control knowledge, and also to break down family ethics and superstitions against such practices. It is necessary to establish as many clinics and teaching centres as possible and to introduce such methods as are sufficiently simple and economical for the labouring and peasant classes.

To conclude, I wish to say that from the humane point of view, for the welfare of the people and also for the mothers, it is necessary to control the rate of multiplication. It is estimated that about half of the children born in China among the poorer classes are unwanted, with the result that they are usually carelessly brought up, even if they live to grow up. This is an economic as well as a human waste, for it means the other children are frequently undernourished because there is not enough means of subsistence to go round. The mother is incapacitated through frequent child bearing and is unable to give the family proper care. The only way to re-

medy this condition is for the parents to have only those children whom they want and for whom they are able to provide.

Besides, with the improvement in sanitary conditions and the spread of medicine, the death rate in China is bound to be reduced. Unless the birth-rate is at the same time voluntarily controlled the population problem will become more acute in the visible future. Therefore, it is the opinion of many thinking people in China that birth-control will play a large part in the uplifting of the economic and social life of China, and will prevent many conflicts in the Far East and in the rest of the world.

DR P. W. LAMB [*China*]: I wish in the first place to thank this Conference and especially the Birth-Control International Centre for their invitation to attend this meeting and to listen to such an enlightening address from Dr. Helena Wright. She has not only given us her own vast personal experience, but also the knowledge gathered in Europe on the subject for perhaps a matter of half a century. As a Chinese speaker I count myself fortunate in following Mrs. Liu Chieh, my compatriot, who has given Chinese thoughts and views which I myself would have liked to do, but could not have expressed in such clear and eloquent language.

As Dr. Helena Wright explained there is in China a great deal of poverty. I remember reading that wonderful classic, "The Growth of the Soil," in which it was stated that after a day or two the mother of a newly-born child was up again and working. Things are not quite so bad as that in China, but they are bad enough. From the medical point of view we can only come to the conclusion that birth-control is not only necessary, but inevitable both from moral and economic standards.

From the Chinese point of view one difficulty has not been mentioned. We have a very ancient tradition in our country. In Europe the individual is the unit, in our country the family is the unit. An addition to the family is counted as one of the greatest blessings that the gods can confer on us. In the promotion of birth-control we are running counter to a very ancient tradition, and it will take a long time to break down that barrier. Happily, we have had a large number of prominent and influential men from my country, like our Minister in London, Dr. Wellington Koo, and many other officials who have already given their support to this movement, and as you have heard the movement has already been started in different centres in Peiping and Canton, and in other parts there are people working for birth-control. I do not doubt but that as time goes on the movement will gather momentum, and you in the

West and we in the East must go on together in this movement for the good of the future human race.

DR KATO [*Japan*]: From the point of view of social and human welfare Japan is one of the countries which most urgently need contraception. The population of the mainland of Japan was 59.7 million in 1925, and it increased to 64.4 million in 1930, namely 4.7 million increase during five years. If we include Korea, Formosa and Sakhalin the total exceeds 90 million. Dealing exclusively with the mainland in 1930, the density of population was 412 per square mile and births were 2.1 million, stillbirth 0.1 million, deaths 1.1 million, thus the increase was 914 thousand. When we convert these figures to the rates per 1,000 living, then the rate of birth was 32.4, stillbirth 1.8, death 18.2 and increase 13.2. While the maternal death-rate remains relatively low, 4.8 per 1,000 deaths, the mortality of infants under one year is very high—132 out of 1,000 births. These figures will indicate sufficiently clearly many vital problems which we are confronting.

Since Mrs. Margaret Sanger visited Japan in 1922 and started the campaign for contraception, it has progressed fairly quickly. There is, of course, obstinate opposition from various sources, even from medical men, but there are not such strong objections from the side of religion as in European countries. Generally speaking there is also the usual trouble that the practice is adopted most where it is least desirable, and vice versa.

At present a number of people of the rich and intelligent classes practise birth-control but some of them use it only for selfish ends. Many middle class people use methods for regulating the number of their children, mostly not for the health of the mother and children but from economic motives. However, it is extremely important for the poor, and it is just among them that it is not practised. Most of these poor people have little consideration for the future, and little sense of responsibility even for their own children. They produce as many children as Nature commands, which is one of the chief reasons why their social condition is becoming worse and worse. Many of them are living two or three families together in a small dirty room. This is a really grave situation from the point of view of racial quality as well as that of individual welfare. There are, of course, campaigns for slum clearance and children's welfare, but they are still in a primitive state. In these campaigns, I think, contraception can make a fundamental contribution, though it would be extremely difficult to teach these poor people how to use proper methods. Many of them are too unintelligent to follow even

simple instructions, or positively hate to take a little trouble to prevent conception, and thus leave the matter to Nature. Therefore, the method itself should be also as far as possible simple and cheap, even if it is not as effective as a more complicated method.

There are at present few clinics in the big towns of Japan, but some of them are situated in the better residential quarters. I think those clinics should move right into the centre of slum districts, and work hand in hand with health visitors for the welfare of these really suffering people.

One final word: the world is getting smaller with the progress of science. Suppose only some countries restrict their population and the rest go on as they do at present, the result will be far from desirable. This campaign must be international.

DR MENON [*India*]: I have been carefully listening to the speeches that have preceded me and perhaps might give you my experience. I have had a few years in the Indian Medical Service and have also practised in this country as a general practitioner for the last 13 or 14 years. I have had experience in both countries of how this problem works; but to get the truth of existing circumstances in India you will have to turn to other speakers.

Birth-control has been practised from time immemorial. Everybody has more or less practised birth-control except those who cannot have children. There are even those who tell you from religious reasons or from other reasons that they do not agree with birth-control who do practise it all the same. Even the most bigoted religious fanatic who opposes you on birth-control at times practises birth-control, although he likes to tell you it is not good for you to do so.

We are at present dealing with the practical side of the problem. What are the things that ought to be done to attain our objects? Dr. Helena Wright has stated the various things that might be attempted in China. Those things could be more or less adopted in all the tropical countries that we are considering at present. The general lines laid down by her are extremely sound, very practical, and she has really brought in the result of a great deal of experience. From my point of view the birth-control problem is associated with the general education and social condition of the people. It is absolutely no use going to people who have practically only one meal a day and saying to them, "Do that and do this." They will say, "First give me a meal, and we will think about birth-control afterwards." There are hundreds of problems in social and educational amelioration that have to be settled before anything like this will

be successful. That is my conviction. But while these things are being done by other agencies I quite agree that an organisation like this ought to be very ready to apply the match when the time is ripe. From that point of view a good deal of success can be achieved.

Here among the poor I come across quite a lot of attempts at birth-control. They say: "I am going to have another one; I have been given instructions but did not know what to do with them." I have had that happen over and over again. They have read instructions, but not applied them properly; they have neither the education nor the facilities to do so. The only method I have found infallible, according to my patients, is the use of the condom. That is the only practical method, the sheath used by the male. All these appliances have their place, but they have got to be applied properly; they are not safe, they are not fool-proof. The condom is a very simple article. I do not know why it should be priced so high, it ought to be extremely cheap to produce. Perhaps the time will come when Woolworths will sell these things! There are some leather condoms, they are very durable, but provided the rubber condom has been tested it is extremely successful, and need not be so expensive. I do not see why it should cost more than $\frac{1}{2}$ d. to produce in bulk.

My own view is that the social and educational amelioration of the people must come first to make them intelligent enough to use contraceptives properly. Then, when the ground is prepared, this organisation can step in and advocate more involved but better methods. I am sure it is doing a great service to humanity, and my own country requires the teaching of these methods as well as any other country.

DR AGNES SCOTT*: I am afraid I have not very much to contribute on this particular subject; 99 out of 100 women who consulted me in India about the size of their families consulted me because they did not have children. I do not think I can remember any case of a woman asking me to help her to restrict her family, except where there has been gross malformation or where there was very great difficulty in child-birth. Since I have been in England—a little over a year—I have tried to get up-to-date in this subject of birth-control and contraceptive methods, and have been to more than one of the clinics in London to see the methods that have been used. It seems to me that there are two great necessities before any contraceptive method is successful: one is the desire of the woman,

* Dr. Agnes Scott has been thirty years in India, fourteen years as a member of the Health Commission.

also of her husband, to limit the family, and such desire I have not yet found in India; secondly, the method used must be easy to learn, reliable, cheap and harmless to the women—that is to say, if the parents wish to augment their family they should still be able to. These are the conditions that seem to me have to be fulfilled to make any contraceptive method successful.

The application of birth-control knowledge to India is far too difficult for me to discuss. What Dr. Helena Wright says is extremely practical and might be applied to India equally with China—the climate is almost worse than that of India in the matter of heat. There is terrible fatalism among the women of India. One patient of mine in the hospital after the 19th pregnancy, when I suggested that she had had enough children and should I speak to her husband about it said, “Oh no, that would not do at all. It was God’s will that I should have them, and if it is God’s will that I should die, it is God’s will.” In India that is the answer to nearly everything.

One of the hoped for results of this Conference is that someone should be sent out to India to organise another conference in India. Provided that person is the right person and goes about it in the right way, I think propaganda on this subject is extremely necessary, but further than propaganda I would not go at present, because, as Dr. Helena Wright has said, this matter must come up in India itself and must be thought out and worked out by Indians and should be left entirely at first in the hands of medical women and people trained by them. I believe a great many kinds of appliances are sold in India, and the custom is for the husband to buy apparatus and teach his wife to use it. That sort of thing is to me repulsive and wrong. There are only about 400 women doctors in India and the population is 350 millions. Half of these you might consider are women. What are they among these millions? A beginning could be made and if the right persons are sent out, not with a view to starting clinics, but with a view to propaganda and teaching, I think good will come of it. I am afraid I have not been very enthusiastic, but that is my opinion.

THE CHAIRMAN: I do not think Dr. Agnes Scott need fear that a little less enthusiasm will be a bar to ultimate success. Sometimes movements get going a little too quickly for success. I am glad Dr. Helena Wright stressed the importance of proceeding slowly, and that Dr. Agnes Scott with her large experience of India and Indians and of the maternity question in general in India has underlined that caution. Dr. de Silva, who was to have spoken for

Ceylon, is detained in Berlin, and Mrs. Westbrook will deputise for him.

MRS WESTBROOK: One can talk a little more cheerfully about population in Ceylon because it is a country that can support a much larger population than it has. It is about the size of Ireland, very fertile, and every kind of plant can grow there. It can grow the fruits of temperate and of tropical countries; the only place where it is not beautiful is where the Europeans have planted tea. Its population is only $5\frac{1}{2}$ millions, but there is a reliable tradition that Ceylon at one time supported more than 40 millions of population. In the great civilisation of 2,000 years ago, and again in the great civilisation of 1,000 years ago, it was a very populous country. This is proved not only by the stories, but also by the remains of the wonderful irrigation systems right through Ceylon. The people of Ceylon had discovered very satisfactory methods of irrigation and of making a tropical country very fertile. I believe there are about 2,000 remains of these artificial lakes—in Cingalese they call them "warer" and in English we call them "tanks." At the present time it does not grow all its own food, although it could do so. It does not grow even all its own rice but has to import some from India, because a good deal of the labour is occupied in growing rubber and tea.

The reason why there is not a large population is that half the country has really gone back to the jungle since the early days. I hope my Indian friends will not mind me saying they were responsible for that because they invaded Ceylon. Because of the warfare the water system was disrupted, a good deal of consumption and malaria resulted and the population declined. There is a large birth-rate but also a large death-rate, though I believe the population is increasing now. There is a large infantile mortality, which is rather strange when one thinks that most of the people live in a little more comfortable conditions than in India, that there is no premature marriage, and there has never been any purdah or segregation of women. A Ceylon doctor who was the head of a children's hospital in London during the War, said there are very few of the worst kind of pulmonary diseases in Ceylon that we have in this country.

Ceylon is a much better educated country than I think the other tropical and Asiatic countries. It has had compulsory education for a whole generation, although it has not been enforced because there are not enough schools. The women are almost as literate as the men, and there is adult education and a very great national revival of education in all kinds of ways. There are a great many women's

societies and institutes and women's political societies in the towns. When I was there three or four years ago I was surprised and very pleased to see the way the women of all races and all the different communities, including Europeans, worked together at clinics and crèches and such social work as the distribution of milk to mothers. I spoke to several people about the work at the clinics in Ceylon and there was a general opinion that many of the babies should not have been born. There was a feeling that some kind of birth-control information was necessary. I am very glad to say one very capable woman doctor in Ceylon has taken up the matter and also one or two men doctors. Dr. de Silva when he goes back hopes to start a birth-control clinic in Colombo under the auspices of some of the women's societies.

DR CECIL I. B. V O G E : Several methods have been mentioned which may be suitable for use in the tropics, but it would seem that a much more critical examination is necessary. Thus, we cannot generalise. For instance, we find that there are, at least, foam tablets, cocoa butter suppositories, gelatin suppositories, jellies, foam jellies and mechanical methods innumerable. Each one possesses peculiar characteristics which differentiate it from its neighbours and which may account for its being less likely to be successful than it otherwise would be.

We must therefore obtain an answer to the following questions so that the methods may be: (a) harmless, (b) successful, and (c) universally applicable. The last aspect is the more necessary where the advice of a trained worker is not obtainable, or where the intelligence of the users is poor.

These answers can only be found when information gained from many subjects such as anatomy, physiology, biochemistry and physics has been studied; each will yield some information, but only when the whole is welded together will anything worth while emerge.

The main types of chemical contraceptive systems which exist will be shown,* but it is emphasised that in this summary any mention of a method implies that it is used alone and not in conjunction with another.

The first slide shows foam tablets. On casual inspection it would seem that little difference can be found between any of them. Is it possible, without the aid of the laboratory, to pick out those which are likely to prove successful? I think not! The same difficulty applies to suppositories and jellies, and it is already evident that we

* Dr. Voge elucidated his remarks by lantern slides.

must investigate the whole matter in a systematic manner before we can hope to gauge the actual value of any one method.

The next slide shows diagrammatically all the factors which appear to influence the "expectation of success" of chemical methods. These results are based upon my laboratory findings, which are in very complete agreement with clinical evidence which I am obtaining. Thus with chemical systems we find the following expectations of success: foam tablets, 50 per cent.; suppositories, 50-75 per cent.; jellies, 75-90 per cent.; foam jellies, 90 per cent.

Based upon these findings a monograph is in preparation on "Proposed Tests, Specifications and Standards," which would embody accurate information such as would enable us to recommend only reliable types.

The next slide shows examples of deterioration in rubber, these being demonstrated by means of microphotographs. Changes such as are shown take place normally at different rates according to many factors, but always more rapidly under tropical conditions. In this connection we are able to cause some types of rubber to perish in three hours by a certain process, while others will stand up to the same treatment for 14 hours. These times are comparable to about three months to a year in the tropics under normal conditions of storage.

Next, I am showing some actual examples of deterioration which have taken place under normal conditions, but those who are desirous of studying this matter in greater detail are invited to come at leisure to the Museum of Contraceptives at the London School of Tropical Medicine and Hygiene. This has been in existence for some fifteen months and is always open by appointment.

Finally, I shall touch upon a subject which arouses bitter controversy—that of cost. I believe that there is much confusion owing to the cost being visualised in terms of retail price. This, in most cases, is entirely prohibitive owing to the absurdly large profits that are taken by the middleman. Where the wholesale prices are concerned I do not think there will be much difficulty in bringing about the required adjustments.

I have calculated out the cost per patient per annum for different methods.

COMPARATIVE COSTS OF DIFFERENT CONTRACEPTIVE MEASURES
(ESTIMATED PER PATIENT PER YEAR ASSUMING DAILY COITUS)

	£	s.	d.
(1) Dutch Cap, 1s. 6d. + G.P. ointment 32 applications per 2 oz. tube 9d.	0	10	6

(2) Two Dutch Caps + ointment as above	...	...	...	0	12	0
(3) Condom: Grade 2; perfect and tested; not such fine workmanship as grade 1; at 1¼d. each	...	...	...	1	16	4
(4) Grade 1; at 2d. each	...	...	...	2	15	10

It is obviously an over-estimation to assume daily coitus; but it shows the great difference between the cost of the occlusive pessary, and the condom. In the second estimate two Dutch Caps are included specially if this method is to be used in the tropics. In the fourth case these condoms are probably more capable of standing up to tropical conditions on account of their being "hot cured." Purely chemical methods will have to be considered for certain cases; the more clinical evidence that I collect concerning these products the more convinced I am that they will be successful. The cost is so high, however, that they will have to be reserved for persons who cannot use mechanical methods.

From what we have seen it is evident that even the cheapest of these methods will be beyond the purchasing power of those whom we wish most to benefit. Some will suggest alternatives, with special reference to the sponge, but even here there is room for much research because with repeated usage the question of cleanliness is most important.

On the other hand, if you want a method which complies with the three original points—harmlessness, effectiveness and general applicability—it seems reasonable to be prepared to pay more for it.

One cannot help questioning the validity of certain aspects of this expense argument when one realises the enormous cost of big bacteriological laboratories and their expenditure on sera and vaccines. Does the question of expense enter into this?

MISS STELLA BROWNE: May I heartily congratulate the Birth-Control International Information Centre and those who have taken part in organising this magnificent and I hope most helpful conference. I want to ask questions about two points. First, have there been any experiments with synthetic rubber for caps and condoms, and if so, how does the material compare with the natural rubber?*

The second point is rather wider, but in an international conference like this, it has its point, because although the West has brought a great deal of harm to the East in one way and another, now our people are trying to bring something that will help. The West is

* Dr. C. I. B. Voge, in replying to this question, stated that ordinary rubber was so cheap that substitutes were not called for.

trying to bring to the East the science of propagation, but the East long ago knew all there was to know about the art of love. I want to know whether there is any reason to believe that the Eastern erotic art has any relevance to the matter of conception? For example, I gather the coital method in favour in China is one which would make any form of contraception somewhat difficult and would make impregnation extremely rapid and easy. I hope we shall be able to know something about this because it seems to me extremely urgent. We cannot expect an elaborate culture like that of China or India or Japan to alter its intimate habits rapidly, or perhaps at all, and I hope it will be possible to learn that Eastern sexual practices will not prevent or make more difficult the practice of contraception.

DR MARIE STOPES: I am extremely glad to have this opportunity of saying just a few words on the Conference in the East. I lived in Japan before Margaret Sanger ever entered Japan and I had staying with me as my guest the leading Adviser to the Japanese Government years before Margaret Sanger came to the country. Seven years ago I wrote a special pamphlet for India giving just the method described by Dr. Helena Wright, using cotton waste which the native Indians have among their domestic articles; I advised not vinegar but oil, because oil is a much better contraceptive than vinegar. I believe that pamphlet is circulated in several vernaculars very widely in India and has been for many years past.

The lady who was so tinged with the fatalism of the East, Dr. Agnes Scott, may I encourage her, or lift her from her slough of despond, by reminding her that the very first Government clinic in the world was an Indian clinic. It was founded by the Indian Government of Mysore. Surely that encourages us to feel that Indians themselves, at any rate in parts, are wide-awake to this subject. My own correspondence alone would prove that, for the last twelve years I have had continual applications from native Indians from all parts of India and Ceylon, and China, and the only difficulty has been coping with the immense demand and giving advice of the kind they can follow, because there are so many dialects that one wants to have any literature or advice translated over and over again.

One of the great problems and difficulties which has not been touched upon in dealing with India—I suppose it applies to China too—is the outrageous behaviour and the disreputable forms in connection with this. One's name is taken, one's books are taken and attached to bawdy advertisements and the worst types of pornography. It makes the whole subject extremely difficult because

it shows the whole subject in such a bad light in connection with those who want to take it up properly.

Dr. Menon could not understand why condoms were so dear. May I tell him? There is a very nice English gentleman, a son of a clergyman, who runs a business here for the supply of hospitals with all sorts of things, bandages and supplies, and he really has done very much for the poor. He said, "I am going to put these things on the market cheaply." So he put in his catalogue condoms at 4½d. each. Not one sold. Though they were there, they withered on his shelves. He said, "I cannot afford this," so he listed them at 2s. 6d., and they were sold out in a fortnight. It is the psychology of the people. They do not trust simple things. I know that from the experience of my own clinic. Three or four years ago our committee decided to take up the step suggested by Dr. Helena Wright, and ourselves supply contraceptives, the very best in the world. I am sorry it is not on the table. The price was only two shillings. The women insisted on a black rubber cap instead of red rubber. We begged them to take it and told them the other would cost five shillings. We told them if we had Princess Mary in the clinic she would be given a red rubber cap, but they would have the other which cost more.

Dr. Helena Wright spoke of heat soluble suppositories as contrasted with water soluble suppositories. By that does she mean the ordinary greasy suppository as contrasted with foam tablets? Did you mean cocoa butter or grease? It is easier to understand if you call it a greasy suppository. I have been wrestling with this problem of greasy suppositories for nearly five years. We are not supposed to do research but we have been working at the clinic for five years on the question of greasy soluble suppositories for oriental countries. There is no contraceptive to compare with grease in spite of Dr. Voge. Dr. Voge always misleads the public by implying that greasy suppositories are inferior to foam or jellies. They are not. Our records show that in 20,000 cases grease is the best contraceptive. If you send cocoa butter or greasy suppositories down the Red Sea or in the tropics it cannot be used. We have tried to get these suppositories in such a form that they can go. Yesterday for the first time in my own home I saw the result of our five years' research and I have a greasy suppository that will remain at 98 degrees which is the right temperature. It has been forgotten that people's bodies are not hotter in the tropics. It has been extremely difficult; I have been to all the leading manufacturers in the country and have at last succeeded. If you are able to make a constructive birth-control movement in the East I have got a greasy suppository melting at 98

which will be guaranteed and absolutely practical, so encased that it can go to the tropics. I urge you to consider the advisability of grease as a superior suppository to jelly in every possible way. The only disadvantage of grease is that it is rather messy.

For India and China where the poverty is so intense they cannot afford to pay even 6d. There you must have devices from things of their own domestic surroundings. Is it possible that there are Indians so poor that they cannot afford a halfpenny spoonful of oil—they use cooking oils? A pad of cotton waste just thrown together with a thread so as to hold it and then soaked in cooking oil is an absolutely safe suppository if made large enough and pushed up high enough.

I agree about getting a right mental attitude towards this subject, but it is growing up in the countries themselves and I think this Conference will help things. I am extremely pleased to take part in it. Had I been approached in time our Committee would have done a great deal more to help than we were able to do.

MR GIRI [*India*]: One contraceptive has not been touched upon by anybody. I should like to have some information about the Gräfenberg ring, I should like to know about the Dutch pessary, whether it could be left in for any length of time, or whether it is something that has to be removed every day to keep it hygienic?*

DR DUNLOP: Dr. Helena Wright has told us about the cotton waste plug and said it was effective. Dr. Voge seemed to endorse it; Dr. Marie Stopes endorsed that. I should like to ask what is there to be said against the cotton waste plug for universal use?

DR HELENA WRIGHT: May I deal with the Gräfenberg ring question? I have been working on that point for the last three years. My opinion is that it is too unreliable to be used here indiscriminately; it is out of the question for the East. The disadvantage of it is that nobody knows in whom the ring is going to stop—it falls out apparently purposelessly so to speak. We cannot find any clue beforehand to know who is going to retain the ring and who will lose it. Under those conditions, when it is not at all certain the patient will know she has lost her ring. I consider it would be quite unjustifiable to go any further with it. It is not because it is harmful. I have found no disadvantages of that sort, but because it is so unreliable.

* Rubber contraceptive pessaries may be left in place for 12, some say 24, hours, after which they must be removed to allow uterine secretions to escape. They should not be removed in less than 8 hours after sexual intercourse.—EDITOR.

With regard to the cotton-wool plug the disadvantage is one of bulk; where you want essentially a disc you are using a sphere. I have had a few Chinese patients whose anatomical proportions are smaller than among women in the West, and it does become uncomfortable and tight. If we could make a disc of it I should think that objection would be overcome, and it would be universally applicable.

THE CHAIRMAN: Officially I am here merely to conduct the business. I am not, as you know, in any way responsible for the convening or the general conduct of this Conference, and therefore I feel that I can say what I think about it. As I have been connected with quite a number of conferences in my time and have taken the chair at not a few, I should like to say that I have never known one better organised than this, better attended, or—I will be prophetic and say—more helpful in its results.

Naturally, there may be some of you who do not already know, and I at this point would like to remind myself with you, that all this is due to the activities of three women who some years ago got this Birth-Control International Information Centre going, and it has now arrived at this stage of maturity as the result of the efforts of Mrs. How-Martyn, Mrs. Guy and Mrs. Laski. The amount of work and the amount of personal devotion entailed you can imagine by the result of this Conference. I suppose each one of them would disclaim any special virtue. Probably the honorary director, Mrs. How-Martyn, will be the first to say it was the other two who really did the work. All the same, Mrs. How-Martyn is the honorary director of the Birth-Control Information Centre, and I should like to ask her to close this Conference that we have been holding.

MRS HOW-MARTYN: I think I shall express all your views if I first of all offer to Lord Horder our most grateful thanks for presiding over this Conference and for helping us as he has done. He has referred to us very kindly, and on the first day of this Conference he drafted a message to be sent to Margaret Sanger. I should not have had the power to have done what little I have done in the birth-control movement in anything like such an effective way had it not been for my association with Margaret Sanger. I could spend a great deal of time telling you the names of people who have helped us, because, though Mrs. Guy, Mrs. Laski and myself have taken a prominent part, we could not have done that unless dozens of others had co-operated with us.

At the offices in Parliament Mansions, through the generosity of

some donors and the result of the Malthusian Ball, we now have a room large enough to have meetings, and every Wednesday afternoon at 3 o'clock you can be sure of hearing a speaker, usually a speaker from some other country, and at 4 o'clock we give you tea and we do not always ask you to pay for it!

We have now contacts in twenty countries, and I could tell you some interesting things about each of them; but I will just content myself with referring to two. In the United States, where Margaret Sanger is living, they are holding a Conference* in Washington on the 15th, 16th and 17th of January next. Had it not been for that Conference Margaret Sanger would have come over for this one. Its purpose is to bring pressure to bear upon Congress to alter their abominable Comstock Laws. The second country is France. There we have Madame Albrecht, who has just issued the first number of a quarterly magazine, copies of which can be obtained. We thank her as, perhaps, she is working in the most difficult of the Western countries. The success she has already achieved in getting more discussion on birth-control, as well as other problems, is encouraging.

One of the practical issues of the Conference is that we have taken the initial steps for the training in the different clinics in London of Oriental medical students and nurses. You will find forms outside and we shall be very grateful to know of friends who would give generously to a Fund to be earmarked for that purpose. I can promise you that not one penny will be diverted to overhead charges, salaries, or anything else.

One last word on a matter emphasised by Dr. Helena Wright. We have no intention at all of going to any other country and putting anything over on anybody. When we go to the East or anywhere else it is to co-operate with the work that has already been begun there and certainly to leave, as Dr. Helena Wright advised, the control of things to the people of the country. Thank you, Lord Horder, very much indeed, and I also thank all the speakers.

* This Conference, which was attended by over 600 delegates, adopted a resolution urging that Federal Relief workers should be instructed to refer the unemployed to birth-control clinics. In its deliberations the Conference summed up the present status of the birth-control movement, showing the relation of birth-control to economic and social problems and indicating the scientific and clinical advances in this field. A report of the scientific proceedings has been edited by Margaret Sanger under the title of *The Biological and Medical Aspects of Contraception*, and may be obtained from the Birth-Control International Information Centre, price 5s.

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