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S o c i a l A f f a i r s

**United Nations Expert Group Meeting on Fertility,  
Changing Population Trends and Development:  
Challenges and Opportunities for the Future**

New York, 21-22 October 2013

**Report of the Meeting**



United Nations





**Department of Economic and Social Affairs**  
Population Division

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# DESA

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## PREFACE

The Population Division of the Department of Economic and Social Affairs (DESA) of the United Nations Secretariat serves the Commission on Population and Development of the Economic and Social Council, which meets every year to consider a special theme based on the Programme of Action of the International Conference on Population and Development (ICPD). In light of the twentieth anniversary of the 1994 ICPD, the Commission's theme for 2014 is an "Assessment of the status of implementation of the Programme of Action of the International Conference on Population and Development". To inform these deliberations, the Commission has requested the Secretary-General to prepare a report on World Demographic Trends, with special attention to changes in population dynamics since the ICPD.

To contribute further to preparations on this theme, the Population Division convened two Expert Group Meetings (EGM) on 21-22 October 2013: one on fertility trends and development and one on mortality and health. For the former, entitled "Fertility, Changing Population Trends and Development: Challenges and Opportunities for the Future", experts in several fields related to fertility were invited to reflect on key questions about the future pace of fertility change, implications for age structure changes and other population trends and effective policy responses. Contributed papers and presentations addressed topics including the determinants and implications of high fertility and low fertility trends in countries, current challenges to young people's transitions to adulthood and the links between fertility, reproductive rights and women's empowerment and gender equality. The issues and recommendations discussed during the meeting, along with the outcomes of joint sessions held with the parallel EGM on mortality and health, are reflected in this report.

This report as well as other population information can be accessed via the Internet on the official website of the Population Division, [www.unpopulation.org](http://www.unpopulation.org). For further information concerning this publication, please contact the Director of the Population Division, Department of Economic and Social Affairs, United Nations, New York, NY 10017, USA; telephone number +1 212-963-3179; fax number +1 212-963-2147; email: [population@un.org](mailto:population@un.org).

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# UNITED NATIONS EXPERT GROUP MEETING ON FERTILITY, CHANGING POPULATION TRENDS AND DEVELOPMENT: CHALLENGES AND OPPORTUNITIES FOR THE FUTURE

## A. INTRODUCTION

The Population Division convened an expert group meeting (EGM) on 21-22 October 2013 in New York on fertility, changing population trends and development. The objective of this EGM was to bring together experts to address key questions about the future pace of fertility change, implications for age structure changes and other population trends and effective policy responses. The results from the expert papers circulated before the meeting and the presentations and discussions at the meeting are summarized in this report. The results will be used to inform preparations for the forty-seventh session of the Commission on Population and Development in April 2014, the theme of which is an “Assessment of the status of implementation of the Programme of Action of the International Conference on Population and Development (ICPD)”.

In a departure from tradition, the opening session on the first day and two sessions on the second day of the EGM were organized and held jointly with a different expert group meeting organized by the Population Division on the progress and challenges toward achieving the survival goals set out in the ICPD Programme of Action and future challenges to reductions in mortality. The lively discussions that ensued and exchange of ideas across disciplines and substantive research areas proved the jointly-organized sessions to be successful.

The first day of the meeting was devoted to presentations and discussions on fertility trends in diverse regions of the world, prospects for change and effective policy approaches that address the determinants and implications of these trends, including current challenges to young people’s transitions to adulthood and the links between fertility, reproductive rights and women’s empowerment and gender equality. The second day of the meeting began with summaries and debate on the key findings from the first day’s substantive presentations of each expert group meeting, including the prioritization of issues for the global development agenda moving forward. The EGM concluded with two presentations and a discussion on how to improve the accessibility and utilization of data and evidence on fertility and health for policymaking.

Ms. Cheryl Sawyer (Population Division) gave an overview of world mortality trends since ICPD from the 2012 Revision of *World Population Prospects* and contrasted the trends with three numerical targets set out in the ICPD Programme of Action: 1) to increase life expectancy to 75 years by 2015 (for countries with the highest mortality – not explicitly defined – the target of 70 years was noted); 2) to achieve an under-five mortality rate below 45 deaths per 1,000 live births by 2015 (later revised in Millennium Development Goal 4 to be a two-thirds reduction in the under-five mortality rate from the 1990 level); and 3) a three-quarters reduction in the maternal mortality ratio from the 1990 level. Key points from the overview of world mortality trends were:

- Since the ICPD in 1994, life expectancy for the world had increased to 70 years (an increase of five years) by 2010-2015 (figure I). Africa presently had the lowest life expectancy (58 years). The gap in life expectancy between Africa and Northern America, the region with the highest life expectancy, had narrowed but remained large at 21 years.
- There were wide variations in the life expectancy gains achieved by 2010-2015 in countries that started at similar levels in 1990-1995.

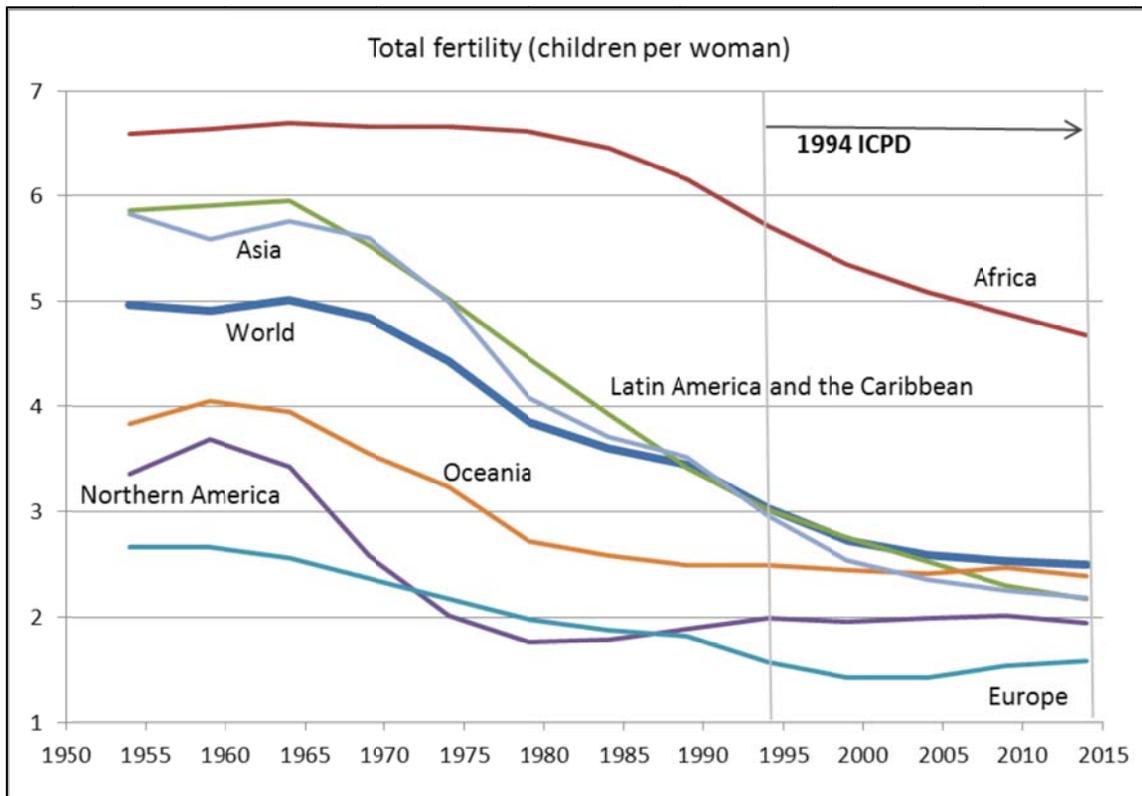
- Reductions in mortality since ICPD were most rapid for child mortality, while declines in the probability of dying between ages 15 and 60 were slower on average; some regions had experienced increases in adult mortality.
- Though a rising proportion of deaths now occurred at ages 60 and above, including in the less developed regions, adult mortality data in most developing countries were limited or of low quality, and survey methods developed to estimate mortality at younger adult ages did not offer evidence for the levels and patterns of mortality at older ages.
- Despite declines in mortality, the ICPD survival goals had not been met by many countries and regions. For example, the maternal mortality ratio has fallen by 47 per cent worldwide since 1990, but neither the world nor different regions are on track to meet the goal of a three-quarters decline between 1990 and 2015.
- Questions for the expert group meeting to address were: How would future health challenges be different from the recent past? How were risk factors evolving? And what were key gaps in knowledge?

An overview of fertility trends (level and timing) and parallel changes in marriage and union formation and family planning behaviours was provided by Ms. Vladimíra Kantorová (Population Division). In 1994, when the world met in Cairo for ICPD, the total fertility of the world was around three children per woman. Asia and Latin America and the Caribbean had experienced fast reductions in fertility over the past three decades. In contrast, total fertility in Africa had recently started to decline from a level just below six children per woman, the same level that Asia and Latin America and the Caribbean had in the early 1960s. Could African countries experience such fast fertility declines as Asia and Latin America and the Caribbean? Northern America, Europe and Australia and New Zealand were all at or below two children per woman. Was this the end of fertility decline in these regions? Key points from the overview of world fertility trends since Cairo were:

- Since 1994, fertility in Africa declined at a much slower pace compared to Asia and Latin America and the Caribbean (see figure I). In 2010-2015, total fertility in Africa was still above 4.5 children per woman.
- Fertility in parts of Europe (mainly Eastern and Southern Europe) and in East Asia declined to very low levels and in a short period of time (due in part to the impact of postponement of childbearing on period total fertility).
- Declines in total fertility in individual countries were not universal and countries with the same total fertility in early 1990s experienced different fertility trajectories.
- Adolescent childbearing and marriage was still common in Africa, and also in some countries in Asia (e.g., Afghanistan and Bangladesh). In Latin America and the Caribbean, adolescent childbearing remained high in many countries even though total fertility was close to replacement level.
- In 1994, more than 60 per cent of married or in-union women used any contraceptive method in all major areas, except Africa. Progress has been slow on ICPD-related benchmarks in reducing the unmet need for family planning across all regions.

- Questions for the expert group meeting to address were: Why is fertility decline in Africa different from other regions and will it stay exceptional in future? What have been the different pathways to low fertility around the world and will these differences persist? What are the changes in transitions to adulthood and their impact on childbearing? What are the key policy-relevant ways that women’s empowerment and gender equality influence childbearing? What are the population-level impacts of enabling women to exercise their reproductive rights?

Figure I. Total fertility for the world and major areas, 1950-2015



Source: United Nations, *World Population Prospects: The 2012 Revision* (2013).

During the discussion, experts highlighted measurement issues and new concerns in making progress on health and reproductive rights issues. They pointed out that now was an ideal time to propose more relevant and meaningful indicators to track progress in achieving health-related goals (e.g., monitoring the percentage of demand for contraception that is satisfied as an indicator of universal access to reproductive health). In low-fertility settings, achieving desired fertility might now be as relevant as preventing unintended pregnancies; that is, the “freely and responsibly” part of reproductive rights in the Programme of Action (“All couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so”) was not just about preventing unintended pregnancies, but also about people being able to achieve their desired number of children.

Participants agreed that Governments were showing increased attention to within-country inequalities, and as a result were demanding that whenever possible, demographic and development indicators be stratified by geographic region or socio-economic categories. Some of the challenges to measuring inequality were discussed. For example, interpreting inequality across wealth or income

quintiles required an understanding of the population composition of the quintiles, which was often lacking. In addition to socio-economic inequalities, participants identified generational change (e.g., mothers' experiences versus daughters' experiences) in union and family formation as a potential driver of future trends in fertility and the consequences for children and families.

The discussion also pointed to a growing need for “public demography”; that is, re-energized attention to public education on population issues given frequent misinterpretations and incorrect assumptions about fertility and mortality trends, as well as progress on development goals. Mr. John Wilmoth, Director of the Population Division, stressed that educating the world on population issues was one of the key responsibilities of the Division and welcomed experts' advice as to how to improve the Population Division's work in that regard.

## B. FERTILITY TRENDS IN HIGH- AND INTERMEDIATE-FERTILITY COUNTRIES

Mr. John Bongaarts (Population Council) examined the ways that the pattern of fertility decline in sub-Saharan Africa (SSA), a region still experiencing high fertility, has been exceptional compared to fertility declines in other regions (Asia, Latin America and Northern Africa). He presented evidence that total fertility in SSA was slightly higher prior to fertility decline compared to other regions, the onset of fertility decline began about two decades later and the pace of fertility decline has been substantially slower than in other regions. Three countries (Chad, Gambia and Mali) have not yet experienced a sustained fertility decline.

Conventional views have held that fertility levels are inversely related to socio-economic development. Using three common indicators of development—child mortality, women's education and gross domestic product (GDP) per capita—Mr. Bongaarts showed that even net of these development factors, fertility in SSA was half a birth higher than in other regions. While there was large variation across countries in the level of GDP at the onset of fertility transition, countries in SSA had a lower GDP threshold at the start of the fertility transition compared to countries in other regions. The slower pace of fertility transition in SSA was related to the relatively early onset of transition in the region given the level of development and the slower rate of development.

He noted that policy options to reduce the reported large number of unintended pregnancies in the region included further investments in family planning programmes and in the schooling of girls. Large increases in GDP were not required for the effective impact of these investments on fertility, as Mr. Bongaarts illustrated with the experiences of fertility decline in Sri Lanka and the state of Kerala in India. A key challenge to expanding family planning programmes has still been political commitment. Mr. Bongaarts concluded with recent examples from Ethiopia and Rwanda where increased political commitment led to health system improvements, including expanded access to family planning services, and media campaigns about the benefits of smaller families.

Mr. Parfait Eloundou-Enyegue (Cornell University) presented on the conditions under which high-fertility countries might reap the economic benefits of rapid fertility decline and the consequent expansion of working-age adults relative to other age groups. Such demographic dividends were plausible but not automatic, and there have been wide variations across regions and countries. He presented a conceptual framework that specified five steps in the process of generating a demographic dividend and enabled the identification of where and why a country may be stalled in the process. The framework steps were: 1) fertility decline, 2) age dependency, 3) economic dependency, 4) savings and investment and 5) economic growth.

Evidence from countries in sub-Saharan Africa over the last 20 years showed that the most problematic points in the demographic dividend process were at the step of fertility decline (i.e., not all countries experiencing fertility declines were doing so in a swift, broad-based and irreversible manner) and at the step of savings and investment (i.e., not all countries were investing in productive sectors). Mr. Eloundou-Enyegue emphasized that policies in the relevant areas of education and family planning that were needed to address the challenges at these two steps had to be more strategic in scope than had usually been the case. With respect to education, policies not only had to improve education for girls but also to raise the returns to schooling and manage the transition from school to work, including attention to schools as places for employment (e.g., tutoring of younger students) and national service, vocational training and internship activities. In the area of family planning, he recommended that policies should go beyond the goal of helping people achieve their desired fertility and move toward helping people achieve supportive families, including a focus on improving parenting skills and union stability.

Participants pointed out that the distinctive fertility decline patterns of countries in sub-Saharan Africa compared to other regions suggested that the Population Division's fertility projections may be too optimistic with respect to the pace of fertility decline. The Population Division was advised to account for this different regional experience when making its next round of fertility projections. Discussion turned to the role of fertility preferences, noting that while preferences were also higher as in SSA at the beginning of transition, fertility preferences were also fairly changeable. Moreover, family planning programmes have not only met existing demand but also created demand through the spread of new ideas about the role of women and the benefits of having smaller families.

The wide range of the impact of the demographic dividend across countries surprised some participants, while others noted that the impact in Latin America has been small compared with Eastern Asia. The diversity of experiences underscored the importance of assessing the link between fertility decline and economic growth at each distinct step of the process. Participants pointed out other factors that merited attention with respect to fertility decline in sub-Saharan Africa, including the role of urbanization and the spread of new ideas; whether international migration and remittances, land ownership, and free primary education substantially change the costs of childrearing; and whether the growing gap between school and work would lead to delayed childbearing. Discussion concluded on the point that large, growing differences in school quality in sub-Saharan Africa (including hidden school fees) have been generating new levels of inequalities in the region via vastly different graduation rates among schools.

#### C. DIFFERENT PATHWAYS TO LOW FERTILITY AND EFFECTIVE POLICY APPROACHES TO ADDRESS LOW FERTILITY

Mr. Tomáš Sobotka (Vienna Institute of Demography) began his presentation on low fertility in Europe by describing three distinct period trends in European fertility after 1990: fertility declined to record-low levels in most countries in the 1990s (with very rapid declines in Central, Eastern and Southern Europe); fertility trends reversed and increased in the 2000s; and after 2008, fertility levels were stable or declining after the onset of the economic recession. There has been a continuous shift to non-marital childbearing, with no correlation with period total fertility in Central, Eastern and Southern Europe but a positive correlation between non-marital childbearing and fertility in Northern and Western Europe. Different theories and arguments were developed to explain fertility change in the region, including attention to the postponement of births to older ages, gender equity, fertility reversals at advanced levels of development, and patterns of disadvantage. Mr. Sobotka presented evidence on fertility since the economic recession (post-2008) that suggested a new postponement in childbearing. The sharpest drops in fertility were at young ages, and government cutbacks were affecting young people (e.g., 13 per cent of young people aged 15 to 24 in the EU-27 were "NEETs": not in education,

employment or training). In other countries the total fertility increase prior to 2008 had reversed (Denmark, Greece, Iceland and Spain). The postponement of childbearing—the tempo effect—has emerged as the most important factor explaining short-term shifts in period total fertility in the region.

Mr. Sobotka showed how the examination of cohort fertility placed countries at a different ranking by fertility level compared to using period total fertility. Parity distributions and education differentials also showed that there could be large differences among countries with similar period total fertility. However, fertility preferences have not varied across Europe, even by education level or between women and men. A two-child family has been the norm since the 1980s.

The wider relevance of the European low-fertility experience was that fertility decline continued declining below replacement level, it did so in many different ways even within the same region, and that a common factor across Europe had been the postponement of childbearing to older ages. He argued that more refined measures of fertility beyond period total fertility and more focus on cohort fertility were necessary for interpreting change in low-fertility countries. He observed that even for countries with low fertility, migration could offset population decline. Concern about low fertility and its broader impact on population ageing and population decline has prompted diverse policy responses in the region. A more detailed treatment of policy approaches was included in the paper rather than the presentation.

Mr. Mohammad Jalal Abbasi-Shavazi (University of Tehran and Australian National University) presented the perspective on pathways to low fertility in Asia based on fertility estimates prepared by the United Nations Population Division. Asia showed diversity not only in terms of religion and development levels but also in patterns and levels of marriage and fertility. Cohabitation was lower in Asia than in other major regions. Early marriage patterns were prevalent in Western Asia and late patterns were common in Eastern Asia (e.g., Japan and the Republic of Korea). China had almost universal marriage. By 2005-2010, countries in diverse parts of Asia had reached below-replacement level fertility. There were variations in the age pattern of fertility even among countries within the same region. Eastern Asia and South-eastern Asia had rapid declines in fertility and the latter was still experiencing more rapid declines than other sub-regions. Eastern Asia had lower total fertility than other regions even in the earlier period 1975-1980. In Central and Southern Asia, fertility decline was much slower than in other regions, and it had reached about 2.7 children per woman by 2005-2010. Rapid fertility decline occurred in Iran since 1985 where total fertility had reached below replacement level by 2005-2010. China experienced rapid fertility decline but not as rapid as Iran. In the Middle East, fertility declined but not as fast as in Iran or other Asian countries.

Several factors explained the decline in fertility decline. In Eastern Asia, parents were spending more resources on their children—particularly on education—than parents in earlier time periods. Women were also postponing marriage to a larger degree. Japan, for example, had the highest proportion of never-married women aged 35-39 years in Eastern Asia. There had also been an increase in labour force participation among women, especially in Eastern and South-eastern Asia.

Mr. Abbasi-Shavazi compared the demographic transition in Europe and Asia. In Europe, the demographic transition and the accompanying social change had been slow and allowed for gradual adaptation to the changes. By contrast, in Asia the demographic transition and the attendant socioeconomic changes were fast and produced concern regarding the implications of rapid fertility decline, especially population ageing. Countries in the region had formulated policies to address low fertility, although many such efforts had been made recently and it was still not clear which policies had had an effect on reproductive behaviour. Singapore adopted a pronatalist policy in 1984 that encouraged educated women to have more children, Japan has introduced numerous policies since the 1990s, and Iran had begun preparing a new draft policy to influence fertility. Mr. Abbasi-Shavazi suggested that efforts to address low fertility had not been very successful because policymakers tended to employ a top-down

approach, often without a full understanding of population issues. He emphasized the need for Governments to analyse and compare their proposed policies with other countries before such policies were implemented.

Ms. Suzana Cavenaghi (National School of Statistics, Brazilian Bureau of Census) showed that between 1950 and 1965 the total fertility in Latin America and the more populous countries of the Caribbean was around 6 children per woman, had since declined dramatically and was projected to reach the replacement level (2.1 children per woman) in 2010-2015. She presented country-specific fertility trends to show the diversity within the region. In 2005-2010, fertility remained relatively high—between three and four children per woman—in Bolivia, Guatemala, Haiti and Honduras. This group of countries had relatively small populations and ranked lower on socio-economic indicators compared to other countries in the region. Most countries in the region now had total fertility between two and three children per woman (Colombia, Dominican Republic, Ecuador, El Salvador, Mexico, Nicaragua, Panama, Peru and Venezuela) or had already reached below-replacement level fertility by 2010-2015 (Brazil, Chile, Costa Rica and Cuba). Argentina and Uruguay had total fertility around two children per woman but had always had comparatively low fertility (e.g., around three children per woman in 1950-1955).

Ms. Cavenaghi pointed out that a unique feature among Latin American countries was the persistence of adolescent childbearing and young age patterns of fertility, even though total fertility had significantly declined. In some countries, such as the Dominican Republic and Ecuador, adolescent birth rates had even increased. She noted that education remained a critical factor to decrease motherhood at young ages in the region. Advances in the educational system and the increase over time in the proportion of women attaining higher levels of education explained most of the declines in fertility in the last 20 years, but the effects varied across countries. She argued that it was highly unlikely that there will be a reversal in adolescent fertility trends in the future.

Very different family structure patterns have characterized countries across the region. For example, data on parity distribution showed that approximately 10 per cent of women aged 45-49 were childless in Brazil, Colombia and Panama and few had three or more children while the opposite was the case in Mexico and Peru. Within countries, Ms. Cavenaghi showed stark differences in fertility patterns by education level and household income. It was not clear if these current differentials would persist and what the impact would be on future fertility patterns (perhaps more childless and one-child families?).

Contraceptive practice in the region occurred even in the absence of laws and regulations that could guarantee the right to universal access to reproductive health (e.g., restrictions on the types of contraceptive methods available or a heavy reliance on the private sector for contraceptive methods). Yet, even in the context of low fertility, there were still high levels of unwanted and mistimed pregnancies and births as well as high unsafe induced abortion rates. Addressing men's and women's reproductive health needs, especially for the poorest and the young, remained a priority in the region.

Ms. Cavenaghi concluded with several points on the new opportunities and challenges that fertility decline in the region presented. The major advances in women's education have now even reversed the gender gap in education in some countries and new policies were perhaps needed to address a male disadvantage in education. Changes in the age structure with fertility decline (i.e., lower dependency ratios of children and adolescents) facilitated increases in labour force participation, especially for women, and would perhaps enable reductions in unemployment and informality in the labour market. Challenges include health care and social security for an ageing population. She suggested that policies needed to strive for an actuarial balance (e.g., increase the minimum retirement age) rather than an explicit focus to raise fertility rates. She also noted that childrearing responsibilities in the region were still a long way from being equally shared by women and men and that bridging this gap involved

giving full access to sexual and reproductive health and rights to young people and bringing men on board as full co-participants in both childbearing and childrearing.

During the discussion, participants considered policies that supported childbearing. Mr. Sobotka pointed out that there had been more spending on family policies over the 1990s and 2000s across almost all countries in Europe. Many countries had a focus on increasing births, but in different ways. For example, in Eastern Europe there had been a return of traditional nationalistic pronatalism while in most European Union countries the focus was on creating conditions for women and men to have the children they wanted (as many women and men had fewer children than they desired). Such an approach included promoting gender equality in work-family balance and the household division of labour. Mr. Sobotka described a range of initiatives, such as:

- shorter but better paid parental leave (e.g., up to 100 per cent of salary for a maximum 1.5 years versus 3 to 4 years at lower pay);
- getting men more involved in childrearing (e.g., parental leave just for fathers and not transferable);
- increased availability of child care for children under the age of two.

The approach of providing birth bonuses (i.e., a lump sum upon the birth of a child) was usually expensive, not fiscally sustainable and showed no clear long-term results with respect to an increase in fertility. Participants noted that Governments did not accurately plan for the budget implications of many of the policies or programmes put into place to increase fertility.

The discussion then turned to ways to alter the household division of labour towards a more equal sharing of household tasks. Research showed that couples in more egalitarian households had more children than couples in less egalitarian households. One participant noted that there was little difference between men and women in Europe and their gender role attitudes. Rather, it was in the realization of those attitudes where issues arose. Men were increasingly spending more hours at work and women tended to be more educated than men in the region. Another participant suggested that given the high cost of rearing a child until adulthood in low-fertility countries, fertility might increase if the cost was more evenly divided between private and public sectors.

#### D. YOUNG PEOPLE AND THE TRANSITION TO ADULTHOOD

Ms. Caroline Kabiru (African Population and Health Research Center) gave an overview of the key transitions to adulthood that young people in sub-Saharan Africa (SSA) experienced with respect to education, employment, marriage and sexual and reproductive health. She noted that the region had the most youthful population in the world, that this will continue to be the case for the future and that a large population of young people presented opportunities for development. For youth in SSA, under-employment has been more of an issue than unemployment. Young people in the region were involved in income-generating activities that required minimal skills and yielding low incomes. Moreover, declining job opportunities existed even for educated young people. While access to basic education had expanded in the region, rapid population growth (driven by high fertility) placed sustained pressure on education resources. Schooling coverage was still unequal. For example, primary school net attendance was markedly lower in rural areas compared to urban areas and lower in the poorest 20 per cent of households compared to the richest 20 per cent of households. Gaps between skills and labour force needs had generally been driven by school dropout and the low quality of education.

Early marriage was still common in sub-Saharan Africa, mainly for girls, and was associated with a host of negative outcomes, including limited educational attainment, unintended pregnancy, HIV infection and violence by an intimate partner. There was also a rise in cohabitation and informal unions,

in part because of economic hardships that made paying for wedding-related expenses more difficult. These patterns, in combination with young ages at sexual debut and low levels of comprehensive knowledge about sexual and reproductive health and limited access to relevant services, were associated with high levels of adolescent childbearing and unsafe abortion throughout the region.

Ms. Kabiru suggested a range of policy approaches to address the challenges facing young people in sub-Saharan Africa. To improve employment opportunities, she reiterated that investments in the “basics of growth” (quality education, good governance, health services) were necessary. A strengthened private sector and funding schemes to support youth entrepreneurship were other promising avenues. To address the gap between skills and labour force needs, she described aligning school curricula content with where job growth was likely to happen and investing in formal and accredited vocational training programmes. Policy approaches to address the sexual and reproductive health needs of young people in the region included enforcement of laws that prohibit early marriage, implementing comprehensive sexuality education and improving access to sexual and reproductive health services by focusing on hard-to-reach groups of young people and going beyond youth-friendly services to include school-based programmes and mobile units.

Mr. Francesco Billari (University of Oxford) then presented on transitions to adulthood from the perspective of countries with low fertility, especially countries in Europe. The size of youth cohorts (ages 15 to 29 years) in these countries was fairly stable over the last few decades, though the proportion of young people as a share of the total population had declined. Net in-migration played an important role in maintaining the size of young adult cohorts in Europe (except Eastern Europe) and Northern America in the face of low fertility.

Mr. Billari showed evidence of a new pattern of the transition to adulthood. The traditional events that marked a transition to adulthood—leaving home, leaving school, a first job, first marriage and first birth—were increasingly postponed by young people and there was both a longer time period between key events and more diversity in their sequencing. In short, the transition to adulthood had become later, longer and more complex. Data from birth cohorts in Europe showed that young women from the birth cohort of the 1970s had an older median age at first marriage and first birth compared to earlier cohorts. There was much less delay in the age at first cohabitation compared to marriage, and leaving home was delayed in a couple subregions (Western and Southern Europe).

Did postponement in the transition to adulthood have consequences? Mr. Billari noted that this was an under-researched question. A study from Italy showed that leaving home one year earlier had the same effect on salary for adults in their mid-thirties as five months of additional education. With respect to fertility, the postponement of fertility in young adulthood had little effect on completed fertility in low-fertility countries as most childbearing behaviour was after age 30. The recent positive association between fertility and the human development index, at high levels of development, was related to a positive association between development and fertility after age 30 rather than with fertility at younger ages. Other evidence on the country-level association between total fertility and the age at leaving home showed a reversal over time such that fertility was lower in countries where home leaving happened later. Mr. Billari also showed that the current proportion of young people (aged 15 to 29) who were neither in employment nor in education (NEETs), ranged widely across OECD countries: from 7 per cent in the Netherlands to 35 per cent in Turkey.

Mr. Billari argued that the emerging pattern of late, protracted and complex transitions to adulthood in low-fertility countries was here to stay. Policies may counter-balance this pattern, but reversing the pattern was unlikely. Youth hardship in terms of late patterns of leaving home to live independently or delays in obtaining a first job following school-leaving were associated with child hardship and work-family imbalances. Policy environments that were youth-friendly also tended to be

woman- and family-friendly. He noted that ageing populations have led to ageing electorates, which implied more attention and stronger support for policies for older adults versus youth. In low-fertility countries the composition of youth cohorts had also shifted to include more immigrants. For example, in Spain the 2011 census showed that one in five 25 year olds had been born abroad. This compositional change raised issues of equality of opportunity for migrant and non-migrant youth as well as reduced eligibility and presented higher barriers to enact the right to vote. He concluded by noting that rising education levels of young women—even surpassing those of young men in many countries—will produce new cohorts of young women whose career aspirations were not compatible with an early and traditional transition to adulthood. In turn, gender equality would play an even more important role in shaping policies in low-fertility countries.

Discussion began on the similar dimensions of the transition to adulthood in both low- and high-fertility settings, including the role of immigration and economic hardship and the potential fertility implications of very early or very late transitions. Participants raised questions about the impact of housing availability, social norms about living as an adult in the parental home and the spread of mobile phones for sexual and reproductive health information and education. Ms. Kabiru pointed out that the pattern of leaving home in sub-Saharan Africa tended to be earlier among highly educated and higher income youth, and that civil society organizations had set up help lines to take advantage of cell phone use among young people and the need for sexual and reproductive health information. Mr. Billari remarked that housing availability mattered for home-leaving patterns and was also relevant for how countries have shaped systems of higher education. Participants noted that once a housing policy started, it was difficult to change it, though an illustrative case was also raised of recently proposed cuts to housing subsidies for young people (unless they were working). The discussion concluded with comparative views on cohabitation and marriage. In low-fertility countries, there was a wide spectrum of social norms on cohabitation and marriage (e.g., to marry without first cohabiting would be considered strange in Sweden and to cohabit without marrying would be considered strange in Singapore). On some aspects of the transition to adulthood, very different countries have begun to look more similar (e.g., Japan and the Republic of South Korea are similar to countries in Southern Europe in terms of delayed marriage and home-leaving).

#### E. LINKS BETWEEN FERTILITY, REPRODUCTIVE RIGHTS, WOMEN’S EMPOWERMENT AND GENDER EQUALITY

Ms. Monica Das Gupta (University of Maryland) focused on the impact of women’s greater control over childbearing and its timing on women’s empowerment and gender equality, and vice versa, in high-fertility settings. She pointed out that while increasing access to contraception was not explicitly intended to empower women, access to contraception enabled women to have greater control over childbearing and empowered women often quickly. Studies from countries at different levels of development showed that when more women had access to control over reproduction, there was higher female labour force participation and greater lifetime earnings. Lower fertility also helped improve women’s health through better maternal health services and reduced exposure to the risk of maternal mortality. The poorest women tended to reap the greatest benefits, and those benefits boosted their children’s human capital accumulation (schooling) and earnings as well. Greater investments were made in planned children when their mothers had more control over birth timing, and lower fertility and birth planning also enhanced children’s health, schooling and life chances.

Households with lower fertility also showed improvements in schooling, health and earnings. However, the strong preference for sons in several countries settings mitigated against lower fertility and investment in children. Research findings showed that parents were more likely to stop bearing children if they had a son (particularly in South Asia, Central Asia, the Middle East and North Africa), which meant that girls tended to have more siblings. Ms. Das Gupta also noted findings from other studies of resource

dilution that suggested that less was invested in girls because they had more siblings on average, regardless of whether parents favoured boys in the allocation of investments in children.

Common constraints to women's control over their childbearing were low decision-making power in the household, early childbearing and limitations on mobility outside the household. Exposure to early childbearing, either due to a tradition of child marriage or early initiation of sexual activity, not only constrained women's decision-making powers but also reduced school attainment and future earnings. Ms. Das Gupta pointed to a recent report issued by the United Nations Population Fund which showed that in developing countries, child marriage was three times higher for girls with no schooling than for those with some secondary schooling (63 versus 20 per cent) and over three times higher for those from the lowest wealth quintile than amongst the highest wealth quintile (54 versus 16 per cent). Other studies had found that orphaned girls married or initiated sexual activity earlier than other children, especially if they came from poorer households. In many developing societies, young women were not the primary decision-makers on key household matters, including childbearing. In some settings, women's mobility was restricted. When compounded by low literacy, the physical seclusion of women limited their access to information (except through mass media that reached their homes). In settings where contraceptive use was not yet commonplace, these constraints could constitute major barriers to its use.

Ms. Das Gupta indicated some of the ways that family planning programmes could respond to reduce these constraints and increase women's control over childbearing. For example, mass communication could change social norms and reduce opposition by spouses or elders to women's contraceptive use. Several studies found that media outreach was effective at increasing contraceptive use and lowering fertility. Community-based service delivery could help people to avoid travelling long distances to obtain contraceptive information and supplies, ensure uninterrupted access to low-cost contraception and have been effective where women's mobility outside of the home was limited. Ms. Das Gupta illustrated this approach with experiences from the Matlab programme in Bangladesh and the Lady Health Worker programme in Pakistan. In Bangladesh, rapid fertility decline occurred in villages where community workers provided regular doorstep delivery of family planning and maternal and child health programme inputs to women, compared to villages where women received regular government programme inputs. In Pakistan, the Lady Health Workers (LHWs), married women with at least eight years of schooling and residents of the communities in which they worked, brought reproductive health services to people's doorsteps in rural and poor urban areas. The data indicated that the LHWs were effective at expanding use of contraception and immunization uptake.

To address unintended childbearing among young women, Ms. Das Gupta noted that laws against child marriage had been in place for many decades in several countries, but the practice persisted for various reasons. Several countries had sought to incentivize families to keep their daughters in school and to postpone their marriage through programmes offering loans, scholarships, subsidies or conditional cash transfers. Subsidies and cash incentives had helped increase women's schooling. While these efforts and others aimed at empowering women may have an impact in the long-term, Ms. Das Gupta pointed out that simple interventions in family planning programmes (mass communication, community-based distribution, use of mobile phones) could also help empower women to assume greater control over childbearing.

Ms. Zoe Matthews (University of Southampton) presented on the impact of enabling people to exercise their reproductive rights and the new opportunities and challenges for further progress in the full exercise of reproductive rights. She noted that reproductive rights were broad and concerned with securing empowerment and entitlements of people to non-discriminatory, respectful, confidential, accessible and quality healthcare that responded to their needs. The reproductive rights of women had taken centre stage since the ICPD in Cairo. There was now recognition that reproductive rights included a variety of rights and responsibilities that could only be achieved through integrated approaches to

provision of services as well as by overcoming social, cultural and economic barriers that so often limited the exercise of rights. While progress had been uneven, particularly between regions, and among the most disadvantaged, in many areas significant progress had been made. Ms. Matthews pointed out that in order for reproductive decisions to be truly “free” required enabling conditions that could transform rights into capacities. Also, implementing a human rights-based approach required identifying rights-holders and strengthening the capacities to claim their entitlements from duty bearers obligated to deliver on those rights.

She argued that if reproductive rights were upheld, reproductive health would improve with potentially far-reaching impacts at the population level. However, the existence of rights in theory did not ensure the translation of those rights into capacities, choices, wellbeing and positive population impacts. Indeed, the ability to exercise reproductive rights (with regard to family planning, safe motherhood, reduced adolescent childbearing and safe abortion) was still lagging and inequalities were pervasive.

Ms. Matthews gave three examples of reproductive rights that had been extended and that had had far-reaching effects. Satisfying the unmet need for family planning accelerated fertility decline, ending unsafe abortion improved maternal health, and ensuring skilled attendance at birth benefitted the health of both mothers and their infants. These population-level impacts influenced, in turn, people’s socioeconomic wellbeing. Previous studies indicated that poor reproductive health outcomes limited the capacity at both the household and country levels to reduce poverty.

Challenges to enabling the full exercise of reproductive rights included poor quality of health care services, early marriage and low educational attainment among girls, domestic violence, and the limited power among many women and girls to make decisions on matters related to their health. Opportunities to make further progress on the exercise of reproductive rights included health system strengthening, support for a development goal for universal health coverage, the expansion of schooling opportunities for girls and young women, and the increasing use of accountability mechanisms. Ms. Matthews concluded that lessons from past successes showed that the targets to improve health and reproductive health must have a rights basis if continued progress were to be made in ensuring that all girls, women, young people and vulnerable groups were provided with the means in which to achieve their reproductive choices.

In the ensuing discussion, participants described the difficulties of showing a direct connection between the exercise of reproductive rights and population-level impacts and of specifying and empirically measuring women’s empowerment and rights. Some participants questioned the utility of a rights-based approach in determining the allocation of resources and to what degree obligations were the responsibility of States versus individuals. Ms. Matthews pointed out that a rights-based approach enabled an environment where people were aware that they were entitled to have something and that it was clear who was obliged to provide it. There was consensus that reproductive rights were broad and assessing their population-level impacts was an enormous exercise. Participants emphasized that a human rights approach was important in empowering women and that having fewer children did not necessarily translate into gender equality, as there were low-fertility countries that had unequal gender relations.

F. KEY CHALLENGES AND OPPORTUNITIES FOR FURTHER PROGRESS IN IMPROVING LIFE EXPECTANCY AND RESPONDING TO IMPLICATIONS OF FERTILITY TRENDS FOR THE GLOBAL DEVELOPMENT AGENDA

On Tuesday, 22 October 2013, participants in the two expert group meetings joined together once again to engage in discussion of key challenges and opportunities for further progress in improving life expectancy and responding to implications of fertility trends for the global development agenda. The intent of the joint sessions was to take advantage of synergies between the two substantive expert groups and ultimately to guide the substance and recommendations with respect to current and future fertility and mortality trends to be included in the 2014 report of the Secretary-General on World Demographic Trends.

Mr. Alberto Palloni (University of Wisconsin – Madison) summarized the most salient points discussed in the mortality meeting, organizing his comments around the key health and mortality concerns that applied to the various stages of life. On mortality in childhood, although some parts of Africa, Asia and Oceania lagged behind, enormous progress had been achieved in reducing mortality risks among children ages 1 to 4. These successes were attributed to expanded vaccination coverage and widespread use of effective treatments for some of the major infectious diseases of childhood. With reductions in child mortality, a growing proportion of child deaths were occurring in the neonatal period (the first month of life), a time during which mortality risks tended to be especially difficult to address. Women’s nutrition, prenatal care and delivery care were identified as promising avenues for continued reductions in both child and maternal mortality, recognizing the strong links between women’s health and neonatal mortality.

In order to leverage past successes to address remaining challenges on child mortality, new tools and research were needed. Decomposition tools could point to which causes of death need to be addressed to improve survival. New indicators could be developed to account for demographic shifts that influence the risk of child mortality. It might be useful, for example, to track child mortality risks by parity, since as fertility rates fell the proportion of high parity births declined and high parity births tended to be associated with greater mortality risks. Geographical differences in risk of child death, including the variable risks in peri-urban areas, also merited further examination.

On adolescent health, a priority need was for better indicators to track adolescent health and mortality risks over time. Demographers tended to focus on the age group 15-59 years when discussing mortality risks in early- and middle-adulthood, but this broad range was not particularly useful to those working to identify priorities to improve adolescent health and survival. Indicators disaggregated for the age groups 10-14 and 15-19 were needed to better understand the needs of adolescents. Indeed, the health concerns of adolescents increasingly were recognized as important to national and global health agendas given that many of the important risk behaviours that led to morbidity and mortality later in life—such as tobacco use, poor nutrition, physical inactivity and the harmful use of alcohol—tended to be established in adolescence and young adulthood. The incidence of injury and death associated with accidents and violence among adolescents was also cause for concern, and gender differentials associated with culture played an important role in shaping those risks.

The age range 15-59 was a crucial period to address women’s health, not only to reduce the risk of morbidity and mortality associated with reproductive and maternal conditions, but also to address the circumstances that increased women’s risk of chronic diseases. Exposure to indoor air pollution, for example, was responsible for a substantial portion of the burden of respiratory diseases in adult women. Insufficient access to diagnosis and treatment of certain diseases like breast cancer was also identified as a priority area to address to improve the health and survival of women.

With respect to health and mortality risks among adults over age 60, life expectancy at age 60 tended to progress linearly over time and an open question was whether there was much room to accelerate that progression. Addressing risk factors associated with chronic diseases such as diabetes and cancers offered some opportunity for intervention. Many of the countries in the midst of their epidemiologic transitions faced a double burden of infectious and chronic diseases.

Mr. Palloni concluded that precisely which types of interventions could be effective to accelerate improvements in health and survival remained unclear. Gains to be made from investing in maternal and child health interventions were more certain than those that aimed to address adult mortality more generally. Evidence for the effectiveness of incentive-based interventions was sparse, and there was a host of ethical issues to consider before recommending this type of policy approach. Information, education and communication interventions seemed not to be effective, and while there was strong evidence for the impact of regulatory action on alcohol use and taxation on tobacco use, it was unclear whether similar actions would be effective for other risk factors, such as unhealthy diet. Some participants suggested that successes in combating and treating HIV/AIDS offered some good practices that could potentially be adapted to address other health concerns. Others noted that the evidence on mortality risks among adults was even sparser than that for children and where it did exist, it focused primarily on maternal health.

Ms. Monica Das Gupta (University of Maryland) presented a summary of the key points from the fertility meeting. The first issue, given that most of the countries still experiencing high fertility were in sub-Saharan Africa, was whether fertility trends in this region were unique compared to other regions. Sub-Saharan Africa has had slightly higher pre-transitional fertility levels, a much later onset of the fertility transition and a slower pace of fertility decline. Moreover, the fertility transition in sub-Saharan Africa began at lower levels of development than when it began in other regions. Fertility stalled in mid-transition for some countries, a pattern that had rarely been observed in other regions. Future prospects for change rested on investments in girls' education and family planning programmes.

A swift and continuous fertility decline can produce a sharp change in the age structure of a population with a rise in the number of working-age adults relative to the numbers of children and elderly adults. Sub-Saharan Africa was facing several opportunities and challenges to reaping the potential economic benefits from relatively large cohorts entering the working ages (i.e., a demographic dividend). Countries in the region that were still early in their fertility transitions or had experienced stalled transitions were not yet in a position to realize the potential benefits of a demographic dividend. Countries in which fertility declines had occurred disproportionately among high socio-economic status groups often had difficulty mobilizing resources to invest in their young people.

The traditional policy levers, including investment in education and family planning, needed to be refined in order better address the challenges facing youth in the region, especially unemployment and under-employment, the gap between skills and jobs, early marriage among girls and limited sexual and reproductive health services for youth. Such refinements included, for example, managing the transition from school to work. Several years lapsed between the end of schooling and the beginning of the first job for young people in many countries. Some of the potential unintended consequences of increased investment in education were also noted, such as when disparities in school quality opened up new levels of inequality in a country or if lowering the cost of education to families bolstered high fertility rates.

In other regions of the world, fertility had declined to low levels but followed different pathways that raised questions about the implications of lower fertility for transitions to adulthood (e.g., moving out from the parental home, marrying, having a child or obtaining a job). In Europe, fertility declined to below-replacement levels in the 1990s, recuperated somewhat in the 2000s and experienced further declines after the 2008 economic crisis. Policies to influence fertility tended to be either explicitly pronatalist and nationalistic or focused on creating conditions for women and men to have the children

they wanted by promoting gender equality in the home and work-family policies. In Europe, a new pattern of transitions to adulthood had taken root, one that was late, protracted and complex. Marriage and parenthood were postponed more so than entry into union. In addition, delayed transitions to adulthood had implications for individuals' economic achievement later in life.

In Latin America and the Caribbean, most countries were moving towards or had reached low fertility but the region was unique in that high levels of childbearing at young ages continued and this was connected, in part, to inequalities in schooling. There was also some evidence of a growing, voluntary retreat from childbearing. Asia was a region where some of the most rapid declines in fertility had occurred (the Islamic Republic of Iran was an example), and where recent efforts to increase fertility had not yet shown results. Countries in Asia were still generally characterized by low rates of cohabitation but diverse patterns in age at marriage. Meeting participants noted other conditions influencing the transition to adulthood: housing availability and prices; technology, such as the use of mobile phones to increase young people's access to sexual and reproductive health information; and culture, which dictated which paths through cohabitation, marriage and childbearing were socially acceptable.

Gender was an important dimension to consider in understanding the drivers of trends in fertility and the transition to adulthood. Youth-friendly societies also tended to be woman-friendly and family-friendly. Some evidence pointed to reversals in gender inequality in education (i.e., more girls achieving high levels of schooling than boys), such as in Europe and Latin America, that could potentially affect trends in union formation and childbearing. Furthermore, some research indicated that couples in more egalitarian households tended to have more children than couples in less egalitarian households.

Ms. Das Gupta closed with a summary of the population-level benefits of empowering women and enabling people to exercise their reproductive rights. When women had access to better control over reproduction they tended to obtain more schooling, have better job prospects and achieve higher lifetime earnings. Studies showed that the poorest women tended to reap the greatest benefits and that those benefits boosted their children's human capital accumulation and earnings as well. Satisfying the unmet need for family planning accelerated fertility decline, ending unsafe abortion improved maternal health, and ensuring skilled attendance at birth benefitted the health of both mothers and their infants. She noted that taking a rights-based approach to fertility and reproductive health meant being prepared for people to exercise their preference to have more children instead of fewer.

Following the two expert group summary presentations, an interactive discussion coalesced around three key issues of relevance for both fertility and mortality levels and trends: 1) how to organize the discussion of demographic trends to better explain the different challenges and priorities of countries at various levels of fertility and mortality; 2) how to consider incentive-based programmes that aim to address challenges posed by current demographic trends, in the context of existing ICPD language; and 3) whether the expert group wanted to recommend that countries set new targets in order to accelerate progress in health, survival, and universal access to reproductive health, including family planning.

Participants from the fertility meeting appreciated the life course approach used to organize the discussion of global health and mortality trends and challenges, but they noted that a similar approach did not lend itself to the discussion of fertility trends and challenges. For mortality, reducing mortality rates was a universally shared goal, but with respect to fertility, some countries were interested in lowering fertility rates while others aimed to raise fertility rates. Furthermore, while the mortality transition seemed to be constrained by an upper-limit on the length of life, the end of the fertility transition was unknown.

One promising approach to organize the fertility discussion entailed classifying countries according to their fertility level and the potential consequences for families and the economy. The challenges and priorities of countries with persistently high levels of fertility were different from those of

countries with fertility around the replacement level, which, in turn, were different from those of countries with fertility rates well below the replacement level. However, one challenge to a classification drawn along levels of fertility was that those levels tended to change over time, and even countries with below-replacement level fertility could experience increased fertility (e.g., periods of low fertility were driven, in part, by tempo effects that eventually subsided).

The discussion then turned to consider the potential utility of incentive-based programmes that aimed to improve access to or use of health care services, including reproductive health services and family planning. Mr. Wilmoth called participants' attention to paragraph 7.22 of the ICPD Programme of Action, which read "Governments are encouraged to focus most of their efforts towards meeting their population and development objectives through voluntary measures rather than schemes involving incentives and disincentives." He asked whether revisiting the recommendations with respect to incentive-based programmes was worthwhile in light of the changes that had taken place in the twenty years since the ICPD.

Participants recalled that the specific language quoted from the Programme of Action was borne of a history of abusive government policies with respect to family planning in some countries. The sterilization incentive programme implemented in India in the late 1970's, for example, was ethically inappropriate, since the payments to those who underwent the procedures were large enough to be considered coercive and the procedures themselves resulted in irreversible changes to the patients' bodies. In general, participants agreed that while some incentive programmes could be effective, they needed to be designed on a local level, taking into account contextual and cultural factors, and with careful and closely-monitored implementation.

Mr. Dow described several types of incentive programmes—such as subsidies, conditional cash transfers and performance-based financing for providers—with the common thread being that each aimed to lower the price of a behaviour. Programmes that subsidized the price of visiting a doctor or purchasing a medication or family planning method could all be considered incentive-based and were widely implemented around the world. Initiatives that lowered the price below zero, thereby paying people, were less common and tended to be more fraught with concerns about coercion. There was some evidence that conditional cash transfer programmes tied to behaviours like attending antenatal care visits, well-child checks, and talks that disseminate information on family planning were both successful in influencing behaviours and cost-effective. Financial incentives around provider quality, such as ensuring that they stocked supplies of a range of family planning methods or counselled a minimum number of women, were also considered, although some worried that the incentives could encourage providers to act in a way that was not in the best interest of the patient.

Participants noted that incentive programmes were common in many areas of health policy. For example, health care costs were frequently subsidized by Governments and incentive programmes for smoking cessation had been implemented in multiple contexts. Participants suggested that regulatory actions could also be considered incentive programmes. Laws that prohibited recreational drug use, for example, provided a disincentive by threatening punitive action for illicit behaviour. Outside of health policy, tax rates that varied according to marital status could be considered incentive programmes as well.

Some participants emphasized that incentives should be used only to help move people in the direction that they already wanted to go, thereby improving the outcome from both the individual and policy perspectives. Others wondered if externalities could be a consideration in whether to implement incentive-based programmes. If an individual's behaviour had negative externalities for others, was it appropriate to incentivize a change in behaviour even if the individual did not already desire to change?

Participants expressed concern that carrying over incentive programmes from other health policies into family planning risked compromising the principles of the ICPD. It was deemed different to incentivize smoking cessation, for example, than to incentivize limiting fertility or having additional children. Examples of family planning incentives that would move people in the direction that they already wanted to go included to lower the cost of contraception for women who did not want more children and to lower the cost of childrearing for those who did want more children. It was more controversial to consider paying people to use particular methods of contraception, since there was a substantial risk of coercion. One possible approach to minimize coercion in incentivizing family planning was to keep the amounts of the payments very small. Research had indicated that small incentives, called “nudges”, could help people to overcome barriers (such as transportation costs or the tendency for procrastination) in order to carry out their wishes with respect to family planning.

The discussion also considered how incentive-based programmes were being utilized in several low-fertility settings in order to encourage families to have more children, an issue that was growing in prominence since the ICPD. Policies included payments for the birth of a child and subsidized child-care and education costs, among others. One participant observed that in some countries of Western Europe the rhetoric around fertility policy seemed to emphasize enabling people to fulfil their wishes with respect to family size, but that in parts of Eastern Europe the pronatalist policies were explicitly driven towards incentivizing higher fertility.

Participants agreed that any use of incentives needed to be rooted in a human rights framework that aimed to eliminate barriers that stand in the way of improved health and well-being. The four dimensions of human rights standards in regard to the right to health—accessibility (including affordability), availability, acceptability, and quality—were cited as central to designing and implementing effective policies for health and family planning. In that regard, it was important to consider whether incentive-based programmes were the best use of resources for a given setting, especially when progress was still lagging in ensuring good quality of care. Participants noted that poor quality of care was often a disincentive itself (e.g., lack of information, counselling and availability of different contraceptive methods led to a higher likelihood of method discontinuation and of not seeking a replacement method). Some participants expressed concern that the incentive programmes could prove unaffordable or unsustainable, and could appropriate resources that were otherwise needed to improve health systems more generally.

The discussion then shifted to whether the expert groups wanted to recommend that countries aspire to particular targets with respect to health, mortality and fertility into the future. On health and mortality, one participant emphasized that while enormous success had been achieved in recent decades on water and sanitation, it was important to establish new targets in order to continue that momentum. It was noted that economic analysis deemed water and sanitation infrastructure projects to be less cost-effective relative to other interventions to reduce diarrhoeal diseases. There was interest in establishing new methods and means of evaluating cost-effectiveness over time and space.

Some participants expressed concern about the role of obesity in current and future trends in the burden of morbidity and mortality. Whereas taxation policies had succeeded in reducing tobacco use in some countries, in others they were ineffective and it was not clear whether such tax policies could be successfully extended to incentivize shifts towards healthier diets. The potential for interventions in the built environment was offered as a potential avenue to reduce physical inactivity and obesity, although like water and sanitation projects, such urban infrastructure projects tended to be costly. A target on traffic hours in urban areas was suggested as a possible means to incorporate concerns about physical inactivity and obesity into the development agenda.

Participants noted that policies and targets related to non-communicable diseases (NCDs) needed to be sensitive to the particular epidemiological context. Countries that were challenged by double burdens of disease (high burdens of infectious and non-communicable diseases) or even triple burdens (infectious diseases, NCDs and injuries) needed policies that addressed their needs. Contrary to a common belief that infectious diseases and maternal causes needed to be addressed before addressing NCDs, participants emphasized a need for a more coherent framework that acknowledged the concurrent burdens caused by different types of health conditions at the individual, household and population levels. Participants suggested that decomposing changes in morbidity and mortality by region or by urban/rural geography could identify areas where the epidemiological changes were happening independent of the demographic transition, and thus pinpoint priority areas for intervention.

On the issue of fertility policy and targets, participants emphasized the need to keep a rights-based focus, ensuring that individuals and couples are able to decide freely and responsibly the number and spacing of their children, in line with the language of the ICPD Programme of Action. With that in mind, there was a need to promote voluntary family planning in all countries to address persistently high levels of unmet need. Furthermore, there was a need to ensure that the barriers to having children were not too high for individuals and couples that wished to have children. Participants agreed that the World Demographic Trends report should describe the symmetrical situation in high-fertility and low-fertility contexts and provide some guidance as to what types of interventions were appropriate.

#### G. PERSPECTIVES ON HOW TO IMPROVE ACCESSIBILITY AND UTILIZATION OF DATA AND EVIDENCE FOR POLICYMAKERS

The interactive discussion on perspectives on how to improve accessibility and utilization of data and evidence by policymakers sought to answer the following questions: Is the utilization by policymakers of health and population data and evidence more of a supply or demand issue? What are the gaps between policymakers' needs and data availability? What innovative strategies are there to get data and evidence to be used by policymakers?

In her presentation, Ms. Kirsty Newman (Department for International Development (DFID), United Kingdom) described her organization's experience in working to improve the use of evidence in policy-making. Many research findings ended up on shelves or in peer-reviewed journals and were not, in the end, used by policymakers or other types of decision-makers. One approach to increase the utilization of research in policy decisions was to develop the capacity of and opportunities for researchers to communicate their research findings via such mechanisms as advocacy, lobbying or writing policy briefs, and to evaluate researchers by the impact that their research had on policy decisions. She noted two dangers of this approach. The first danger was that researchers might then pay less attention to conducting good quality research and instead spend more time lobbying, advocating and promoting their research findings. The second danger was that researchers would provide evidence to policymakers in an oversimplified way, with the risk that policymakers would merely accept the research findings as presented instead of engaging the researchers and interrogating the data. Ms. Newman suggested an alternative approach to encourage the use of research evidence at two different levels. First, senior officials who could champion the use of research evidence should be identified and engaged in order to obtain political buy-in. Second, working relationships with and training of the technical support staff whose role was to synthesize and understand the research on behalf of their superiors should be established. DFID was working in several countries on how to integrate research into policymaking using this alternative approach.

Mr. Hans Rosling (Karolinska Institutet and Gapminder Foundation) gave a presentation on his experience in communicating population data to diverse lay audiences. He was astonished at how many people in the world lacked basic knowledge of population facts and trends. The problem was not ignorance but rather pre-conceived ideas, which were often at odds with the data, and the inability or unwillingness to look to the future. Population estimates and projections could generally be trusted. For example, he showed that the current estimate of world population was discrepant by only four per cent from the population projections made for the current period by the Population Division in the early 1960s. Hence, the problem with getting evidence on population trends to be utilized by policymakers was not so much a problem with the data themselves, but with the manner in which data were communicated.

Population issues must be communicated in simple terms. He demonstrated how a complicated concept of population momentum could be explained by the “inevitable fill-up” of adults for many years in the future that would occur even if every couple decided immediately to have only two children. Mr. Rosling also emphasized that it was no longer tenable to dichotomize the world into “developed” and “developing” regions or countries. Countries classified as developing now differed substantially from one another on multiple demographic and development indicators. Continuing to lump them together as a group perpetuated widespread misunderstanding of the substantial progress in development achieved in recent decades. He strongly encouraged all colleagues to stop using this dichotomy.

In the discussion that followed, participants acknowledged that it was possible for researchers to be partial to their own work or areas of research, and that civil servants who could assess, synthesize and communicate research findings played an important role in informing policymakers. Another issue raised was that the use of data in many countries was impeded by policymakers fatigued by advocates from other countries who pushed for specific priorities without considering the budget implications. Researchers who lived in the country and who could work in the capacity of “in-house adviser” to policymakers could improve the utilization of research in policy decisions. One participant raised the example of the Council of Economic Advisers, an agency within the Executive Office of the President of the United States of America, where researchers served for a short defined period to analyze and interpret research evidence and provide economic policy advice that included recommendations for sound policy ideas and to stop bad policy ideas from advancing. Others noted that the demand for research did not necessarily mean a demand for “new” research but also the ability to use existing research.

Discussion then turned to whether the need for improved data (their accuracy and coverage) was meriting sufficient attention and resources from the international community. For example, the Secretary-General’s High-Level Panel of Eminent Persons on the Post-2015 Development Agenda called for a “...data revolution for sustainable development, with a new international initiative to improve the quality of statistics and information available to citizens”. Some participants noted that there had been little research on how to improve civil registration and that more efforts were needed in this area. Improving civil registration for valid cause-of-death attribution was more resource-intensive than improving the coverage of birth and death certification. While divergent views emerged on the priority of intensive investments to obtain complete civil registration data in settings where it is severely lacking, there was agreement that countries should develop their own integrated data systems, including civil registration, surveys and censuses and strengthen their capacities to collect, analyze and disseminate their own data. The discussion ended with the recognition that, as researchers, the topic had drifted from utilization of data and evidence by policymakers to the availability and quality of data, an area that was perhaps more comfortable for researchers. Participants acknowledged that the concrete suggestions provided by Ms. Newman and other experts on improving data and evidence utilization and the communication points made clear (and in a lively manner) by Mr. Rosling merited action.

In summary, the presentations and discussion indicated that improving the utilization of health and population data and evidence by policymakers was more of a supply issue, impeded in part by the lack of simplicity in presenting and explaining the data and the lack of opportunities for focused engagement and critical interrogation of research by policymakers and working-level staff that could synthesize research evidence for policymakers. The data needed to be presented in clear and jargon-free ways by, ideally, credible, independent and resident technocrats, and prioritized in consideration of national and local budgets. Academic researchers or experts could be embedded within national and local legislatures, line ministries and other relevant policymaking bodies to work with technical personnel tasked to synthesize and understand research analyses on behalf of their superiors.

#### H. CONCLUSION

The Director of the Population Division thanked all participants for their active engagement and noted that their inputs would be used in preparations for the forty-seventh session of the Commission on Population and Development in April 2014. The final versions of the background papers that experts had prepared prior to the meetings would be made available on the Population Division website for Member States and the general public to access. The new fertility and mortality-related issues and trends and related policy actions that were raised at the meetings would be taken into account during the preparation of the Secretary-General's report on World Demographic Trends, which would be prepared as part of the documentation for the next session of the Commission on Population and Development.



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**UNITED NATIONS EXPERT GROUP MEETING ON  
“FERTILITY, CHANGING POPULATION TRENDS AND DEVELOPMENT: CHALLENGES  
AND OPPORTUNITIES FOR THE FUTURE”**

United Nations Secretariat  
Department of Economic and Social Affairs  
Population Division  
New York, 21-22 October 2013

**PROVISIONAL ORGANIZATION OF WORK**

**Monday, 21 October**

9:00 – 10:15 (Joint with Expert Group Meeting on Priorities for Improving Survival: ICPD  
Beyond 2014)

**1. OPENING OF THE MEETING:** John Wilmoth, Director, Population Division

**2. OVERVIEWS OF TRENDS IN MORTALITY AND FERTILITY SINCE ICPD:**

Cheryl Sawyer, Mortality Section, Population Division

Vladimira Kantorova, Fertility and Family Planning Section, Population Division

10:15 – 10:25 Break

10:25 – 11:40

**3. Fertility trends in high- and intermediate-fertility countries**

- How exceptional is the pattern of fertility decline in sub-Saharan Africa and what makes it likely to continue or change?  
*Expert:* John Bongaarts (Population Council)
- What challenges and opportunities are faced by high- and intermediate-fertility countries in reaping a “demographic dividend” from fertility decline?  
*Expert:* Parfait Eloundou-Enyegue (Cornell University)
- Moderator: Amson Sibanda (Division for Social Policy and Development/DESA)

11:40 – 11:50 Break

11:50 – 13:30

#### **4. Different pathways to low fertility and effective policy approaches to address low fertility**

- Perspective from Europe  
*Expert:* Tomáš Sobotka (Vienna Institute of Demography)
- Perspective from Asia  
*Expert:* Mohammad Jalal Abbasi-Shavazi (University of Tehran and Australian National University)
- Perspective from Latin America  
*Expert:* Suzana Cavenaghi (National School of Statistics, Brazilian Bureau of Census)
- Moderator: Ralph Hakkert (UNFPA)

13:30 – 14:45 Lunch

14:45 – 16:00

#### **5. Young people and the transition to adulthood**

What are current challenges to young people's transitions to adulthood (family formation, human capital and sexual and reproductive health) and policy prospects to address them?

- Perspective from a high-fertility context  
*Expert:* Caroline Kabiru (African Population and Health Research Center)
- Perspective from a low-fertility context  
*Expert:* Francesco Billari (Oxford University)
- Moderator: Sajeda Amin (Population Council)

16:00 – 16:15 Break

16:15 – 17:30

#### **6. Links between fertility, reproductive rights, women's empowerment and gender equality**

- What are the key policy-relevant ways that women's empowerment and gender equality have influenced fertility trends and vice versa? What should we expect for the future?  
*Expert:* Monica Das Gupta (University of Maryland)
- What are the population-level impacts of enabling people to exercise their reproductive rights, and the new opportunities and challenges for further progress in the full exercise of reproductive rights?  
*Expert:* Zoe Matthews (University of Southampton)
- Moderator: Patience Stephens (UN-Women)

#### **7. CLOSING OF DAY 1 AND GUIDANCE FOR DAY 2**

- Moderator: Francesca Perucci (Population Division)

**Tuesday, 22 October (joint with Expert Group Meeting on Priorities for Improving Survival: ICPD Beyond 2014)**

9:00 – 11:00

**1. SUMMARIES AND INTERACTIVE DISCUSSIONS:  
KEY CHALLENGES AND OPPORTUNITIES FOR FURTHER PROGRESS IN IMPROVING LIFE EXPECTANCY  
AND RESPONDING TO IMPLICATIONS OF FERTILITY TRENDS FOR THE GLOBAL DEVELOPMENT  
AGENDA**

Two experts will present their views of the key points arising from the first day of each expert group meeting. Participants will engage in an interactive discussion on the key findings from the meeting, including the prioritization of issues for the global development agenda moving forward and of effective policy responses for shaping future population trends. The discussion will also identify promising future research directions.

*Experts:* Alberto Palloni (University of Wisconsin, Madison) and Monica Das Gupta (University of Maryland)

Moderator: John Wilmoth (Population Division)

11:00 – 11:15 Break

11:15 – 13:00

**2. INTERACTIVE DISCUSSION:  
PERSPECTIVES ON HOW TO IMPROVE ACCESSIBILITY AND UTILIZATION OF DATA AND EVIDENCE BY  
POLICYMAKERS**

- Is getting health and population data and evidence to be used by policymakers more of a supply or demand issue?
- What are the gaps between policymakers' needs and data availability?
- What innovative strategies are there to get data and evidence to be used by policymakers?

*Experts:* Kirsty Newman (DFID) and Hans Rosling (Gapminder Foundation)

Moderator: Francesca Perucci (Population Division)

13:00 – 13:30

**CONCLUSIONS AND FUTURE DIRECTIONS:** John Wilmoth, Director, Population Division

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*UN/POP/EGM-FERT/2013/INF.4*

21-22 October 2013

ENGLISH

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**UNITED NATIONS EXPERT GROUP MEETING ON  
“FERTILITY, CHANGING POPULATION TRENDS AND DEVELOPMENT: CHALLENGES  
AND OPPORTUNITIES FOR THE FUTURE”**

Population Division

Department of Economic and Social Affairs

United Nations Secretariat

New York

21-22 October 2013

**PROVISIONAL LIST OF PARTICIPANTS**

## LIST OF PARTICIPANTS

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