E EXPERT GROUP MEETING ON FERTILITY TRANSITION



INTRODUCTION

The United Nations Population Division, with the support of the MacArthur Foundation, convened the Expert Group Meeting on Completing the Fertility Transition, at United Nations Headquarters in New York, from 11-14 March 2002. The purpose of the meeting was to discuss guidelines for fertility change proposed by the Division for use in intermediate-fertility countries, defined as countries with total fertility between 2.1 and 5 children per woman in 1995-2000. The proposed guidelines anticipate that by 2050 fertility in the intermediate-fertility countries will fall below the level required for long-term population replacement. These guidelines represent an important break with traditional demographic views about the future of fertility and with the guidelines used by the Population Division to project the fertility of intermediate-fertility countries in the 2000 Revision of the official United Nations projections.

The meeting was opened by Mr. Joseph Chamie, Director of the Population Division, who noted that this meeting was the third in a series. The first meeting, held in 1997, focused on future fertility assumptions in low fertility countries. The report and papers of that meeting were published in the monograph *Below*-

heterogeneous group. Some participants questioned whether fertility in some intermediate-fertility countries would really fall below replacement level by 2050. Other participants expressed confidence that fertility would fall below replacement level in many of the most populous intermediate-fertility countries, despite possibly lagging economic development.

It was suggested that, on the one hand, that reducing fertility from 3.3 to 2.1 children per woman in some of the intermediate-fertility countries would be difficult, but also that declining fertility would bring about changes in the lives of women that would promote further fertility decline. As fertility declined, women became increasingly free to adopt social and economic roles that did not involve childbearing. Consequently, the potential for further fertility reductions would increase as rising proportions of women would remain unmarried or voluntarily childless within marriage.

It was noted that the rate of fertility change depended on the level of fertility attained. Declines would tend to be slower at higher levels of fertility when the transition was starting than when the transition had gained momentum and somewhat lower levels of fertility had been reached. The pace of decline would slow, however, as fertility approached 2 children per woman. This pattern of fertility change should be incorporated in projections of future fertility, rather than the pattern of linear decline that seemed to underlie most of the projected fertility trends for intermediate-fertility countries in the 2000 Revision. With such a change, the "target" level of fertility could be thought of as a "floor" below which fertility would not fall.

Several participants felt that using a single target value for all intermediate-fertility countries was not advisable and suggested that different targets might be used for different regions of the world. It was pointed out, however, that the countries making up the world regions were already too diverse to justify a regional approach of this kind, though this diversity might be taken account of by grouping countries in other ways.

II. KEYNOTE ADDRESS

Following the presentation of the proposed new guidelines a keynote address was presented by Mr. John Caldwell, Professor at the Australian National University.

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happened, countries all over the world, including those that might still have relatively high fertility levels, might tend to follow suit and adopt pro-natalist measures as well.

The most difficult aspect of future demographic behaviour in the world would likely be international migration. The pressure from both legal and illegal migrants to enter the developed countries would probably be far greater than the numbers those countries desire. The growth of large cities in developing countries also raised a number of issues. In particular, questions about the health levels of the poor living in those cities had to be answered by quantitative inquiry to give direction to remedial measures. Further specialized work was needed, finally, to delineate and measure the impact of the HIV/AIDS epidemic.

Mr. Caldwell concluded by observing that there no longer seemed to be any barriers to most countries reaching below replacement fertility levels. Whereas we once thought of the demographic transition as leading to a stationary population where population growth would be zero, more recently we have thought in terms of a maximum population followed by a long period of perhaps accelerating reductions. This might not be a bad outcome.

III. GLOBAL ISSUES IMPACTING THE FERTILITY TRANSITION

Moderator François Héran introduced the four speakers in turn. The discussion of the four papers is summarized in section E below.

A. IMPACT OF THE 1994 INTERNATIONAL CONFERENCE ON POPULATION AND DEVELOPMENT ON POPULATION AND DEVELOPMENT

Jason Finkle

Mr. Finkle discussed the political dynamics and patterns of influence that gave shape and sTD /F0 9 Tf5 -0.75 TD /F39 Tcce Tcpect of future demooNi i

Assessing the impact of the Cairo conference on Government policies and programmes throughout the world is a complex and difficult task. Work that Mr. Finkle had done with Jack Kantner suggested that direct and immediate impacts were limited, and indeed that some policies and programmes have not been affected at all. Rhetorical compliance as reflected in statements by national leaders may contribute to a change in policy, but change may come slowly and incompletely. It may be too much to expect conferences to prescribe population policies.

More important than the specific programmatic changes that Cairo recommended was the clear and unqualified demand that women be equal partners with men in every phase of life and therefore, implicitly, the recognition of the comparative disadvantage of women at the present time. One major C. Examining changes in the status of women and gender as predic

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policies are of minor importance compared to mass political movements. The response to thirty years of low fertility in Europe has been muted, but there has not yet been any significant population decline. Should population decline by one third, a political and social response would probably be forthcoming.

The nature of policy impacts was clarified by way of a comparison between Mexico and Brazil. Mexico has a population policy. Brazil has none. Fertility has declined rapidly in both countries. This does not mean that policy is irrelevant, however. There is much more abortion in Brazil than in Mexico. Fertility decline may occur without supporting policy, but only by incurring a serious social cost. Policy can facilitate adaptation to changes that would have occurred in any case. Fertility decline is not the only issue.

It was noted that world population will increase by more than one billion persons between 2000 and 2015, that almost all of this growth will be in the developing countries, and that much of it will be in the world's least developed countries, many of which still have high fertility. Another participant questioned Mr. Sinding's assertion that support for population and development issues is in decline, citing interest on the part of the Government of the United States and various private foundations. In response, Mr. Sinding noted that several of these foundations had recently closed down their population programmes. Another participant noted that though external funding is important, it isn't necessarily the most important factor. The Islamic Republic of Iran, for example, received no external funding after the revolution, yet fertility there has declined very rapidly and is now just above replacement level.

Mr. Sinding said that it was very important to return to a broad view of population in development planning, committed to such issues as primary education and to health care. He noted also that the population industry, though perhaps in decline, is still "alive and kicking". Finally, he emphasized the importance of understanding the concept of the momentum of population growth and of developing policies to address it. Where is funding likely to go? What is the alternative to early and frequent childbearing?

Concerning Ms. Cosio-Zavala's paper, it was noted that the status of women is very much a social concept. In some contexts, women who have many children and who do not have to engage in paid employment may have higher status than other women. In some countries in which gender inequity is increasing we nonetheless observe rapid fertility decline. This suggests that there is no clear relation between the two phenomena. It was suggested that we should perhaps be less insistent about the predictive value of gender variables. Between 1996 and 1998 fertility declined in all groups in South Africa, but there was no increase in the status of women. The explanation seems to have been, rather, that women realized the economic advantages of small families.

It was suggested, with respect to Ms. Zaba's presentation, that the biggest impact of the HIV/AIDS epidemic is likely to be on *uninfected* women, that there may be a large behavioural response as consciousness of the epidemic develops. Another participant noted that an analysis of the most recent census data has found no evidence of an increase in widowhood in Kenya despite a severe HIV/AIDS epidemic. It appears that when a woman loses her husband she is absorbed into her husband's brother's family. If this new marriage is consummated, the brother's family is at risk. Ms. Zaba responded that there is indeed levirate marriage, but that there is pressure to keep it symbolic (unconsummated) precisely because of the risk of HIV infection. In response to a question on the issue of survival of HIV infected children, Ms. Zaba noted that estimates of child mortality due to AIDS have been revised on the basis of new evidence from community studies. Unfortunately, HIV tests for children are much more expensive than tests for adults, so that this data is generally obtained only in clinical settings. It was pointed out that the most recent Demographic and Health Survey in Mali includes AIDS seroprevalence tests for adults.

IV. LEVELS, TRENDS AND DETERMINANTS OF FERTILITY

The meeting continued with four background papers on levels and trends of fertility in the intermediate-fertility countries and on the determinants of these levels and trends.

A. FERTILITY LEVELS AND TRENDS IN COUNTRIES WITH INTERMEDIATE LEVELS OF FERTILITY Population Division

The background paper for this session was prepared by the United Nations Population Division and presented by Ms. Hanta Rafalimanana. The paper focused on 54 intermediate-fertility countries with a population of one million or more persons in 2000, including 12 countries in Africa, 21 countries in Asia, 20 countries in Latin America and the Caribbean, and 1 country in Oceania. For the past three decades, fertility has been declining in all of these countries. The pace of decline is higher for higher fertility countries and lower for lower fertility countries. The changing age pattern of fertility suggests that older women contributed most to the decline, with the exception of North Africa, where rising age at marriage resulted in lower birth rates for younger women. Though contraceptive use levels are high, levels of unmet need for contraception remain high as well, suggesting a potential for further fertility decline. In many countries, fertility declined more rapidly for women with no education than for women with secondary or

spacing, separation of spouses, and unions without co-residence. In several West African cities, including Douala, Yaoundé, Accra and Abidjan, total fertility rates have decline to between 2 and 3 children per woman. This decline may spread to other cities in the region. The motivation for smaller families is present, but availability of contraceptives is limited.

Will the small family norm be adopted in West Africa in less than 50 years? Probably not in the countries of the Sahel as a whole. It will be adopted in the larger cities, but not necessarily in the smaller cities or in rural areas.

C. EDUCATION AND FUTURE FERTILITY TRENDS,

Two papers were presented during this session. The moderator, Mr. Dov Friedlander, introduced the papers and presided over the following discussion.

A. VIEWS AND POLICIES CONCERNING POPULATION GROWTH AND FERTILITY AMONG GOVERNMENTS IN INTERMEDIATE-FERTILITY COUNTRIES Population Division

The background paper for this session was prepared by the United Nations Population Division and presented by Mr. Anatoly Zoubanov. His presentation reviewed the policies and views of Governments of the intermediate-fertility countries on fertility, family planning, reproductive health, and related matters. The majority of intermediate-fertility countries had policies to reduce fertility during the past 25 years. The proportion of Governments with a policy to lower fertility rose from 47 per cent in 1976 to 63 per cent in 2001. The percentage of intermediate-fertility countries providing direct support for family planning has increased during the past 25 years. Following the adoption of the Programme of Action at the Cairo conference in 1994, many Governments have been revising their national population and health policies and integrating family planning with comprehensive reproductive and general health policies.

B. EFFORT MEASURES FOR FAMILY PLANNING ACTION PROGRAMMES: PAST TRENDS AND FUTU

C. DISCUSSION

One participant asked to what extent the measures of family programme effort referred to in Mr. Ross's paper reflected Government ideas and behaviour and to what extent they reflected public demand. Another participant asked how the programme effort methodology handled the diversity of implementation at the sub-national level that results when family planning programmes are decentralized. Mr. Ross responded that the effort measures were derived from questions addressed to persons knowledgeable about the country's family planning programme. In the case of decentralized programmes, the respondents were supposed to "take an average" over the entire country in formulating their answers. The measures did not incorporate any direct component reflecting demand for contraception. It was suggested that Mr. Ross's paper underscored several comments made earlier in the meeting that what countries do bears little relation to the pronouncements of international conferences. Still, it was said, the programme effort analysis was encouraging. The discussion concluded with a brief comment on the situation in Mexico, where contraceptive use is at about 70 per cent and programme effort may be as high as it will get.

VI. FUTURE EXPECTATIONS FOR FERTILITY

A. THE END OF THE FERTILITY TRANSITION IN THE DEVELOPING WORLD John Bongaarts

Mr. Bongaarts began by noting that reproductive behaviour has changed rapidly in much of the developing world over the past four decades. Recent fertility declines have been more rapid and pervasive than was expected. Conventional theories have little to say about the pace of fertility decline or the level at which fertility will stabilize at the end of the transition. The objective of his study was to identify regularities in the past record that may provide clues to future trends. There were three principal conclusions. First, the future course of fertility will depend crucially on human development, as suggested by regression analysis of past trends in fertility and (representing human development) literacy and life expectancy at birth. Second, the pace of fertility decline will slow as countries approach the later stages of the fertility transition. This is to be expected, but Demographic and Health Surveys taken during the 1990s have indic ated that fertility decline has stalled in several large intermediated-fertility countries that had previously seen substantial fertility declines. Third, average fertility can be expected to remain significantly above replacement level until at least 2025. The proportion of developing countries with fertility below 2, currently one in ten, will no doubt rise over time, but it will almost certainly be less than one half by 2020-2025.

B. THE PROXIMATE DETERMINANTS DURING THE FERTILITY TRANSITION Jean-Pierre Guengant

Mr. Guengant began by noting the importance of "proximate determinants" for projecting future fertility in the intermediate-fertility countries. Since the early 1980s, the United Nations Population Division has made periodic assessments of the level and trend of contraceptive use in all countries of the world for which data is available. The latest assessment,

Mr. Guengant had carried out an analysis of these data using the FAMPLAN computer programme. Keeping in mind the limitations of the data, he computed the contraceptive prevalence required to reach the 2025 and 2050 fertility levels in the 2000 Revision for each of eight developing regions provided that all other factors remain constant. For Western Asia, for example, contraceptive use should reach 66 per cent by 2035 to reach a total fertility rate of 2.3 children per woman, the projected low variant value given in the 2000 Revision. This and similar exercises suggest that it cannot be taken for granted that fertility in all of these countries will soon reach replacement level. In concluding, Mr. Guengant noted that while he did not propose that fertility should be projected by projecting its proximate determinants, he did strongly recommend that the relationship between fertility projections and proximate determinant projections be explored when making projections.

C. DISCUSSION

Discussion began with a comment on Mr. Bongaarts paper. If the Population Division had arranged for a meeting on this subject for European countries during the 1960s, it was suggested, the meeting would have come to the same conclusion: that fertility would not fall so quickly. Multiple regression analysis, in particular, can be misleading. Mr. Bongaarts noted that the United States had below replacement fertility during the 1930s and that the many demographers who predicted continuing low fertility on this basis failed to anticipate the "baby boom". Similarly, the United States Census Bureau missed the "baby bust" as late as the early 1970s. This was a failure of "momentum" forecasting that should not be repeated, Mr. Bongaarts added.

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VII. REFLECTIONS OF AMBASSADORS

Mr. Joseph Chamie, Director of the United Nations Population Division and moderator of the session, began by saying how honoured the meeting was to have representatives from four permanent missions of the United Nations, Egypt, the Islamic Republic of Iran, Brazil and Mexico. Mr. Chamie then introduced the four speakers in turn.

A. HIS EXCELLENCY MR. AHMED ABOUL GHEIT (EGYPT)

His Excellency Mr. Aboul Gheit focused on the implications of fertility and population trends for the future of Egypt. The Egyptian Health Ministry has said that a new baby is born in Egypt every 2.3 seconds and that by 2025 the Egyptian population will be between 93 and 100 million persons. In 1913, by comparison, the country had only 13 million persons. This was a very large increase. Only four per cent of Egyptian land is arable. Much of the country is desert, without rain, so agriculture depends on the river Nile. This situation is compounded by the loss of arable land to development. The population of Cairo is now 23 million persons. Consider then, His Excellency said, what Egyptian policy makers face in contemplating the year 2025. We are about 70 million persons today. Adding another 30 million will require creating 600,000 to 800,000 jobs annually, and we hope to eradicate illiteracy by 2025. How are we to stabilize the demographic explosion? We have been taking the necessary steps, in family planning programmes, in health, and in education. No village is without a health center, and people are learning the negative consequences of having a large family. His Excellency Mr. Aboul Gheit concluded by noting the role of globalization in demographic change. Television is everywhere and has affected family planning behaviour in Egypt.

B. HIS EXCELLENCY MR. NASSROLLAH KAZEMI KAMYAB (ISLAMIC RK

public sector will need to provide more resources. As the children of the "baby boom" of the early 1980s will soon be reaching marriage age, provision of reproductive health and family planning will need more financial and human resources. In the Ministry of Health this has been seen as a crisis that will require tremendous effort and strong support of multilateral institutions, especially UNFPA. Finally, education and health depend to a large extent on Government funding, and this makes them vulnerable to changes in Government income and spending patterns. Increasing the role of the private sector in these activities could reduce such vulnerabilities.

C. Mr. José Ramón Lorenzo, First Secretary (Mexico)

Mr. Lorenzo noted that Mexican Government population policy dated back to 1974, at which time the Government became more open to the idea of a relation between family planning and unemployment and poverty. Population policies have had a large impact. In 2001 Mexico had a contraceptive use rate of 70 per cent. Regarding the future, Mr. Lorenzo said, the Government expected that the infant mortality rate will continue to decline. The population growth rate has been declining, and it is expected that population will begin to decline by 2044. Before then, however, a large increase in working age persons, as well as older persons, will have occurred. The future presents opportunities and challenges. Declining numbers of births will make it possible for health services and education to achieve higher coverage and quality. There will be less pressure to provide jobs and less pressure for people to migrate abroad. The Government expects, Mr. Lorenzo said, that the level of out migration will drop. Challenges include the aging of the population and increasing demand for health services for the elderly. The Government is very much aware of these issues and has reformed the pension system in anticipation. It is anticipated that the aging of the population will result in a shift in the balance of electoral power.

D. Mr. Alex Giacomelli da Silva, Second Secretary (Brazil)

Moderator Joseph Chamie introduced the presentation, noting that the representative from Brazil would speak briefly, after which Ms. Ana Maria Goldani would provide further information about the situation in Brazil. Mr. da Silva noted that the population of Brazil more than tripled between 1952 and 2000, from 52 million to 170 million people. Life expectancy at birth has increased from 40 to 68 years and the total fertility rate has declined from 6.2 to 2.3 children per woman. Mr. da Silva said that these are important facts and then asked Ms. Goldani to proceed with her remarks. Ms. Goldani began by saying that Brazil should be regarded as an "outlier" in the history of the demographic transition. Though Brazil is a wealthy country with low fertility, it has no official family planning Programme. Several policies of the Brazilian Government implemented between 1975 and 1985 had unanticipated effects. They created a demand for family planning services which was met by sterilization. This is why sterilization has played a major role in Brazil's fertility decline.

E. DISCUSSION

One participant asked, with respect to Egypt, about the role of the Imams in family planning. How have they interpreted the Koran in this context? It was said in reply that the idea that the Koran is against family planning is a stereotype, that there is nothing against family planning in the Koran. Islam is a very pragmatic religion. The Government of Egypt was very successful in recruiting religious leaders for family planning work.

Another participant asked how the decline in infant mortality in the Islamic Republic of Iran was achieved. The reply was that since the early 1980s Iran had made many efforts to eradicate poverty. Rural areas were the focus, and there was extensive investment in rural agricultural development, health care and immunization, and especially in education. The Iranian experience was very impressive, it was

noted. What was the role of religious leaders in family planning? What methods were used? The religious leadership in Iran appreciates very strongly the importance of family planning and reproductive health, was the reply. The Health Ministry has used the large number of Koran recitation meetings as a way to disseminate information. The Ministries of Health and Education were both successfully involved in this work, as were women's non-governmental organizations. Regarding contraceptive methods, 60 per cent of use is of modern methods. Additionally, couples have very comprehensive workshops before marriage. Health care facilities provide contraceptives, and private entities get Government subsidies for this purpose as well. The work is mostly supported by public sector funds. There seems to be a broad consensus on the importance of these programmes.

VIII. BACK TO THE FUTURE: PROPOSED UNITED NATIONS ASSUMPTIONS

Mr. Joseph Chamie, Director of the Population Division, moderated the session and opened the discussion by making several points. First, he said, meetings of this kind provide necessary input to the work of the Population Division, which benefits greatly from the expertise of the participants. Second, he stressed, world population growth is not over. The medium variant projection in the 2000 Revision shows world population growing from 6.1 billion in 2000 to 9.3 billion in 2050, an increase of 3.2 billion persons, or more than 50 per cent. Nearly all of this growth will occur in the less developed countries of the world, and much of it will occur in urban areas. Half of the growth will occur in a handful of countries, including Bangladesh, China, India, Indonesia, Nigeria and Pakistan. It is necessary to focus on these countries. World population has not stabilized, Mr. Chamie emphasized. Population momentum will cause world population growth to continue for many decades even if the level of fertility in the intermediate-fertility countries falls below replacement by 2050.

A third important point, Mr. Chamie continued, is that although fertility in the intermediate-fertility countries is expected to continue to decline, the rate of decline is likely to decrease as lower levels are reached. This may be compared to a train coming into a station. It cannot enter the station at full speed, it must slow down as it approaches. A fourth point is the principle, adopted in the Programme of Action of the International Conference on Population and Development (ICPD) in Cairo, that all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children. Fifth, there will be great variation in the future. The Population Division takes account of the HIV/AIDS epidemic in our projections, but it does not attempt to forecast disasters. The Division's projections generally anticipate an improving human situation and continued progress in human welfare. Finally, returning to the specific focus of this meeting, the Population Division is proposing below replacement fertility as a guideline for projecting fertility in the intermediate-fertility countries. In doing so the Division is looking beyond 2025, as its mandate requires. Based on this meeting the Division will probably revise the target fertility level to 1.8 or 1.9 children per woman, rather than the 1.85 children per woman originally proposed, to avoid giving a spurious impression of accuracy.

Mr. Chamie then opened the meeting for general discussion. As the discussion proceeded, many participants thanked the Population Division for a constructive, useful and successful meeting that had broken new ground on an important subject.

Several participants endorsed the idea of revising the 1.85 children per woman target in the proposed guidelines to 1.9 children per woman. Three reasons were given in support of this change. First, it would be very odd for the target level for the intermediate-fertility countries to be lower than the target level for the low fertility countries. Second, the two digits after the decimal conveys a spurious impression of accuracy. Third, the existence of "tempo" effects, which it may be assumed will in the future operate

for intermediate-fertility countries as they are operating now for low fertility countries, argues for choosing a higher rather than a lower value.

Discussion then turned to the general issue of the proposed new guidelines for projecting fertility for the intermediate-fertility countries in the 2002 Revision of the official United Nations world population estimates and projections. Various views were expressed, some on general issues affecting all or most countries, others on the situation of particular countries. It was noted that there were two visions of the long term, the vision of a homogenizing world, and the vision of a world increasingly divided by economic and social disparities. The globalization of world communication has made the second of these visions more dangerous than ever before because people in less developed countries all over the world tend to be aware of the disparity between their situation and the situation in the most developed countries. At the same time, the idea of globalization tends to make people in more developed countries forget that we are still living in a divided world. The idea that all intermediate-fertility countries will move toward a fixed target level of fertility below replacement level associates most naturally with the vision of a homogenizing world. It is not necessarily the case, however, that a world of considerable disparity with respect to economic and social development implies a world of similarly disparate fertility levels, for adversity as well as development may lead to low fertility.

Various views were expressed on the applicability of the proposed new guidelines. Some participants doubted that a decline from the current 3.2 children per woman in intermediate countries to below 2.1 children per woman would happen so easily as the new guidelines might seem to suggest. The preconditions for such a decline, including social development and support for family planning and reproductive health programmes, cannot be assumed to be automatically present, it was said, particularly if the idea that high fertility and population growth are no longer problems takes hold among policy makers, funding institutions and the general public. Other participants argued that moving the target fertility level below 2.1 children per woman was a move in the right direction. Fertility decline begets further fertility decline, it was observed, by changing women's lives. As women spend less of their lives bearing and rearing children, they are free to take up other pursuits, including further education and labour force participation. This leads to a new social situation in which some women decide to remain childless, and in which families attach more importance to having "quality" children, particularly with respect to education, than to having a large number of children.

The discussion then proceeded to related but more general issues. Several participants expressed concern over the difficulties of taking "outliers" and "surprises" into account when making population projections. The situation in some countries had deteriorated rather than improved in recent decades, it was observed, and there was a clear possibility of further deterioration in the future. It is difficult to take account of this in projections, but it is important not ignore or dismiss such evidence. Projections assume a surprise-economic and D0crd ratTc 0.95as observed, a1cades, projei Tw (whicoArI thutantmr6 Tj

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fertility tell us is that if factor A goes up a bit, fertility tends to go down a bit, or if factor B is lower, fertility will tend to be higher. This is true of the lowliest univariate regression, and it is equally true of what Norman Ryder once called "these Cadillacs of multivariate analysis". This kind of thinking simply is not useful for deciding such questions as whether fertility will stabilize at 2.1 children per woman or 1.85 children per woman.

Demographers have been roundly ridiculed here for the silliness of the 2.1 children per woman target. This is quite wrong. Having projected fertility tend to replacement level is not arbitrary at all. It is a carefully calibrated statement about the place of man in the universe. We have been around for a million years or so. We want to stay around. We are not greedy. We do not want more than our share of the biosphere. But we do not want to just up and disappear, either. Having said this, the evidence of the below-replacement fertility countries shows that, for less cosmic time horizons, the end of the fertility transition is going to be more complicated than we anticipated. Riad Tabbarah's paper points the way for

X. CONCLUSION

Mr. Chamie asked keynote speaker Mr. John Caldwell, Professor at the Australian National University, to provide some further reflections on the meeting. Mr. Caldwell began by congratulating the Population Division on the whole history of its achievement. Its population projections of the 1940s and 1950s changed the world, he said, but these were not "scare" messages. The first principle for the Population Division must always be to adhere to truth and to ensure the scientific integrity of its projections. If this were to be lost, all would be lost. A second principle must be to provide information. The real contribution of the Population Division to action is to *make its projections known*. Perhaps the Division could produce different kinds of reports, he suggested, reports that would spell out some of the implications of the voluminous and highly detailed projection numbers contained in *World Population Prospects*.

Long-range projections influence action more than you might imagine, Mr. Caldwell added. The world ecosystem is under stress, and this is inherently a long-term phenomenon. Population is not the only important part of the picture, but it is a very important part. We should be careful, he continued, not to get too far away from specifics. Sub-Saharan Africa, for example, is at present less than 10 per cent of world population, but in the coming decades it is likely to rise to more than 20 per cent of world population. Yet this region is beset by more economic, health and development problems than any other major world region. This region could well become the main focus of international development efforts in the future.

We have moved a long way, Mr. Caldwell concluded, perhaps too far away, from the old idea of population and development. The International Conference on Population and Development (ICPD) said very little, in fact, about population and development. The Population Division should not slight its measurement of the impact of population growth on development.