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# **Population dynamics and Sexual and Reproductive Health and Rights**

## What, why, and how to be addressed

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# Introduction

By the close of this century, our planet will be home to some 11.2 billion people, which is a 50% increase compared to today. This growth will take place disproportionately: the population in some regions and countries, such as (Eastern) Europe and Japan, will be declining while in Sub-Saharan Africa the population is likely to quadruple. Population dynamics evidently have an effect on education, health and the economy, countries' stability, as well as that of ecosystems and migration flows. Some of the most important drivers of rapid population growth are: high fertility rates, early pregnancy and higher life expectancy.

In this paper we aim to examine population dynamics, its consequences and drivers and specifically the link to Sexual and Reproductive Health and Rights (SRHR). The paper is divided into four sections. Section 1 provides an overview of population dynamics and its consequences at macro level. The second section focuses on micro-level drivers, and specifically the link between population dynamics and SRHR. We present a historic overview of population programmes in Section 3, and end the paper with an exploration of future programmes.

# 1 Population dynamics

By mid-2017, the world counted nearly 7.6 billion people, a strong increase from 2.5 billion in 1950 and 4.4 billion in 1980. Population growth is slowing down though. Whereas a decade ago the population grew by 1.24% per year, growth has been reduced to 1.10% today, an increase of 83 million people annually. Prospects point to 9.7 billion inhabitants in 2050 and 11.2 billion in 2100. Population including its growth is unevenly spread across the globe. Currently, 60% of the world's population lives in Asia, with India and China being the two largest countries in the world (UN-DESA, 2017). This picture will change in the future due to uneven growth rates. Europe and East Asia are characterized by decline and the Americas are experiencing little growth. Substantial growth is expected in the least developed regions of South and West Asia (including India and Pakistan) and North Africa (e.g. Egypt). By far, the largest increase in population growth will be found in Sub-Saharan Africa. The African population is expected to double from 1.2 today to 2.4 billion in 2050 and even to 3.9 billion in 2100 (UNICEF, 2014).

These differences in growth rates can be explained by the demographic transition theory, describing a country's transition from high fertility and high mortality to low fertility and mortality. In a pre-transition stage, both birth and death rates are high and population growth is low. During the early-transition phase, improved living and health conditions result in falling death rates, but fertility rates remain high, resulting in rapid population growth. In the third – late transition – stage, fertility rates drop as well and both birth and death rates are in equilibrium again, but at a much lower level compared to the pre-transition phase. More recently, a fourth stage has been added to the model describing population decline as fertility rates have dropped below replacement level (UNFPA, 2014a).

These different phases have huge implications for age structures and therefore to the ratio between working and dependent population (below and above working age), known as the support ratio. In phase 2, with declining mortality rates and high fertility, the population is characterized by a large share of young people, and as such the group of dependent people is relatively large compared to the working age population (see Figure 1: Bulgaria in 1950 and Niger from 2015 onwards). When a country moves to phase 3 and a population bulge occurs with fewer children, then their own cohort, the working-age population, becomes relatively bigger than the younger base (see Figure 1: Bulgaria in 2015), and hence the ratio between the working and dependent population reverses. When life expectancy increases further and birth rates remain low, ageing occurs. Currently, Europe and Japan have the highest proportion of people aged over 65, and a declining population is foreseen, placing them in the fourth stage. Several higher, and middle income countries (including, for example, Asian tigers), can be placed in the third phase. This phase is characterized by a large group of working population. Most sub-Saharan countries and several Asian countries are in phase 2. Although mortality rates have dropped significantly, fertility decline has been slow. The ten countries with the highest fertility rates are found in Africa. The continent's average is 4.7 children per woman, but there are strong differences between countries (up to 7.6 children per woman in Niger) (PRB, 2014), as well as within countries. Especially educated women have on average fewer children (Canning *et al.*, 2015). The differences between phases 2 and 4 is also clearly reflected in the median age: Japan has the oldest population with a median age of 46.5 years (i.e. 50% of the population is younger than 46.5 years), and Niger the youngest with a median age of 14.8 years (UN-DESA, 2015a, pp. 32).

## Population growth

### Strongest increase:

1. Niger (4.01%)
2. Uganda (3.22%)
3. Burundi (3.21%)
4. Chad (3.15%)
5. Angola (3.12%)

### Strongest decrease:

1. Bulgaria (-0.76%)
2. Romania (-0.69%)
3. Lithuania (-0.59%)
4. Latvia (-0.53%)
5. Ukraine (-0.52%)

2015-2020 estimates.

Source: UN-DESA 2015b

## 1.1 Public services

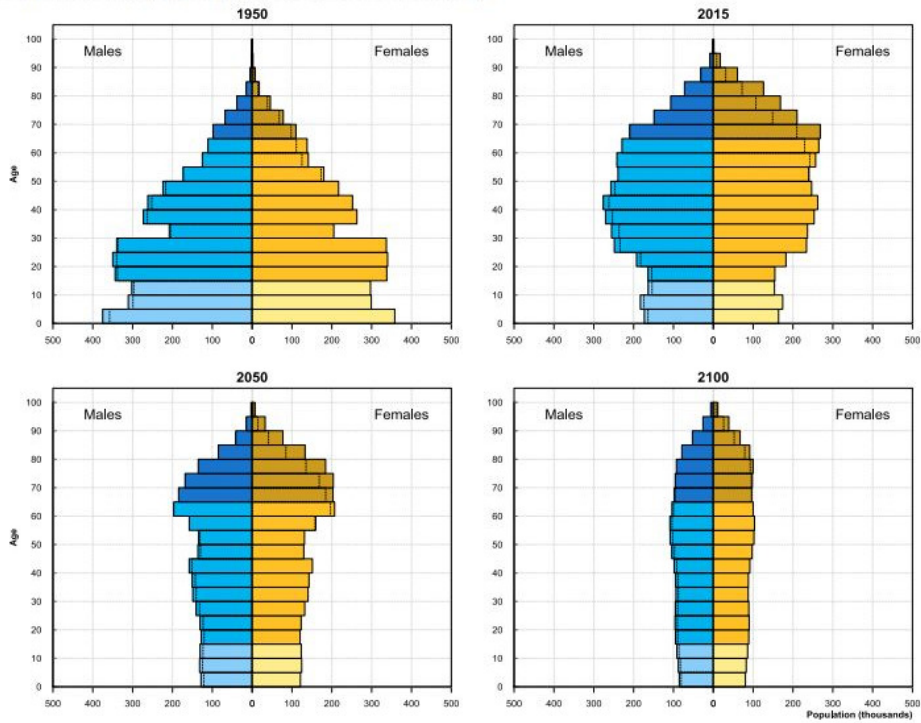
Population growth and age structure have implications for the demand for public services. People below and above the working age, the dependent group, are net consumers. They have the highest need for public services such as education (for the youngest group) and health care (especially the older population). Although most African countries have shown impressive increases in educational enrolment rates over the past two decades, and the share of government expenditure on education has slightly increased as well (AAI, 2015), the combination of increased enrolment rates and rapid population growth puts pressure on the educational system. Quality of education falling behind (e.g. due to insufficient qualified teachers to meet growing demand for education), low enrolment in secondary education and a lack of vocational training are the most important challenges. Similarly, many countries report a shortage of skilled health workers (Kinfu et al., 2009), which makes it difficult to meet the growing demand for healthcare services. Not only population growth creates challenges for the healthcare system, an ageing population does so as well. Moreover, it leads to pressure on the pension system. Where birth rates are low and societal safety nets weak (e.g. China), life will be difficult for the elderly.

## 1.2 Economic development

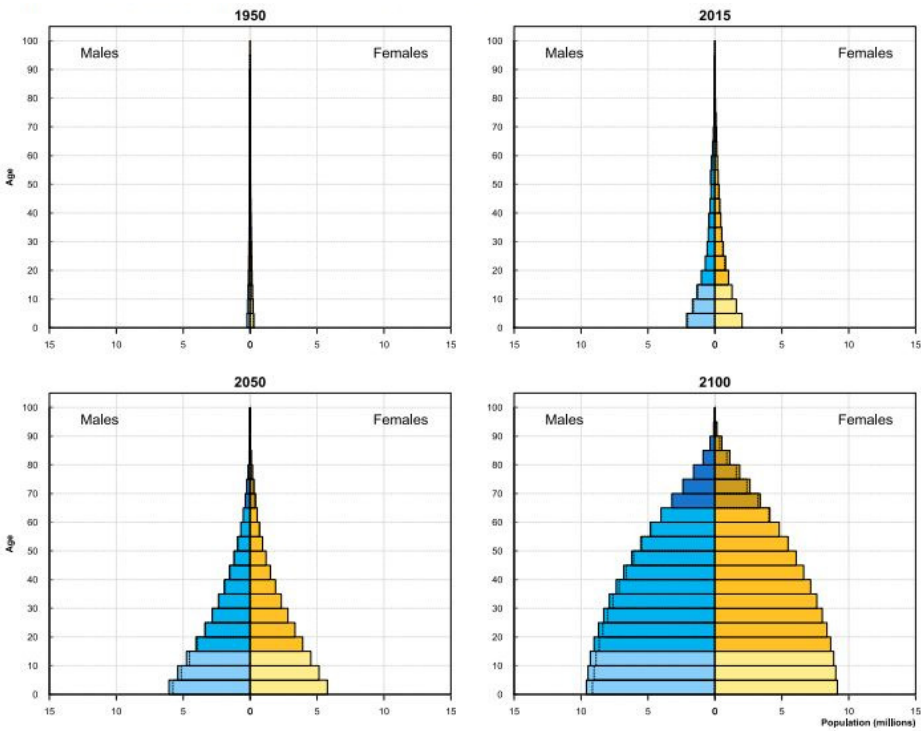
The age structure is also a strong factor in economic development. The support ratio indicates if a country's population is a net producer or consumer. In a country with a large dependent population, consumption will be higher than production, hindering economic growth. When the population bulge enters the work force and fertility levels drop, a window of opportunity opens. With more people in the labour force and fewer children to support, a country has the opportunity for economic growth. This is referred to as the demographic dividend. However, economic growth does not follow automatically from fertility decline. Investments and policies are needed in education, health, governance, infrastructure, gender equality and the economy. Hence, high fertility rates put pressure on public services, but these investments are vital to ensure an educated and healthy population once young people are of working age. Unemployment is a big threat to the demographic dividend. Currently, according to the ILO (2015), 10-20% of young people in developing countries are unemployed and another two thirds of young workers were in vulnerable employment (e.g. unpaid family work). For Sub-Saharan Africa, the IMF (2015) estimates that, up to 2035, 18 million jobs will have to be created annually in order to meet the demand of the growing labour force.

Instead of a demographic dividend, various developing countries are at risk of falling into the demographic trap. This refers to a situation in which a country remains in phase 2 of the demographic transition, as poor living conditions reinforce high fertility levels, which in turn reinforces poverty. This risk is realistic if governments cannot make the investments needed to create employment and to meet the demands for public services, i.e. when the level of development is insufficient to slow down rapid population growth.

**Figure 1 Population pyramids (population by age group and sex, absolute numbers): Bulgaria versus Niger**



**Bulgaria**



**Niger**

Source: UN-DESA (2015c), pp. 145 and 561.

### 1.3 Mobility and social unrest

Population growth invariably has an effect on mobility: urbanisation and migration. Despite the generally lower fertility rates in urban settings, we see strong urbanisation largely caused by migration of rural populations to urban areas: Whereas in 1950, 30% of the world's population was living in urban areas, currently 54% reside there, and estimates point to 66% in 2050, with Africa and Asia showing the strongest urbanisation rates. Historically, urbanisation has been considered an important driver of poverty reduction and social transformation, as reflected by lower fertility, longer life expectancy, and higher levels of education. Expanding access to public services, such as education, housing, electricity, water and sanitation is relatively cheaper in urban settings. However, if investments in infrastructure and services do not meet the urbanisation rate and policies to ensure equitable sharing of benefits are lacking, rapid and unplanned urban growth becomes a threat to sustainable development. This results in large proportions of urban poor, pollution, and environmental degradation (UN-DESA, 2014).

Mobility also refers to migration. Although media and dominant political and policy discourses try to depict an apocalyptic image of predominantly male mass migration from Africa to Europe, assumptions based on this image are often incorrect. The largest share of African migrants migrate within the African continent. Push-pull theories point to poverty as the main cause of mass migration from Africa. Yet, evidence shows that migrants are usually among the relatively well-off, including many students who migrate for educational purposes. Low income and increasing aspiration does not usually lead to high migration, except in the case of social unrest and war, disasters and climate change (de Haas, 2007). When looking at the history of Europe, we see similar trends. For example, pushed by land shortages, pulled by labour possibilities, or fleeing from war and the political climate (e.g. communism, Hungarian revolution) migrants from Europe moved to the US at an increasing rate in the nineteenth and twentieth centuries. To date, most migrants in the EU migrate within the EU. A smaller proportion, approximately 1.4 million, come from non-EU countries, excluding asylum seekers. Due to war, asylum applications to the EU/EFTA have risen sharply in the past eight years: from 256,155 in 2008 to just under 1.4 million in 2015. The top two countries of origin shifted from Iraq and Russia in 2008 to Syria and Afghanistan in 2015. The overall top countries remain rather stable, and furthermore include: Albania, Kosovo, Serbia, Pakistan, Eritrea, Somalia, Nigeria and Iran (MPI, 2016). A much larger proportion of refugees and migrants are found in neighbouring countries such as Jordan, Palestine, Lebanon and Pakistan. In sum, development increases mobility, both outmigration and immigration, but outmigration will outweigh immigration until countries have reached high levels of income.

Although poverty may not be the main driver for migration, it is directly related to social unrest. Youth participation in the labour force stimulates the economy, investments and savings. However, if young people do not get the opportunity to participate, this can lead to social unrest. High unemployment, low pay and a lack of perspective can lead to frustration and, among men specifically, to the feeling they cannot fulfil their role as man and breadwinner as set by masculinity norms. Large numbers of unemployed, frustrated young men fuel socio-economic tensions, can lead to higher crime rates, violence, drug and alcohol abuse, political instability (e.g. the Arab Spring), and participation in conflict (e.g. through radicalisation) (Zuehlke, 2009; Bongaarts, 2016).

#### **Environment, food and water security**

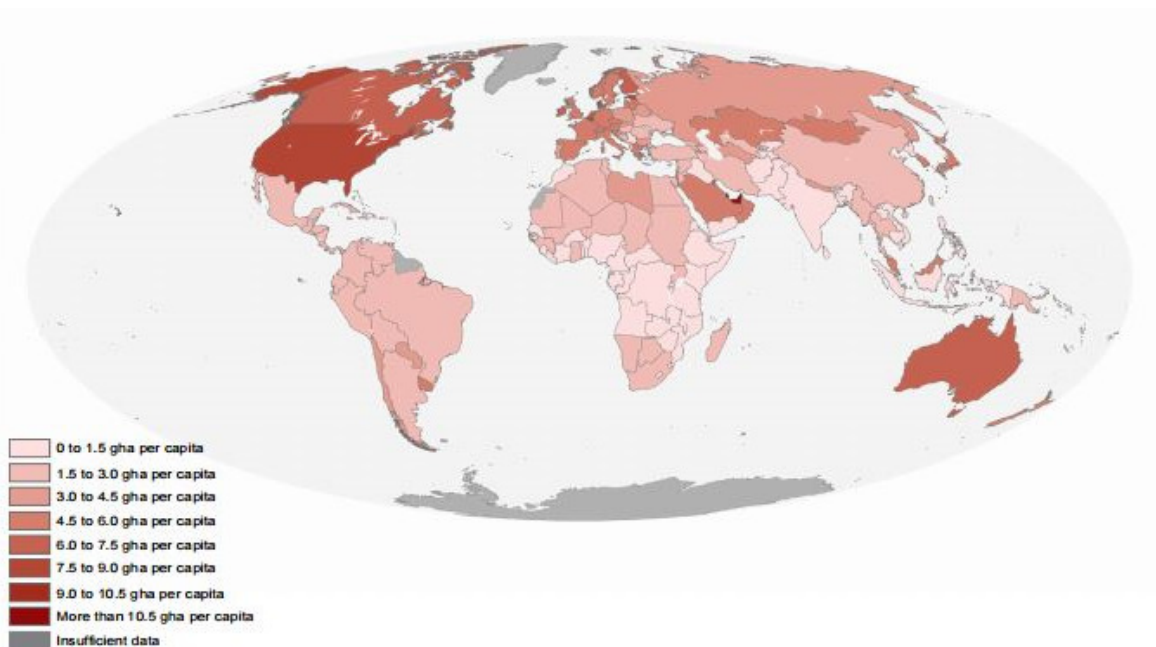
Population dynamics have strong implications for ecological systems. Population growth puts pressure on fresh water availability, results in air, water and soil pollution and mounting waste, leads to deforestation and soil degradation, overgrazing and also has consequences for arable land (Newman et al., 2014; Bongaarts, 2016). High population density and limited arable land leads to urbanisation and migration to coastal areas, where the population is put at risk by rising sea levels. For example, in Bangladesh, a sea-level rise of one meter results in a 20% loss of land and the displacement of 15 million people (Newman et al., 2014). As such, population pressure can directly lead to increased risk of famine and water shortage. In the 1990s, Maurice King described a three-phased ecological transition. In the first phase, expanding human demands are well within the capacity of the countries' ecosystem; in the second phase, biological reserves are used to meet the human demands; in the third phase, human consumption is forcibly reduced as the ecosystem

collapses. A doom scenario of “overshoot and collapse” was already predicted in 1972 in the book *The Limits of Growth*, from the Club of Rome. Critics have always pointed to technological possibilities to avert this doom scenario. From that perspective, rapid population growth could be considered as a driver for technological development.

Yet, it is not only population growth which contributes to the pressure on the ecosystems. In fact, industrialized countries with low population growth contribute much more to the ecological footprint, compared to developing countries with higher population growth (see Figure 2). As such, reducing fertility alone will not solve the ecological problem. It is even likely that if fertility levels decline, and if countries are able to use the window of opportunity for the demographic dividend to create economic growth, consumption will rise and the pressure on the ecosystem will prevail or even increase. This is further strengthened by a change in household composition, as single-occupant households (mostly found in urban areas, and as a result of postponed marriage, divorces and widowhood) account for significant consumption.

In sum, population dynamics, and specifically rapid growth and age structures have important implications for the demand for public services, economic development, political and social stability and the environment. The rapid population growth combined with an uneven distribution of resources leads to an unsustainable future. Fertility is one of the drivers of population growth. In the following section we will describe the relationship with fertility, but will also link population dynamics with the broader arena of Sexual and Reproductive Health and Rights.

**Figure 2: Ecological Footprint of consumption per person 2007**





## 2 Empowered population

Among the main drivers of rapid population growth are: reduced mortality rates and increased life expectancy, high fertility rates, and early pregnancy. Mortality rates have reduced significantly by improving access to clean water, and by curbing childhood illnesses, TB, malaria and HIV/AIDS. For example, between 1990 and 2015 infant mortality (children aged 0-5 years) was reduced by as much as 72% in Malawi (from 236 to 65 per 1,000 births) and by 74% in Bangladesh (from 144 to 38 per 1,000). Life expectancy shows in general an upward trend, except for countries that were hard hit by HIV/AIDS, where a clear drop in life expectancy was shown in the nineties, a trend that has been reversed since then. For example, In Zimbabwe life expectancy increased from 59 years in 1975 to 63 in 1990, but dropped to 51 years in 2000, and currently is showing an upward trend again (60 years in 2015) (Gapminder, 2016). Although declining, fertility rates remain high in various regions, especially in Sub-Saharan Africa, of up to 7.6 children per woman (in Niger) (PRB, 2014) (for a more detailed description of the trends in fertility rates over time in various regions, see UNFPA, 2018). The mean age of mothers at their first birth is lowest in African and South Asian countries. Globally, it varies from as high as 31.2 years in Greece to as low as 17.9 years in Chad (based on data from 138 countries) (CIA, 2016). Even if fertility rates were around replacement level, early pregnancy would still contribute to population growth (as generations succeed each other quickly). People live on average longer, have more years to reproduce, and give birth at a relatively young age to a relatively large number children of which an increasing share survives. In exploring the links between population dynamics and SRHR further, we distinguish three main components: 1) freedom of choice: drivers of fertility and unintended pregnancies; 2) a healthy population as pre-condition for a demographic dividend and 3) an empowered population as accelerant of the demographic dividend.

### 2.1 Fertility

In discussing drivers of fertility rates and unintended pregnancies, we distinguish between drivers for the *desired* number of children and drivers for *unintended* pregnancies and the unmet need for family planning.

#### **Desired fertility**

Pritchett (1994) shows that fertility levels are largely determined by the desire for children, i.e. in countries where fertility rates are high, women want more children. Another study shows that, on average, in many developing countries, men have a desire for slightly more children than women (Bankole & Singh, 1998). Determinants of the demand for children are varied. First, among families with limited financial resources in a context with limited official social safety nets, children are seen as old age support. Second, child mortality plays a role. Death of an infant increases fertility due to both biological (sudden termination of breastfeeding, triggering resumption of ovulation, increasing the risk of conceiving) and psychological reasons. Parents may attempt to replace a child that passed away, or they may have extra children to protect their desired number of children against future deaths. The assumption is that when child mortality rates are reduced, fertility will drop as well. The third driver focuses around the quality-quantity trade-off. If couples value investments in their children (e.g. in schooling) they are more likely to opt for fewer children (Worldbank, 2010). This is strongly related to opportunity costs, which can be driven by costs of living or loss of income due to pregnancy and child care. The desired number of children is substantially lower in urban areas compared to rural, partly due to the higher costs of living (Mosha et al., 2013). In rural areas, children are more often considered as additional labour in agriculture, less investments are made in schooling as future income is expected to be generated via agriculture, and due to the nature of extended households, childcare is of no significant cost. Opportunity costs are also higher if women are working, due to the loss of income during maternity leave. Furthermore, education can influence the desired number of children in multiple ways. It can increase the desire to invest in each child, pointing to the quality-quantity trade-off. Female education may increase women's likelihood to be economically active, and subsequently increase opportunity costs. And it is likely to increase awareness of the health and economic consequences of high fertility. Finally, social or cultural norms can influence the individual and couple's desired fertility. For example, large families can be considered an expression of masculinity, adding status. And son preferences also increase fertility

rates, as families will not stop child bearing until the desired number of sons has been born. There is a clear trend in the reduction of the desired number of children over time. In 14 low and middle-income countries, in 1975-1979 and 2005-2011, the ideal family size was reduced in each country, although large variations exist between countries. The range varied between 3.6-8.3 in 1975-1979 to 2.2-5.7 children in 2005-2011. The strongest decrease was found in Kenya: from 7.2 in the seventies to 4.0 in the new millennium (Darroch, 2013).

### **Drivers of unintended pregnancies and unmet need**

A desire to reduce pregnancies has led to an increased need for modern contraceptives. The need for contraceptives has also increased because people marry at a later age. Although early marriage is still highly prevalent in many countries (globally, each year 12 million girls become child brides (UNFPA & UNICEF, 2017)), the age of marriage has increased in most countries. While regional differences vary greatly, most men and women have their sexual debut in their late teenage years (15-19 years), but this sexual debut is – for women – on average lower in countries where early marriage is common. The trend towards later marriage leads to an increase in premarital sex. The time between first sexual intercourse and living with a partner is on average 0-2 years for women and 3-6 years for men (Wellings et al., 2006). With premarital sex increasing, the risk of unintended pregnancies increases as well. Approximately 43% (89 million annually) of all pregnancies in developing countries are unintended (Guttmacher, 2017). For adolescent pregnancies (15-19 years old), this number is estimated at 35% for Sub-Saharan Africa (Guttmacher, 2015). About half of the unintended pregnancies end in induced abortions, of which an estimated 55% include unsafe abortions. The uptake of modern contraceptives in developing countries has risen greatly in the past 50 years, from trivial levels 50 years ago to 57% among married women aged 15-49 years. However, the uptake varies greatly between regions, from approximately 88% of married women in Eastern Asia to barely 19% in Sub Saharan Africa (Singh et al., 2014). About half of sexually active women<sup>1</sup> (aged 15-49) in developing regions want to postpone or stop childbearing, but 25% of these women are not using modern contraceptives, accounting for roughly one out of eight women, or 214 million women in developing countries (Guttmacher, 2017). For adolescents specifically, 15% need contraceptives, but the majority in this group don't use them. As such, the unmet need is higher among these adolescents compared to adult women. It is region-specific though. In Africa, where contraceptive uptake is low, unmarried women are more likely to use modern contraceptives compared to their married peers. In Asia, this is the other way around. Social stigma regarding premarital sex is likely to create a barrier in accessing commodities (Darroch et al., 2016). Important to note is that the unmet need for contraceptives has only been measured from a woman's perspective, leaving us clueless as to the man's point of view, and simultaneously strengthening the idea or misconception that contraceptive uptake is purely the woman's domain.

Known determinants of unwanted and unintended pregnancies as well as unmet need are: low education, poverty, lack of knowledge about contraceptives, lack of access to contraceptives, costs, fear of side effects, opposition from spouse and family, social and religious norms, and low empowerment (Bongaarts, 2016; Singh et al., 2014). As such, the highest unmet need is found among poor households, among people with little education, living in rural areas, in poor regions of the countries, and is higher among younger people (15-19 years old, often unmarried) compared to older (20+) women (Singh et al., 2014).

## **2.2 A healthy population**

A healthy population is an important goal in itself. Moreover, it reduces the pressure on the health system and via a healthy working population positively contributes to the country's economy. It can therefore be considered a pre-condition for the demographic dividend. Investing in sexual and reproductive health is vital in this respect. It includes information, and education, prevention, screening and treatment for STIs and HIV, access to contraceptive methods and care for pregnancies and deliveries. For example, if all 214 million women with an unmet need for modern contraceptives were to receive the contraceptives they seek, the number of unintended pregnancies

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<sup>1</sup> This includes both married women, as well as unmarried women who are sexually active (i.e. had sex in the past three months).

would drastically drop from 89 to 22 million a year. Subsequently, this would result in 23 million fewer unintended births and 36 million fewer abortions (Guttmacher, 2017). Moreover, it would lead to 70,000 fewer maternal deaths, half a million fewer new-born deaths and 52 million fewer health years of life lost (DALYs) (Singh et al., 2014, pp. 11). These health benefits could further be strengthened if health care was improved during pregnancies and deliveries. Approximately 43% of the women in developing countries who give birth make fewer than the minimum of four antenatal care visits recommended by the WHO and almost 35% do not deliver their babies in a health facility. Another 16% of the pregnant women need but do not receive care for major obstetric complications and one out of four have newborns who need but do not receive the necessary care for health complications (Singh et al., 2014, pp. 4). Next to reproductive health, sexual health is equally vital. Worldwide, over one billion people have an STI, including HIV, resulting in 1.7 million deaths annually (HIV responsible for the largest share). Every day, approximately one million men and women, aged 15-49, contract one of the four major curable STIs, and an estimated 35 million people are living with HIV worldwide (data from 2012), of which the vast majority live in Sub-Saharan Africa (Singh et al., 2014). HIV/AIDS is one of the leading causes of death among young people aged 10-14 years. Moreover, among the 15-19 year olds, unsafe sex as a risk factor for healthy years of life lost (DALYs) increased from rank 13 in 1990 to rank 2 in 2013, and therefore shows the strongest increase (Mokdad et al., 2016). Condoms reduce the risk of infection of STIs and HIV, but the uptake is relatively low, suggesting substantial unmet needs in relation to information, education and services. Access to STI testing and treatment is limited in low-income countries, which contributes to infertility, pelvic inflammatory disease, miscarriages and stillbirths. Furthermore, access to antiretroviral therapy varies between countries, and 48% of the HIV-infected women in developing countries have an unmet need for this therapy (Singh et al., 2014).

In the above, we have focussed on the negative health outcomes of poor sexual and reproductive health. But sexual health is more than the absence of STIs. According to the WHO definition, sexual health also *“requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence”* (WHO, 2016). This second element of sexual health is strongly related to empowerment and gender equality, which is addressed in the next paragraph.

### 2.3 Empowerment and gender equality

Next to a healthy population, an empowered population (defined as the ability to make choices) is strongly related to population dynamics in various ways and domains. First, empowerment is strongly related to education. Educated people are generally more empowered, and in turn, more likely to invest in the education of their children. Subsequently, education is related to increased knowledge on health, more economic opportunities, and less poverty, among others. The second domain refers to economic empowerment. Women’s contribution to economic activities is far below its potential. Women less often than men take part in formal employment, and are overrepresented in unpaid work and informal jobs. The gender participation gap has been declining since the 1990s, largely due to falling male participation rates. The gap varies strongly per region, with the highest gap observed in the Middle East and Northern Africa (51%), followed by South Asia and Central America (over 35%) (Elborgh-Woytek et al., 2013, pp. 6). If women were given better opportunities to participate in the labour force, this could benefit the economy. Furthermore, greater earnings by women are expected to result in higher expenditure on children’s schooling, potentially triggering a virtuous cycle. In ageing economies, increased participation of women mitigates the impact of a shrinking workforce and subsequently boosts economic growth (Elborgh-Woytek et al., 2013).

A third domain relates to intra-household decision-making and bargaining power, which refers to equal power between couples and other household members. This affects all kind of decisions, including decisions on age and terms of marriage, family size, contraceptive use, healthcare uptake, child care, children’s schooling, division of (household) tasks, freedom of movement, and economic engagement. For example, communication and joint decision-making is important for effective contraceptive uptake, but many do not feel comfortable with this. Moreover, couples who show more

equitable gender attitudes are more likely to have a more equal division of tasks, where on average more involvement of men in childcare is seen (Levtov et al., 2015).

A fourth domain refers to bodily integrity: control over and autonomy of one's own body. This includes being able to secure oneself against violence, and having opportunities for sexual satisfaction (Nussbaum, 2000, pp. 78). Violence levels differ greatly between countries but are generally high, and women are more at risk of intimate partner violence. Globally, between 15 and 71% of women experience physical or sexual violence by an intimate partner (Garcia-Moreno et al., 2005). A significant proportion of men who use such violence did so for the first time as adolescents (Heilman et al., 2014). Moreover, boys who experience violence or witness violence against their mothers are up to three times more likely to use violence against their female partners during their adult life (Peacock & Barker, 2012). Next to violence, in many countries women especially are unable to exercise their right to make choices regarding their sexuality. In general, women are identified in many areas in relation to reproduction and childbearing (G. Sen & Batliwala, 2000). As child bearing is an important way to gain status, it may contribute to the relatively large desired family size. The inability to make choice regarding sexuality is, for example, also reflected in the inability to refuse sex, or in a lack of power in condom negotiation. On the other hand, power is complex, rendering the image of heterosexual men as always powerful and women (and men with a different sexual orientation) as powerless invalids. One example of power complexity can be found in transactional sex, where young women can be perceived as both powerless (poverty and dependency as some of the main drivers) and powerful (using transactional sex to gain access to resources).

Power is strongly related to gender norms which are at the root of all these four empowerment domains. Rigid gender norms and harmful perceptions of what it means to be a man or a woman is one of the drivers of men's use of violence, granting them control over resources and the power to dictate the terms of sex (Barker et al., 2012). As a result, women are likely to be in a submissive position, with a low level of political and economic power. These norms do, however, not only affect women, but also men, boys and sexual minorities. As norms dictate men to be strong, little room is available for showing insecurity and vulnerability, which can for example affect (sexual) health, reduce healthcare uptake (Levtov et al., 2015), and also result in stigmatisation and assault of men who are not living up to these norms. Important to note as well is that the binary approach of men and women, masculine and feminine, is part of these gender norms, and even reinforces them. This paper also suffers from this binary approach, largely because studies and data make this distinction based on biological sex, rather than on experienced gender which is much more fluid in nature.

In sum, fertility, but also the broader arena of SRHR is linked to population dynamics in various ways. The following section focuses on population programmes, and describes how programmes addressing population dynamics have evolved, based on a progressive understanding of the complexity of this matter, from the 1950s onwards.

## 3 Population Programmes: Past Decades

Population growth rates and average family size worldwide have fallen by roughly half over the past four decades. These figures suggest that it is possible to limit or even end human population growth through increasing universal access to sexual and reproductive services and information, so that essentially all births result from intended pregnancies. In this light, we will review past population programmes, followed by a description of neglected areas in order to define the characteristics for future population programmes in Section 4.

### 3.1 The emergence of the family planning movement

Two separate streams of thought and action came together to form the family planning movement that flourished from the mid-1960s to the mid-1990s. The first was the birth control movement of Margaret Sanger, Marie Stopes, Johannes Rutgers and other pioneers of the early 20th century. These were primarily concerned with women's well-being, empowerment and rights, particularly the right to avoid unwanted pregnancies. The second, a modern Malthusianism, was the recognition in the decade following World War II of the extraordinary rapid growth in human populations. Public health and immunisation programmes resulting in falling death rates, without a similar reduction in births, led to concerns about the adverse effects of large populations. Common ground was found in non-coercive approaches to population policies and programmes, marked by the founding of the International Planned Parenthood Foundation (IPPF) and the Population Council in the early 1950s. By the mid-sixties a strong consensus (led by development economists) had developed in international development circles on the inevitability to reduce the high population growth rates of developing countries. This could be achieved by making available the newly introduced easy to use and effective intrauterine device (IUD) and the oral contraceptive pill to all married couples in developing countries (Robinson & Ross, 2007).

By the early 1970s, international efforts to reduce rapid population growth in the developing world were well advanced. The United States, followed by other Western countries, earmarked significant foreign assistance funds for population programmes; the World Bank made substantial loans available for population projects; and the United Nations (UN) created a fund, the UN Fund for Population Activities (UNFPA). Developing countries were pressured to adopt population policies, e.g. start family planning programmes. These early population policies and programmes were too often top-down and driven by global targets. The, to be expected, disappointing results of these early family planning initiatives divided the movement: demographers increasingly came to believe that deeply embedded cultural traits, as well as the economic and emotional value of children to poor households, were the primary causes of programme failure, while public health professionals ascribed these to programmatic design flaws.

### 3.2 Population and Social Development

At the 1974 World Population Conference (Bucharest) several countries expressed reservations about the need for population programmes and how these programmes should be framed. It was felt that Western countries were pressing too hard for population control through global demographic goals and targets, neglecting other areas of, mainly economic, interventions. This ultimately led to a consensus document, the World Population Plan of Action, in which social development was recognized to have a role in reducing fertility. The document called for a mix of family planning and other development investments that would help reduce the demand for children. Following the conference, a majority of the participating countries adopted population policies in the form of – again – voluntary family planning programmes.

These policies and programmes gave couples access to information and family planning services and resulted in, what some described as, a worldwide, with the exception of Sub-Saharan Africa, reproductive "revolution" (Robinson & Ross, 2007). Fertility declined by 50%, while contraceptive prevalence among women increased from less than 10% to nearly 60%. In countries where socio-

economic conditions were not conducive to rapid and sustained fertility decline, China, India, Indonesia and Peru being the most notable cases, public action to lower birth-rates sometimes led to the introduction of strong coercive elements. This enraged human rights activists and women's health advocates and led to a different political orientation towards population policies and programmes by the early 1990s.

The next global conference (Mexico City, 1984) reaffirmed the principles of the World Population Plan of Action (Bucharest, 1974). However, during the conference, the United States announced its controversial "Mexico City Policy", abruptly shifting from its longstanding commitment to population policies and programmes to one of neutrality as far as population growth was concerned and a categorical opposition to abortion. This policy swing had a serious long-term negative impact on the family planning movement and accommodated the shift to individual concerns during the next decade.

### 3.3 (Sexual and) Reproductive Health and Rights

Initiated by the use of coercion, women's rights activists successfully argued that women in particular paid a high price in earlier population programmes: women were viewed as passive "targets" who needed to become "acceptors" of contraception. These concerns were acknowledged by the International Conference on Population and Development (ICPD, Cairo 1994). ICPD established that population objectives would be reached faster if couples' and individuals' needs were taken into account instead of imposing macro-demographic goals, moving from 'counting people' to 'people count'. Women were recognized as key agents in the process of reproduction and should be empowered – through education, information and access to health services (that include but are not limited to FP) – to have control over their own bodies.

By the mid-1990s, the focus of population policies had moved from narrow family planning to include the broader (sexual and) reproductive health and rights, following the recommendations of ICPD. Thus population policies and programmes came to include a series of new issues, including women's empowerment, the fight against poverty and the protection of the environment. By 1996, 115 countries around the world had official policies to support family planning (UNFPA, 2014b). These policies and programmes benefited from transformations in the economy and the role of women, as well as changes in traditional attitudes towards sexuality and reproduction, a process facilitated by the fast transmission of new ideas through new means of communication.

The ICPD Programme of Action continues to serve as a comprehensive guide to people-centred development. During the ICPD, delegates struggled to agree on the importance and meaning of sexual and reproductive health, reproductive rights and particularly sexual rights. Twenty years later, sexual and reproductive health and rights are viewed as interrelated and interdependent, that is, including not only reproductive, but also sexual rights. This implies that universal access is now also understood as sexual and reproductive services (Barot, 2014). Moreover, sexual and reproductive health and rights are now understood to be the right for all people, regardless of age and gender, to make choices regarding their own sexuality and reproduction, provided that they respect the rights of others.

However, in the years following the ICPD, the strong support for family planning began to diminish due to:

- Fertility rates having dropped, leading to a sense that the "population problem" was largely solved.
- There appeared to be little empirical evidence proving that rapid population growth and high fertility were serious obstacles to economic progress.
- Serious concerns about coercive elements in some Asian population programmes; and
- New health priorities, especially HIV and AIDS, had emerged (Bongaarts et al., 2012).

### 3.4 SRHR in the Global Development Agendas

The weakening interest in population and development and SRHR was reflected in the Millennium Development Goals (MDGs, 2000-2015) framework. SRHR was initially completely left out of the MDGs. MDG 5b, “Achieve universal access<sup>2</sup> to reproductive health” only entered this framework in 2007, seven years after the MDGs’ framework was operationalized (UN, 2015). This goal, including access to voluntary family planning, witnessed the least progress over the entire 15-year MDG time frame. Already by 2010, experts concluded that “the poorest, least educated women in sub-Saharan Africa have lost ground, with adolescents lagging furthest behind.” (UNFPA, 2010).

Unlike the MDGs, which focussed on social issues, the Sustainable Development Goals (SDGs, 2016-2030) set out targets across three dimensions – social, economic and environmental – of sustainable development, thus closely resembling the comprehensive Cairo Programme of Action. Sexual and reproductive health and rights’ issues were from the outset explicitly seen as fundamental to achieving these goals. Therefore, the SDGs include many objectives related to gender equality and women’s and girls’ empowerment and SRHR. Importantly, both SDG 3 on health and SDG 5 on gender equality and women’s and girls’ empowerment include SRHR targets. Target 3.7, under SDG 3, calls for universal access to SRHR care, services – including family planning – information and education, and the integration of reproductive health into national strategies and programmes. Target 5.6, under SDG 5, calls for universal access to sexual and reproductive health and reproductive rights in accordance with the ICPD Programme of Action. In addition, the 2030 Agenda requires all countries to take measures to end discrimination and eliminate violence against women and girls as well as harmful practices, such as child, early and forced marriage and female genital mutilation. But while the SDGs are comprehensive, they remain limited in the scope of addressed SRHR issues, partly because of the ongoing ideological and religious opposition to the broader SRHR agenda.

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<sup>2</sup> There is no universally accepted definition of what is meant by ‘universal access to SRH services’. The WHO working definition which includes prevention, diagnosis, counselling, treatment and care services relating to: Antenatal, perinatal, postpartum & newborn care; Family planning services dealing with infertility and contraception; elimination of unsafe abortions, prevention and treatment of STIs, HIV/AIDS, RTIs, cervical cancer, etc. and promotion of healthy sexuality.

## 4 Future of Population and SRHR Programmes

### 4.1 The Need for Population and SRHR Programmes

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Future population growth will come largely from fertility levels that are still above replacement level and early pregnancies in developing countries. Further improvements in life expectancy will also contribute to the increase of the world's population. In addition, new challenges for population policies have emerged. Fast growing populations may face security challenges, triggered by the youth bulge and the difficulties of providing employment to ever-larger cohorts of young men and women. Although emigration trends will bring some benefits in the form of remittances in developing countries, the "brain drain" might also deprive these countries of much-needed human capital. Urbanisation trends pose challenges for social inclusion and equity. Finally, the major threat of global warming and climate change will affect poor people and poor nations disproportionately. Many developed countries are seeing rapid population aging and will soon face the issue of depopulation. Immigration flows that developed countries must accommodate and the difficult debate about replacement immigration are also stirring up nationalist reflexes.

Not surprisingly, interest in population policies (particularly voluntary, human rights-based family planning) seems to be increasing as is illustrated by, among others, the following initiatives that have revitalised family planning globally (Starbird et al., 2016):

- The 2010 "Global Strategy for Women's and Children's Health", launched in 2010: this UN initiative aims to accelerate progress in reducing maternal and child deaths. The strategy calls for governments to ensure that maternal, new-born and child health care is included in the package of essential health services that is available to everyone. It is implemented under the umbrella effort, Every Woman Every Child, which includes about 300 national and international partners.
- Family Planning 2020 (FP2020), launched during a 2012 summit in London: the initiative has refocused attention on the large gaps between the need for and use of modern contraceptives in the 69 poorest developing countries. Since the summit, governments and non-governmental organisations worldwide have committed to improving services in these countries by addressing the barriers that prevent people from using contraceptives.
- UNFPA's Global Programme to Enhance Reproductive Health Commodity Security established in 2007: the programme works to ensure that governments in developing countries have access to a reliable supply of contraceptives, condoms, medicine and equipment for family planning, prevention of HIV and other STIs, and maternal health services.

It seems safe to conclude that far from being outmoded, population policies are more necessary and relevant than ever for developed and developing countries. Successfully addressing these fertility challenges should be embedded in the integrated and interdependent set of Sexual and Reproductive Health and Rights needs as defined in the ICPD Programme of Action (May, 2012).

Improvements in SRH outcomes have been considerable since ICPD, but mask substantial inequalities, and people's ability to exercise their sexual and reproductive rights is neither universal nor equitable. Furthermore, progress regarding certain components of the SRHR framework has furthermore been uneven, in many instances hindered by ideological, rather than scientific, public health and cost-effectiveness grounds. These components, sometimes referred to as the "sensitive issues", include family planning, unsafe abortion (menstrual regulation), emergency contraception and sexual gender based violence.

In addition, SRHR programmes have problematized sex, seeing it as something that needs to be controlled in order to avoid negative health outcomes such as STIs, HIV and unwanted pregnancy. Positive aspects of sex and sexuality, such as pleasure and fulfilment, have been ignored. Finally, SRHR programmes have focussed on (married) adults. Novel population policies need to pay special attention to young people. By definition, sustainable development is to the benefit of younger people and the next generations, but at the same time it is important to underscore that progress towards sustainable development will only happen with the full involvement and support of young people. Hence, it is essential that future policies and programmes focus on the empowerment of younger



people. This depends on adequate investment in their health, together with sexual and reproductive health, and education, including comprehensive sexuality education.

## 4.2 Characteristics of Future Population and SRHR Programmes

The observed revived interest in population programmes has not yet resulted in widespread change in government policies or programmes in countries with the highest fertility and fastest population growth. What are the essential elements of future population and SRHR programmes according to Rutgers?

### 1. A Rights-Based Approach to SRHR

Population policies should not (solely) be based on population growth, economic and environmental factors, but need to recognize the needs and rights of individuals: policies need to be aligned with the integrated (comprehensive) and rights-based SRHR concept. As well as providing SRH services, care and information, a rights-based approach means paying attention to sexuality and the sexual rights of different groups. This includes right to sexual health, and focussing not only on problems and disease, but on what should be positive experiences in relation to pregnancy and parenthood, and sexuality and relationships. Moreover, these population policies and programmes should enjoy broad public support and should ideally be organized around concepts such as equity, gender justice and poverty alleviation; and will have to be more participatory and include all actors and stakeholders. This also calls for major improvements in coordination mechanisms as the number of national and (inter)national stakeholders (e.g., NGOs) has soared in recent decades.

From this rights-based perspective, the following elements are essential in any Rutgers supported family planning intervention:

- Quality of care in this respect means that the needs of the clients in the context of their personal life should be the major determinant of the behavior of the providers (rights of the client) (Huezo C. *et al.*, 1993). Ten rights of family planning clients have been outlined by IPPF (IPPF, 1997) follows: rights to information, access, choice, safety, privacy, confidentiality, dignity, comfort, continuity, and opinion. The responsibilities for quality of care, and therefore fulfilling the rights of the clients, are distributed throughout the whole family planning program, but those who are actually seen as most responsible are the ones who are in direct contact with the clients – the service providers. A strategy for quality of care cannot be realistic without recognizing that service providers have their own needs which can be outlined as: training, information infrastructure, supplies, guidance, back-up, respect, encouragement, feedback, and self-expression. When fulfilling the rights of the clients and needs of the service providers, both technical and human aspects should be taken into account.
- Ensure that women are able to make informed choices. In the case of family planning, this includes making choices about whether they wish to have children, the number of children to have and with whom, and the timing and spacing (number of years) between each pregnancy. The decision-making process should result in a voluntary and informed decision by the individual on the basis of options, information, and understanding about whether she or he wishes to obtain health services and, if so, what method or procedure the individual will choose and consent to receive.
- Policymakers often have sacrificed the reproductive self-determination and human rights of individual women for a variety of reasons. The ICPD Programme of Action, however, views incentives or disincentives to alter fertility rates with suspicion (Gold, R.B., 2014). Thus priority lies in upholding choices for women everywhere, and that coercion—whether to prevent childbearing or compel childbearing—violates women’s reproductive autonomy and should be unequivocally condemned (currently particularly relevant in the drive to promote Long Acting (Reversible) Contraceptives (LARC)).
- Expanding contraceptive options for voluntary family planning is critical for several reasons. First, individuals have different needs for pregnancy prevention depending on their personal and family context, and needs may vary throughout the reproductive lifecycle (World Health Organization, 2018). Second, some women discontinue contraceptive use even though they want to avoid pregnancy. Having a wide choice of contraceptives will meet the needs of some discontinuers if they have the option of switching; Third, three-fifths of women (62%) with unmet

need have never used contraception (3), and a wider range of options may lead some of these women to become users. Finally, some users will have a need for contraceptives that provide protection against pregnancy and sexually transmitted infections including HIV.

- Strengthen and expand SRH services to the essential package recommended by the Guttmacher-Lancet Commission (Starrs, A.M. et al., 2018) to meet the specific individual needs for information and services:
  - Comprehensive sexuality education.
  - Counselling and services for a range of modern contraceptives, with a defined minimum number and types of methods.
  - Antenatal, childbirth, and postnatal care, including emergency obstetric and new-born care.
  - Safe abortion services and treatment of complications of unsafe abortion (see below).
  - Prevention and treatment of HIV and other sexually transmitted infections.
  - Prevention, detection, immediate services, and referrals for cases of sexual and gender-based violence.
  - Prevention, detection, and management of reproductive cancers, especially cervical cancer.
  - Information, counselling, and services for subfertility and infertility.
  - Information, counselling, and services for sexual health and wellbeing.
- Within the current Rutgers Strategy, access to safe abortion services deserves specific attention. Evidence shows that legal restrictions on abortion do not reduce the occurrence of abortions; abortion rates are essentially the same in countries where the procedure is prohibited as in countries where it is available on request. Where abortion is illegal, however, it is usually less safe. Given that more than 40% of pregnancies worldwide are unintended, and nearly 60% of these end in induced abortion, this issue is far too large to ignore (Singh S. et al., 2018). A starting point in abortion care is to ensure that safe abortion services are available and accessible to the full extent permissible by law, that care for complications of unsafe abortion is available, that these services are comprehensive and of high quality, and that women who obtain an abortion or providers are not punished. In the long term, legal and policy reforms must be enacted that broaden the criteria under which an abortion is allowed.
- Ensure availability (functioning public health and health care facilities, goods and services, as well as programmes in sufficient quantity), non-discriminatory, physical, economical accessibility (health facilities, goods and services accessible to everyone) and acceptability (all health facilities, goods and services must be respectful of medical ethics and culturally appropriate, as well as sensitive to gender and life-cycle requirements) of the above essential services.
- Ensure continuing financial and social investment in family planning (advocacy).

## 2. Gender Equality: Male Engagement in SRHR

SRH including FP is not just a women's issue. Placing the burden of SRH on women has resulted in women bearing most of the responsibility for their own and their families' sexual and reproductive health. Inadequate attention given to men's SRHR needs exacerbates gender inequality, leads to poor health outcomes, detrimentally excludes nearly half of the population, and the mentality that men are not responsible for their own or their partner's SRH is not challenged. Research has consistently shown that men are keen to be more involved, and women are generally supportive of their partner's increased participation. Engaging and educating men regarding their own sexual and reproductive health is imperative in preventing STIs (including HIV), preventing unwanted pregnancies, gender based violence and reducing the burden of these issues on women (Barker *et al.*, 2012). In addition to seeing men as partners and parents, however, it is also important that men are seen as individuals with male-specific sexual and reproductive health needs. Not only will addressing individual SRHR improve men's health outcomes; promoting and encouraging men to address their own sexual and reproductive health is also good for women's and children's health outcomes and equal gender relations (Barker *et al.*, 2011; Levtoev *et al.*, 2015). In short, we must envision building male involvement in SRHR and gender equality as a combination of engaging men as clients, partners, and agents of positive change.

Several reviews highlight the importance of interventions targeting the early adolescent period (10-14 years or younger) because attitudes and values related to gender equality, sexuality, and health behaviours are established in this period and have important implications for health and social well-being in later life (Venkatraman Chandra-Mouli, M.B.B., 2015)

### 3. The Multi Component Approach to SRHR

Health and rights in sexuality and reproduction are an integrated package, which includes sexual and reproductive health services (family planning, maternity care, safe abortion, prevention and treatment of sexually transmitted infections and HIV, among others); comprehensive sexuality education; and protection of sexual and reproductive rights (Germain *et al.*, 2009). From recent studies on SRH and HIV/AIDS programmes, there is convincing support for a multi-component approach as opposed to single or dual-component approaches, based on the effects on sustainability, diversity in reach, and synergy (Chandra-Mouli V. *et al.*, 2015). This approach combines: 1) addressing the capacity of the individual through (gender transformative) comprehensive SRHR education, information and skills building; 2) improving the availability, accessibility and quality (including youth friendliness) of SRH services for all individuals; and 3) creating an enabling environment through working with communities and advocacy. In all three components interventions should ideally work at multiple levels: individual, relational, community, institutional and societal (Bronfenbrenner, 1979). The key implementation challenges are caused by structural barriers, organisational issues and possibly the integration of other components such as: economic development, non-clinical/private/retail services, and mass-media.

### 4. SRHR of young people

As mentioned, there are strong public health, human rights, and economic reasons to invest in adolescent SRH. Adolescence is a crucial time to lay the foundation for healthy sexual and reproductive lives and to address issues that are especially harmful to women's health: inequitable gender norms, child marriage, and gender-based violence (Patton G.C. *et al.*, 2016). It is also an important period for sexual development and exploration of sexual orientation because the expectation to adhere to gender roles and norms begins to intensify and solidify in these formative years (Kågesten A., *et al.*, 2016). Experiences during adolescence can determine the trajectory of people's lives. Promoting mutually respectful attitudes between and among adolescent girls and boys in connection with sexuality as well as other healthy behaviours will form the foundation for the good health of populations, as adolescents become adults, and for social, and economic development more broadly.

About half of 19-year-old women in developing regions are sexually active mostly, but not always, because they are married, and about half of their pregnancies are unintended. Adolescent girls and women are also highly susceptible to STIs, including HIV. Providing adolescent women and men the SRHR information and services they need requires overcoming social, cultural, health system, and legal obstacles, and must start with the acknowledgment that they might already be sexually active or could soon be (Starrs, A.M. *et al.*, 2018).

In developing regions, adolescent women who want to avoid a pregnancy might encounter many barriers to using contraception. They might feel social pressure to have a child, especially if they are married, or they might find it difficult to access and use contraceptive services. Of adolescent women in need of contraception (*i.e.* those who are sexually active and do not want a child for at least 2 years), 60% are not using a modern method. Adolescents who use contraceptives in developing regions most commonly rely on male condoms (38%), the contraceptive pill (27%), and injectables (19%); few adolescents are using long-acting reversible methods such as implants and IUDs, which have higher rates of effectiveness (Darroch *et al.*, 2016). Failure of contraceptives is an important concern. Emergency contraception and female condoms could meet some adolescents' needs, but they are often not available.

### 5. Mainstreaming SRHR

The SRHR movement has been less effective in partnering with mainstream development organisations working on poverty elimination, food and water security, the environment, biodiversity, climate change, and other elements of the sustainable development discourse. To mitigate resistance, the SRHR sector needs to find concepts and a language that explain why and how Sexual and Reproductive Health and Rights are relevant to sustainable development.

### 4.3 Financing Universal Access to SRHR

Sexual and Reproductive Health and Rights (SRHR) are fundamental human rights, central to eradicating poverty and achieving sustainable development across social, economic and environmental dimensions. SRHR are fundamental to the ability of all people, especially women, adolescent girls and young people, to lead full, satisfying, healthy and productive lives. With a focus on prevention (SRHR problems are largely preventable), investments in SRHR are not only critical to people's wellbeing and the prosperity and resilience of families, communities and nations, but are also proven to be cost-effective and cost-saving, freeing resources for investment in other development priorities.

Funding seems to be increasing in all major types of development finance, though the data and evidence are incomplete, but SRHR and RH remain underfunded. The costs of inaction – to health, lives, economic productivity and public budgets – far outweigh the costs of the investments required to fulfil SRHR.

How much would it cost to provide a package of sexual and reproductive health services for all sexually active women and their new-born's?<sup>3</sup>

- Fully meeting the need for modern contraceptive services would cost \$9.4 billion.
- Providing the recommended levels of maternal and new-born healthcare for women who have a live birth would cost \$21.7 billion.
- Providing the recommended care for women whose pregnancies end in miscarriage, stillbirth and abortion (assuming no change in relevant laws or practice) would cost \$2.0 billion annually.
- Meeting the need for HIV testing and counselling for all pregnant women and antiretroviral treatment for those living with HIV (during pregnancy and up to six weeks after delivery) would cost \$3.0 billion.
- Meeting the needs of newborns for testing and treatment related to HIV in the first six weeks of their lives would cost \$1.3 billion.
- Treating the major curable STIs of all women of reproductive age would cost \$1.7 billion (Singh, *et al.*, 2014).

These investments, if made together, would bring the total cost of sexual and reproductive health care to \$39.2 billion annually. This total represents more than a doubling of the current costs of these services, but amounts to only \$25 per woman of reproductive age annually, or \$7 per person in the developing world.

Comprehensive sexual and reproductive health services and modern contraception are not only integral to recognizing the right to good health for all people and essential for achieving gender equality, they are also a smart financial investment. Research shows that every US\$1 spent on modern contraceptive methods would yield US\$120 in overall benefits (including the reduced pressure on public spending and environment) (copenhagenconsensus.com, 2015). The estimated returns of effectively reducing the unmet need for contraception in 27 high-fertility countries would exceed 8% of global GDP by 2035. If the need for effective contraception were met and all women and newborns received the care recommended by the WHO, unintended pregnancies would drop by 70%, maternal deaths would decline by 67%, newborn deaths would drop by 77%, the transmission of HIV from mother to newborn would be drastically reduced, and unsafe abortions would decline by 74%. Investing in sexual and reproductive health and contraceptive access is cost-effective and, most importantly, critical to advancing the health, wellbeing, and development of girls and women, and their families, communities, and societies (Packer & Petruney, 2016).

Currently, individuals (more than half, through out-of-pocket expenditures) and national governments (approximately 25%) account for the largest share of expenditures, followed by NGOs and international donor agencies (IPPF, 2015). Discussions about the additional needed funds must take into account that the people most in need of services are among the least able to pay. Low- and

<sup>3</sup> The report (Singh *et al.*, 2014) does not examine men's sexual and reproductive health needs independently from those of women, although men's needs are important to address in their own right. Rather, this report looks at the sexual and reproductive healthcare that women need and use over the course of their lives and identifies gaps in services that, if filled, could improve their health, as well as that of their partners and children. Moreover, it focuses on health care and does not include all components of the integrated, multi-component approach.

lower middle-income countries account for 80% of the increase in spending needed to fully solve all unmet needs for sexual and reproductive health care.

## 5 Conclusion

By the close of this century, our planet will be home to some 11.2 billion people, which is a 50% increase compared to today, due to reducing mortality rates, increasing life expectancy, high fertility rates and early pregnancies in certain regions. This growth will take place disproportionately. Many developed countries are seeing rapid population aging and will soon face the issue of depopulation. On the other hand, population size may quadruple in Sub-Saharan Africa. The rapid population growth and age structures have important implications for the demand for public services, economic development, political and social stability and the environment. The rapid population growth combined with an uneven distribution of resources will lead to an unsustainable future. On the other hand, investments in education, health and employment together with declining fertility rates provide opportunities for economic growth in developing countries when the youth bulge of today is of working age (so called demographic dividend). In this paper, we have shown the important links between population dynamics and Sexual and Reproductive Health and Rights, including: desired fertility and unintended pregnancies, investments in a healthy population, empowerment and gender equality. Investing in SRHR – including family planning – can accelerate progress across the 5 SDG themes of People, Planet, Prosperity, Peace, and Partnership and is critical in achieving the goals and complying with the post-2015 development agenda. Empowering women and engaging men to choose the number, timing, and spacing of their pregnancies is not only a matter of health and human rights but also touches on many multi-sectoral determinants vital to sustainable development, including women's education and status in society. Without addressing SRHR, the impact and effectiveness of other interventions will be less, will cost more, and will take longer to achieve.

## References

- AAI (2015). *State of education in Africa report 2015. A report card on the progress, opportunities and challenges confronting the African education sector*. New York: The Africa-America Institute.
- Bankole, A., & Singh, S. (1998). Couples' fertility and contraceptive decision-making in developing countries: hearing the man's voice. In: *International Family Planning Perspectives*, Vol. 24(1): 15-24.
- Barker, G., Contreras, J.M., Heilman, B., Singh, A.K., Verma, R.K. & Nascimento, M. (2011). *Evolving men: initial results from the international men and gender equality survey (IMAGES)*. Washington, D.C.: International Center for Research on Women (ICRW) and Rio de Janeiro: Instituto Promundo.
- Barker, G., Greene, M., Nascimento, M., Segundo, M., Ricardo, C., Taylor, A., Aguayo, F., Sadler, M., Das, A., Singh, S., Figueroa, J. G., Franzoni, J., Flores, N., Jewkes, R., Morrell, R. & Kato, J. (2012). *Men who care: a multi-country qualitative study of men in non-traditional caregiving roles*. Washington, D.C.: International Center for Research on Women (ICRW) and Rio de Janeiro: Instituto Promundo.
- Barot, S. (2014). *Looking back while moving forward: marking 20 years since the international conference on population and development*. New York: Guttmacher Institute.
- Bongaarts, J., Cleland, J., Townsend, J.W., Bertrand, J.T. & das Gupta, M. (2012). *Family planning programs for the 21st century rationale and design*. The Population Council, Inc.
- Bongaarts, J. (2016). Slow down population growth. In: *Nature*, Vol. 530 (comment): 409-412.
- Bronfenbrenner, U. (1979). *The ecology of human development: experiments by nature and design*. Harvard University Press: Cambridge, MA.
- Canning, D., Raja, S. & Yazbeck, A.S. (eds) (2015). *Africa's demographic transition: dividend or disaster?* Africa Development Forum Series. Washington, DC: World Bank.
- Chandra-Mouli V., Lane C., Wong S. *What does not work in adolescent sexual and reproductive health: a review of evidence on interventions commonly accepted as best practices*. *Glob Health Sci Pract*. 2015;3(3):333-340. <http://dx.doi.org/10.9745/GHSP-D-15-00126>.
- Chandra-Mouli V., M.B.B., M.Sc., Joar Svanemyr, Ph.D. Avni Amin, Ph.D. Helga Fogstad, M.D., Lale Say, M.D., Françoise Girard, LL.B., M.A., and Marleen Temmerman, Ph.D. *Twenty Years After International Conference on Population and Development: Where Are We With Adolescent Sexual and Reproductive Health and Rights?*
- CIA (2016). *The World Factbook: Mother's mean age at first birth*. Retrieved at October 9<sup>th</sup>, 2016 from: <https://www.cia.gov/library/publications/the-world-factbook/fields/2256.html>.
- Copenhagenconsensus.com. <https://www.copenhagenconsensus.com/post-2015-consensus/gender-equality-whats-smartest-post-2015-target>.
- Darroch, J.E. (2013). Trends in contraceptive use. In: *Contraception*, Vol. 87(3): 259-263.
- Darroch, J.E., Woog, V., Bankole, A. & Ashford, L.S. (2016). *Adding it up: costs and benefits of meeting the contraceptive needs of adolescents*. New York: Guttmacher Institute.
- De Haas, H. (2007). *The myth of invasion. Irregular migration from West Africa to the Maghreb and the European Union*. IMI research report: International Migration Initiative, University of Oxford.
- Elborgh-Woytek, K., Newiak, M., Kochhar, K., Fabrizio, S., Kpodar, K., Wingender, P., Clements, B. & Ewing B., Moore, D., Goldfinger, S., Oursler, A., Reed, A. & Wackernagel, M. (2010). *The ecological footprint atlas 2010*. Oakland: Global Footprint Network.
- Family Planning Evidence Brief – Expanding contraceptive choice WHO/RHR/17.14 Rev.1, World Health Organization 2018.
- Gapminder (2016). *Data in Gapminder World: life expectancy at birth (years)*. Retrieved, August 12<sup>th</sup>, 2016 from: [https://docs.google.com/spreadsheets/d/1H3nzTwbn8z4IJ5gJ\\_WfDgCeGEXK3PVGcNj\\_Q\\_U5og8eo/pub?gid=1#](https://docs.google.com/spreadsheets/d/1H3nzTwbn8z4IJ5gJ_WfDgCeGEXK3PVGcNj_Q_U5og8eo/pub?gid=1#)
- Garcia-Moreno, C., Jansen, H.A.F.M., Ellsberg, M., Heise, L. & Watts, C. (2005). *WHO multi-country study on women's health and domestic violence against women. Initial results on prevalence, health outcomes and women's responses*. Geneva: World Health Organisation.
- Germain, A., Dixon-Mueller, R. & Sen, G. (2009). Back to basics: HIV/AIDS belongs with sexual and reproductive health. In: *Bulletin of the World Health Organization*, Vol. 87(1): 840–845.
- Gold, R.B. *Guarding Against Coercion While Ensuring Access: A Delicate Balance*. Guttmacher Policy Review Summer 2014, Volume 17, Number 3.

- Guttmacher (2015). *Adolescent pregnancy and its outcomes across countries (factsheet)*. New York: Guttmacher Institute.
- Guttmacher (2017). *Adding It Up: Investing in Contraception and Maternal and Newborn Health, 2017 (fact sheet)*.
- Heilman, B., Hebert, L. & Paul-Gera, N. (2014). *The making of sexual violence: how does a boy grow up to commit rape? evidence from five IMAGES countries*. Washington, DC: International Center for Research on Women (ICRW) and Washington, DC: Promundo.
- Huezo C., Diaz S.; *Quality of care in family planning: clients' rights and providers' needs*; *Adv Contracept*. 1993 Jun;9(2):129-39.
- ILO (2015). *Global employment trends for youth 2015. Scaling up investments in decent jobs for youth*. Geneva: International Labour Office. IMF (2015). *Economic regional outlook Sub-Saharan Africa. Navigating headwinds*. Washington DC: International Monetary Fund.
- IMF (2015). *Regional Economic Outlook. Sub-Saharan Africa: Navigating Headwinds*. Washington DC: International Monetary Fund.
- IPPF (2015). *Financing demystified 2015*. London: International Planned Parenthood Federation.
- IPPF. *Charter Guidelines on Sexual and Reproductive Rights*; IPPF, United Kingdom. 1997.
- Kågesten A., Gibbs S., Blum R.W., et al. *Understanding factors that shape gender attitudes in early adolescence globally: a mixed-methods systematic review*. *PLoS One* 2016; 11: e0157805
- Kinfu, Y., Dal Poz, M.R., Mercer, H. & Evans, D.B. (2009). The health worker's shortage in Africa: are enough physicians and nurses being trained? In: *Bulletin of the World Health Organization*, Vol. 87: 225-230.
- Levtov, R., van der Gaag, N., Greene, M., Kaufman, M. & Barker, G. (2015). *State of the world's fathers: A MenCare advocacy publication*. Washington, DC: Promundo, Rutgers, Save the Children, Sonke Gender Justice, and the MenEngage Alliance.
- May, J.F. (2012). *World population policies, their origin, evolution, and impact*. Dordrecht: Springer.
- Mokdad, A.H., et al. (2016). Global burden of diseases, injuries, and risk factors for young people's health during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. In: *The Lancet*, Vol. 387(10036): 2383-2401.
- Mosha, I., Ruben, R., & Kakoko, D. (2013). Family planning decisions, perceptions, and gender dynamics among couples in Mwanza, Tanzania: a qualitative study. In: *BMC Public Health*, 13. doi: 10.1186/1471-2458-13-523
- MPI (2016). *Asylum applications in the EU/EFTA by country, 2008-2016 (Q1)*. Migration Policy Institute. Retrieved, July 1st 2016 from <http://www.migrationpolicy.org/programs/data-hub/charts/asylum-applications-euefta-country-2008-2016-q1>
- Newman, K., Fisher, S., Mayhew, S. & Stephenson, J. (2014). Population, sexual and reproductive health, rights, and sustainable development: forging a common agenda. In: *Reproductive Health Matters*, Vol. 22 (43): 53-64.
- Nussbaum, M.C. (2000). *Women and development. The capabilities approach*. Cambridge: Cambridge University Press.
- Packer, C. & Petruney, T. (2016). *Meet the demand for modern contraception and reproductive health*. FHI 360. Retrieved, October 9<sup>th</sup>, 2016 from: [http://womendeliver.org/wp-content/uploads/2016/04/Good\\_Campaign\\_Brief\\_2\\_092016-1.pdf](http://womendeliver.org/wp-content/uploads/2016/04/Good_Campaign_Brief_2_092016-1.pdf).
- Patton G.C., Sawyer, S.M., Santelli J.S., et al. *Our future: a Lancet commission on adolescent health and wellbeing*. *Lancet* 2016; 387: 2423–78.
- Peacock, D. & Barker, G. (2012). *Working with men and boys to promote gender equality: a review of the field and emerging approaches*. 17-20 September 2012, Expert Group Meeting: Prevention of violence against women and girls. Bangkok, Thailand; EGM/PVAWG/EP.13.
- PRB (2014). *2014 World population data sheet*. Washington, DC: Population Reference Bureau. Retrieved May 18<sup>th</sup> 2016 from: [http://www.prb.org/pdf14/2014-world-population-data-sheet\\_eng.pdf](http://www.prb.org/pdf14/2014-world-population-data-sheet_eng.pdf).
- Pritchett, L.H. (1994). Desired fertility and the impact of population policies. In: *Population and Development Review*, Vol. 20 (1): 1-55.
- Robinson, W.C. & Ross, J.A. (eds) (2007). *The global family planning revolution: three decades of population policies and programmes*. Washington DC: The Worldbank.
- Sen, G., & Batliwala, S. (2000). Empowering women for reproductive rights. In: H. B. Presser & G. Sen (eds), *Women's empowerment and demographic processes. Moving beyond Cairo*. (pp. 15-36). New York: Oxford University Press.



- Singh S. et al. *Abortion Worldwide 2017: Uneven Progress and Unequal Access*, New York: Guttmacher Institute, 2018.
- Singh, S., Darroch, J.E. & Ashford, L.S. (2014). *Adding it up: the costs and benefits of investing in sexual and reproductive health*. New York: Guttmacher Institute.
- Starbird, E., Norton, M., Marcusa, R. (2016). Investing in family planning: key to achieving the sustainable development goals. In: *Global Health Science and Practice*, Vol. 4(2): 191-210.
- Starrs, A.M. et al., *Accelerate progress—sexual and reproductive health and rights for all: report of the Guttmacher–Lancet Commission*, Lancet 2018.
- Starrs, A.M. et al. *Accelerate progress—sexual and reproductive health and rights for all: report of the Guttmacher–Lancet Commission*, Lancet 2018; 391: 2642–92.
- UN (2015). *The Millennium Development Goals report 2015*. New York: United Nations.
- UN-DESA (2014). *World urbanization prospects: the 2014 revision, highlights*. New York: United Nations, Department of Economic and Social Affairs, Population Division, ST/ESA/SER.A/352.
- UN-DESA (2015a). *World population prospects: The 2015 revision, key findings and advance tables*. working paper no. ESA/P/WP.241. New York: United Nations, Department of Economic and Social Affairs, Population Division.
- UN-DESA (2015b). *World population prospects: the 2015 revision, DVD edition*. New York: United Nations, Department of Economic and Social Affairs, Population Division.
- UN-DESA (2015c). *World population prospects: the 2015 revision, volume II: demographic profiles*. New York: United Nations, Department of Economic and Social Affairs, Population Division.
- UN-DESA (2017). *World population prospects: The 2017 revision, key findings and advance tables*. Working paper no. ESA/P/WP/248. New York: United Nations, Department of Economic and Social Affairs, Population Division.
- UNFPA (2010). *How universal is access to reproductive health? A review of the evidence*. New York: UNFPA.
- UNFPA (2014a). *The Power of 1.8 Billion Adolescents, Youth, and the Transformation of the Future. State of the World population 2014*. New York: UNFPA.
- UNFPA (2014b). *International Conference on Population and Development Programme of Action. 20<sup>th</sup> anniversary edition*. New York: UNFPA.
- UNFPA (2018). *The Power of Choice: Reproductive Rights and the Demographic Transition. State of the World Population 2018*. New York: UNFPA.
- UNFPA & UNICEF (2017). *2017 Annual Report, Accelerating and Amplifying Change. UNFPA-UNICEF Global Programme to Accelerate Action to End Child Marriage*. New York: UNFPA & UNICEF.
- UNICEF (2014). *Generation 2030 Africa. Child demographics in Africa*. New York: UNICEF - Division of Data, Research, and Policy.
- Journal of Adolescent Health 56 (2015) S1eS6
- Wellings, K., Collumbien, M., Slaymaker, E., Singh, S., Hodges, Z., Patel, D. & Bajos, N. (2006). Sexual behaviour in context: a global perspective. In: *The Lancet Sexual and Reproductive Health Series*, Vol. 368(9548): 1706-1728.
- WHO (2016). Retrieved on October 9<sup>th</sup> from [http://www.who.int/topics/sexual\\_health/en/](http://www.who.int/topics/sexual_health/en/)
- Worldbank (2010). *Determinants and consequences of high fertility: a synopsis of the evidence*. Washington DC: The WorldBank.
- Zuehlke, E. (2009). *Youth unemployment and underemployment in Africa brings uncertainty and opportunity*. Population Reference Bureau: <http://www.prb.org/Publications/Articles/2009/youthunemployment.aspx>