Solutions through Reproductive Health: Why Family Planning Can Help Solve Climate Change



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We developed this PowerPoint to help clarify some of the main connections between population and climate change. We believe that including population dynamics into climate-related education and advocacy will help pinpoint further solutions that will make our climate interventions more successful — such as access to reproductive health care, family planning options, girls' education, and gender equity.

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"Fundamentally, the twenty-first century presents two equally urgent imperatives: to lessen human impact on the environment and to reduce the glaring inequalities that divide humanity. Slowing population growth is central to both."

- Laurie Mazur, "A Pivotal Moment: Population, Justice & the Environmental Challenge"

Outline

Intro

- Population and Climate Vulnerability
 - Country Profile: Bangladesh
- Future Population Projections
- Family Planning and Climate Change
- Unmet Need for Family Planning
- Conclusions

Intro

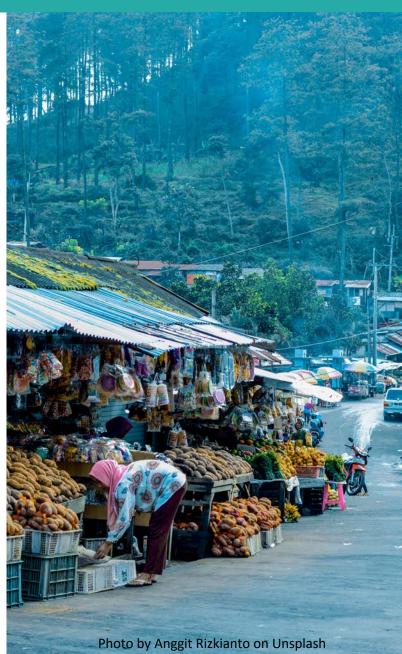
- Rapid population growth hinders sustainable development and exposes more people to climate impacts.
- Increasing access to voluntary family planning services is a human rights-based and costeffective approach to addressing climate change.
- Family planning is an integral part of global sustainable development strategies, and yields both social and environmental benefits to society.



Family planning is not only a matter of human rights; it is also central to women's empowerment, reducing poverty and achieving sustainable development.

Population and Climate Vulnerability

- Globally, rapid population growth compounds the threats posed by climate change.
- High levels of unmet family planning needs in low-income countries worsen pressures already felt by rapid population growth, including:
 - resource depletion
 - · low economic growth
 - · less access to resources like education and health care
 - · low status of women
 - overall health

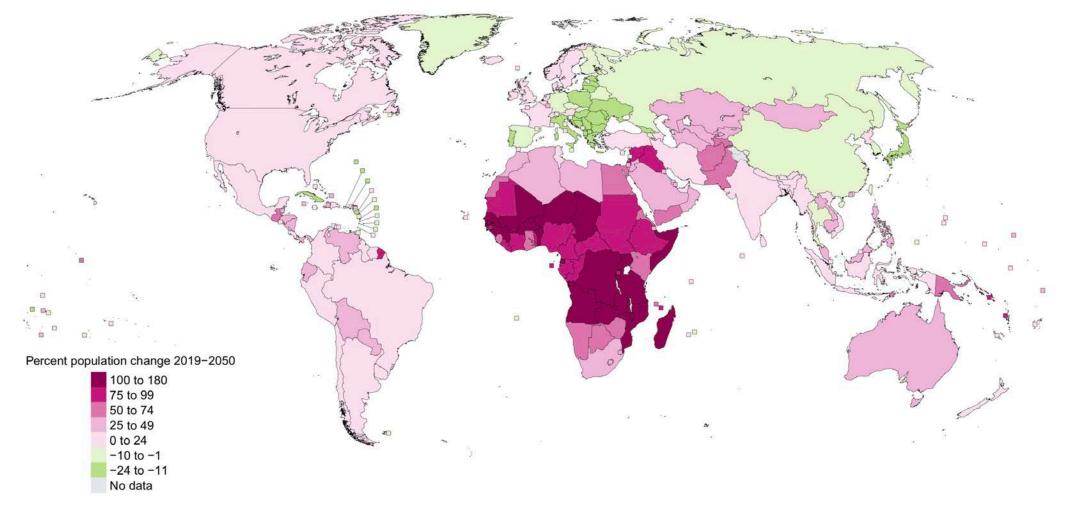


Population and Climate Vulnerability

- Rapid population growth slows global sustainable development.
 - The 47 least developed countries are the fastest growing. Many are projected to double in population between 2019 and 2050 – increasing strain on already scarce resources and challenging improvements in health and economic growth.



Many least developed countries will continue to experience rapid population growth between 2019 and 2050



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. Final boundary between the Republic of Sudan the Republic of South Sudan has not yet been determined. A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Note: Countries or areas with surface area less than 30,000 km2 are shown with squares coloured according to their statistical values.

Population and Climate Vulnerability

- Sub-Saharan Africa is expected to add over 1 billion people by 2050, which would account for over half of the projected global population growth between now and 2050.
- Two-thirds of the population growth projected through 2050 would occur even if childbearing in high fertility countries were to immediately fall to replacement level.
 - This is because these countries have a large population of children and youth who will reach reproductive age over the next few decades.



SOLUTIONS THROUGH REPRODUCTIVE HEALTH: WHY FAMILY PLANNING MATTERS TO CLIMATE CHANGE



Population and Climate Vulnerability

- Low-income populations are generally the most vulnerable to climate change because there is less capacity to prepare, respond, or adapt to things like changing weather patterns, rising sea levels, or extreme weather events.
 - Heavy reliance on local and regional natural resources for food security and livelihoods is also common, as well as:
 - Limited alternative employment opportunities
 - Increased financial insecurity





Population and Climate Vulnerability

- Due to geography (e.g. tropical, high altitude, land-locked), many of the world's least developed countries are already prone to:
 - drought
 - flooding
 - natural disasters
- Climate change will increase the frequency and intensity of these adverse weather events.



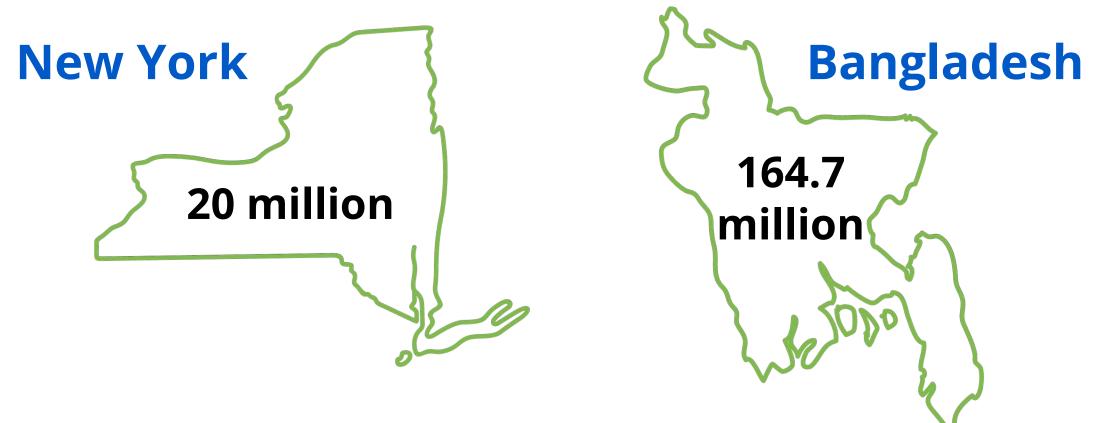
Country Profile: Bangladesh

- Bangladesh is about the size of New York, but has a population of around 164.7 million people — making it the 8th most populous country in the world and encompassing 2% of the global population.
- The country is expected to exceed 200 million people by 2045, according to the UN's medium variant projection.

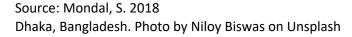




Country Profile: Bangladesh



- Bangladesh's population has doubled over the last 35 years, but its CO₂ emissions represent only 0.19% of the global total.
 - Yet, climate change poses the biggest threat to the country, as increasing temperatures and resulting rainfalls impact rice and wheat production.





- Bangladesh is particularly vulnerable to climate change because of its low elevation, high population density and unstable infrastructure.
- The country is already enduring the effects of sea level rise, intense and irregular storms, cyclones, drought, erosion, landslides, flooding, and salinization, all as a result of climate change.





- Two-thirds of Bangladesh lives on the coast, where tidal flooding caused by sea level rise is increasing. By 2050, up to 18 million people may be forced to move because of sea level rise alone.
- Scientists predict a 50 cm rise in sea level by 2050, which will cause the country to lose about 11% of its land and could affect more than 15 million people.
- Some estimates predict that by 2050, one in seven people will be displaced by climate change.



- The agriculture industry contributes 56% of Bangladesh's GDP and is the main source of income for the country's population.
- Crop damage resulting from sea level rise is causing large yield losses and price reductions.



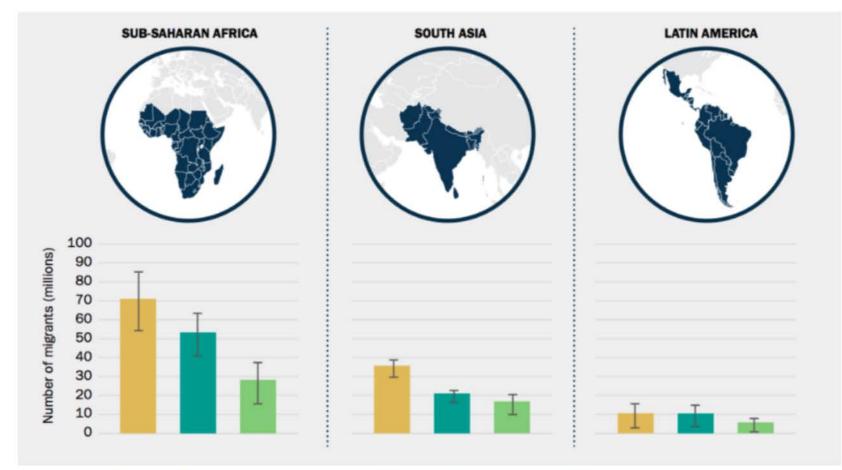
- Population pressures are increasing stress on agricultural production required to meet increasing food demands.
- At the same time, the processes involved in agricultural production contribute the most amount of greenhouse gas emissions, including carbon dioxide, methane, and nitrous oxide.
- About 40% of Bangladesh's overall emissions come from its agriculture industry, making it the most significant contributor to the country's growing emissions.



Population and Climate Vulnerability

- Rapid population growth will also perpetuate large-scale, in-country migration, as people are forced to migrate as a result of natural disasters caused by climate change.
- Some estimates project that more than 143 million people will be forced to migrate by 2050 because of crop failure, water scarcity, and sea level rise.
- The World Bank (2018) reports that the majority of the coming migration will shift populations from rural to urban areas.
 - Large-scale migration is set to take place in Sub-Saharan Africa, South Asia, and Latin America — three places that represent over 55% of the developing world's populations.

Internal Climate Migration Scenarios by 2050



"Plausible" internal climate migration scenarios by 2050 across Sub-Saharan Africa, South Asia, and Latin America under three scenarios: the "pessimistic (Reference)" scenario (yellow), the "more inclusive development" scenario (blue) and the "more climate-friendly" scenario (green). Vertical lines represent the 95th percentile confidence interval. Source: World Bank 2018.

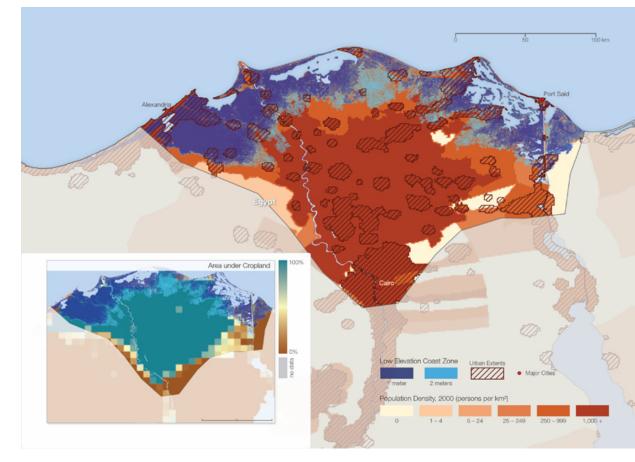
Population and Climate Vulnerability

- Migration to large cities will increase climate vulnerability.
 - One-third of the world's population lives within 60 miles of shoreline.
 - 13 of the world's 20 largest cities are coastal.



Population and Climate Vulnerability

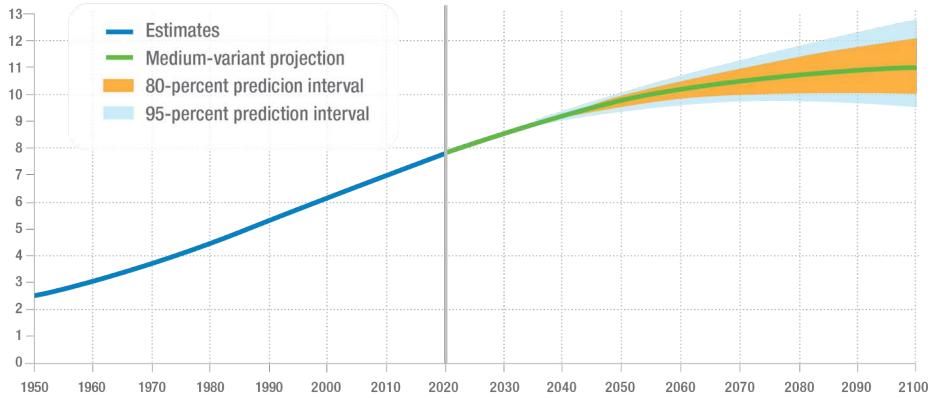
- In the next 20 years, sea level rise will begin submerging a large area of the Nile Delta which facilitates large-scale agricultural production.
- Agricultural production in India and Sub-Saharan Africa face projected losses of 40% or greater by 2080 because of climate change.



Future Population Growth

The world's population continues to grow albeit at a slower pace than any time since 1950.

Population of the worlds: estimates, 1950-2020, medium variant projections, 2020-2100, with 80 – and 95 – percent prediction intervals



The UN's medium variant projects that the world will host between 9.4 and 12.7 billion people in 2100.

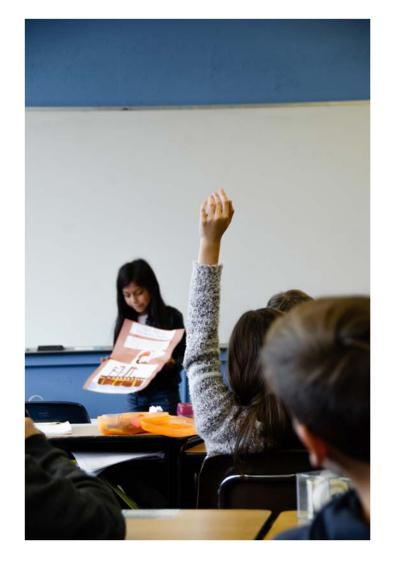
Reaching the lower projection will require large-scale investments in family planning services.

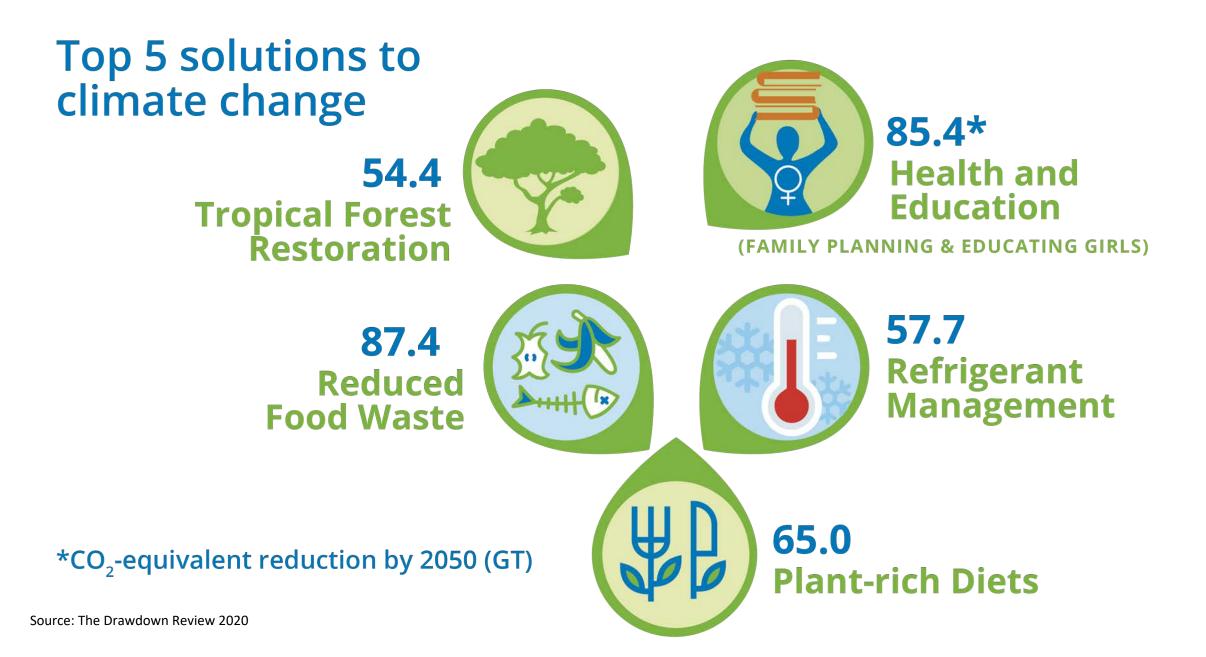
Population and Climate Change

- Slowing population growth through rights-based, voluntary family planning services is one important solution to climate change that meets both human rights agendas as well as sustainability efforts.
- Other solutions include:
 - Technological innovations
 - Shift to renewable energy sources
 - Lifestyle changes and reduced per capita consumption
 - Fundamental changes to global economic systems
 - Others?

Solutions Through Reproductive Health

- When education levels rise for women and girls, they gain political and economic power.
 - Higher levels of education afford more options for sustained employment and help increase livelihoods.
 - More resources become available to help women and girls choose when and how to start a family.
 - Women who are educated tend statistically to have fewer, healthier children.
- Low-income populations face the biggest barriers to getting an education and family planning.
 - This is largely because of limitations from cost, stigma, or policies.





Individual Solutions

The rankings shown here are based on projected emissions impact globally. The relative importance of a given solution can differ significantly depending on context and particular ecological, economic, political, or social conditions.

Scenario 1 Overall Ranking Solution	TOTAL CO₂-eq (GT) Reduced/ Sequestered (2020-2050)	Net First Cost To implement solution (Billion \$US)	Net Lifetime Cost To operate solution (Billion \$US)	Net Lifetime Profit other implementation & operation (Billion \$US)
1 Reduced Food Waste	87.4	_	-	_
2 Health and Education	85.4	-	-	-
3 Plant-Rich Diets	65.0	-	-	-
4 Refrigerant Management	57.7	-	600	-
5 Tropical Forest Restoration	55.4	-	-	-
6 Onshore Wind Turbines	47.2	800	-3,800	-
7 Alternative Refrigerants	43.5	-	-	-
8 Utility-Scale Solar Photovoltaics	42.3	-200	-12,900	-
9 Improved Clean Cookstoves	31.3	100	1,900	-
10 Distributed Solar Photovoltaics	27.9	400	-7,800	-

HEALTH BENEFITS

- Reduces maternal mortality & morbidity
- Reduces infant and child mortality
- Reduces rated of unintended pregnancy
- Reduces abortion rates
- Increases health overall



Voluntary Family Planning and Reproductive Healthcare

Informed choice: enable women and couples to freely and responsibly determine the number, timing and spacing of their births.

SOCIAL, ECONOMIC & ENVIRONMENTAL BENEFITS

- Increases education rates for women and girls
- Improves livelihoods and wellbeing
- Reduces poverty
- Relieves population pressure on:
 - Natural resources
 - Economic growth
 - Food production
 - Infrastructure development
 - State stability
- Slower population growth reduces greenhouse gas emissions Lessens climate vulnerability

FAMILY PLANNING AND THE SUSTAINABLE DEVELOPMENT GOALS

Peace, Justice and Strong Institutions

more routinely met.

The strain of rapid population growth

can threaten a fragile state's stability and

security. Family planning can reduce this

stress and contribute to more peaceful

societies in which all people's needs are

GOAL #16



Climate Action

According to the Universal Access Project, meeting the current global demand for contraception and slowing population growth could get the world a third of the way to the emissions reductions we need by 2050 to avoid dangerous climate disruptions.

Responsible Consumption and Production

GOAL #12

Improving access to family planning helps slow population growth, which reduces demand for food and relieves some of the environmental pressures of overfarming, overfishing, and greenhouse gas emissions.

Decent Work and Economic Growth



Family planning can create a demographic dividend: Longer lives and smaller families means more working-age people supporting fewer young people.

GOAL #5

Family planning and gender equality go hand-in-hand, because family planning empowers women to make decisions about when and how many children to have.



No Poverty Ň:++:† GOAL #1

Enabling women and girls to plan their pregnancies lowers health care costs, keeps more girls in school, and helps more women enter and stay in the workforce.





Gender Equality

K4Health Knowledge for Health

Zero Hunger

The benefits of birth spacing can have far-reaching effects into childhood, for example, by reducing stunting-a key measure of malnutrition.

Good Health and

Well-being



Well-spaced births can also lead to better health for both mothers and babies, such as healthy birth weight and stronger bones.

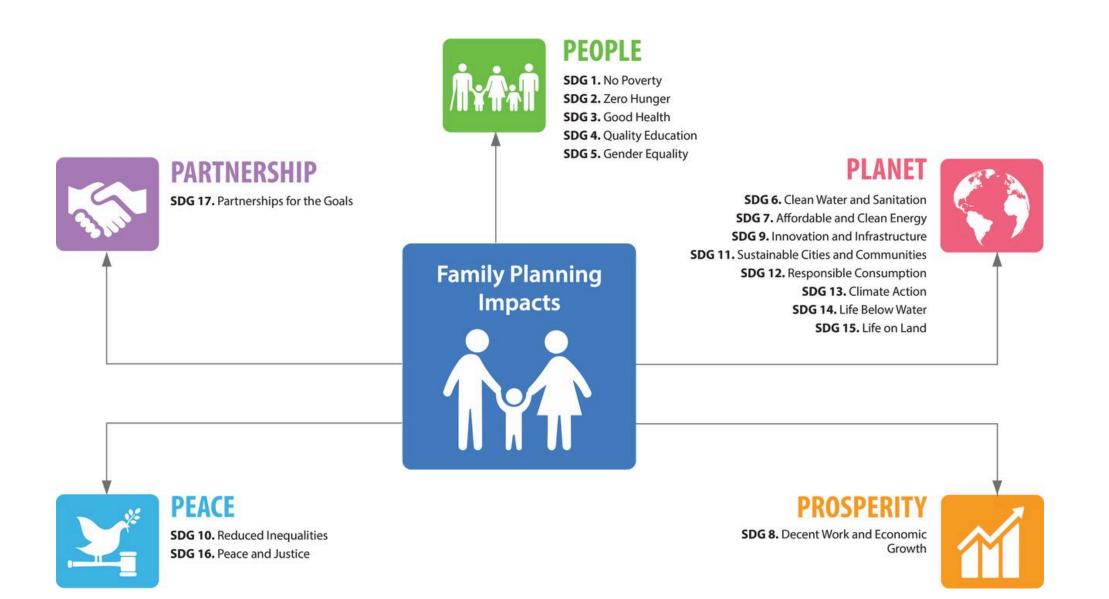
Quality Education

GOAL #4

Access to comprehensive sex education and contraceptive services help girls delay sexual debut, avoid pregnancy, and stay in school longer. On average, each year of education a girl attains increases her future earning potential by 10% and gives her children a 10% better chance of surviving infancy.





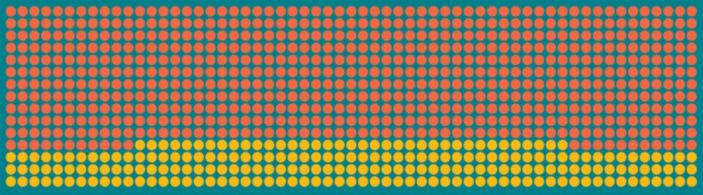


SDG = UN Sustainable Development Goals, 2030 Agenda for Sustainable Development

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WHY INVEST IN FAMILY PLANNING?

885 million women of reproductive age (15-49) in developing regions want to avoid a pregnancy



214 million of them have an unmet need for modern contraception

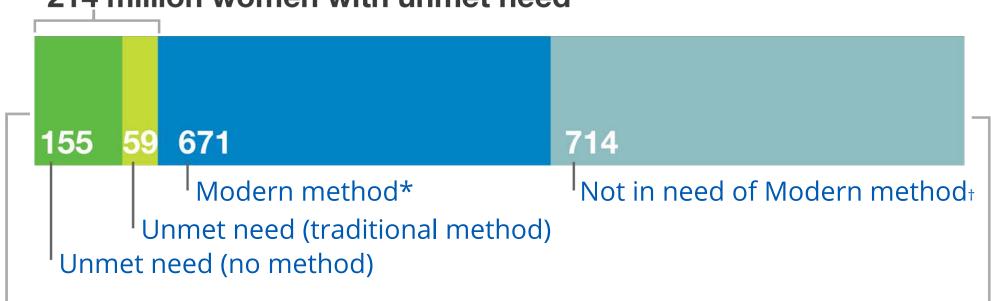
This means they want to avoid a pregnancy but are not using a modern method of contraception

• = one million

gu.tt/AddingItUp2017

CONTRACEPTIVE NEED AND USE

In developing regions, 214 million women want to prevent pregnancy but are not using modern contraception



214 million women with unmet need

1,600 million women of reproductive age, 2017

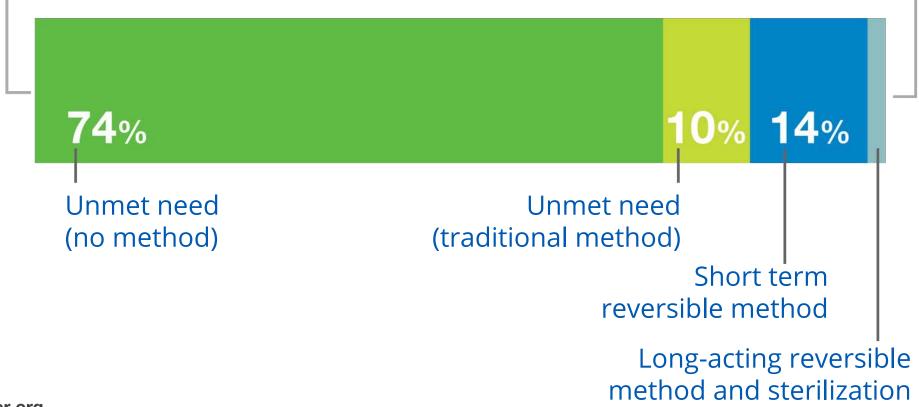
*Modern methods include female and male sterilization, hormonal methods, IUDs, male and female condoms, modern fertility awareness-based methods, lactational amenorrhea method, emergency contraception and other supply methods.

[†]Includes women who are unmarried and not sexually active, are infecund, want a child in the next two years, or are pregnant/postpartum with an intended pregnancy.

UNINTENDED PREGNANCY AND UNMET NEED

Women with unmet need for modern contraceptive methods account for 84% of unintended pregnancies.

89 million unintended pregnancies, 2017





Family Planning helps women and slows climate change

- Addressing the global unmet need for family planning will help empower more women to plan their pregnancies. Access to and use of comprehensive reproductive healthcare:
 - · Increases the health of women, children, and families
 - · Decreases rates of unintended pregnancies, unplanned births, and abortions
 - · Increases education rates, livelihoods, and personal autonomy
 - · Reduces emissions and helps slow climate change
 - · Increases community resilience from climate impacts

Discussion points:

- Can you think of other ways that access to high quality healthcare benefits or otherwise influences a society?
- Outside of access, what are some challenges to increasing the use of contraceptives and other family planning services around the world?





Family Planning Innovations in Bangladesh

- Family planning is one of Bangladesh's top stated priorities for slowing population growth and achieving sustainable development.
 - Bangladesh has prioritized implementing a national action plan for postpartum family planning,
 - · Reduced social and geographical disparities by increasing services, and
 - Implemented a national adolescent health strategy to address the unmet need for contraception.
- The government of Bangladesh will dedicate \$615 million for this family planning program from 2017-2021, which is an increase of 67% from the previous program.
- Bangladesh continues to strengthen and improve its trained service providers.



Family Planning Innovations in Bangladesh

- Contraceptive use in Bangladesh increased sevenfold in less than 40 years, from 8% in 1975 to 62% in 2014.
- The unmet need for family planning dropped from 21.6% in 1993-94 to 12% in 2014.
- The total fertility rate (TFR) was 6.8 children per woman in 1975 and decreased to 2.2 children per woman in 2014. Today, the TFR is about 2.05 births per woman.



Family Planning Innovations in Bangladesh

- Still, almost ¼ of pregnancies are unintended, signaling an unmet need for family planning. The TFR would be 30% lower if unplanned pregnancies were avoided.
 - Commitment from governments and organizations is necessary to monitor strategies and improve quality and efficiency of services.



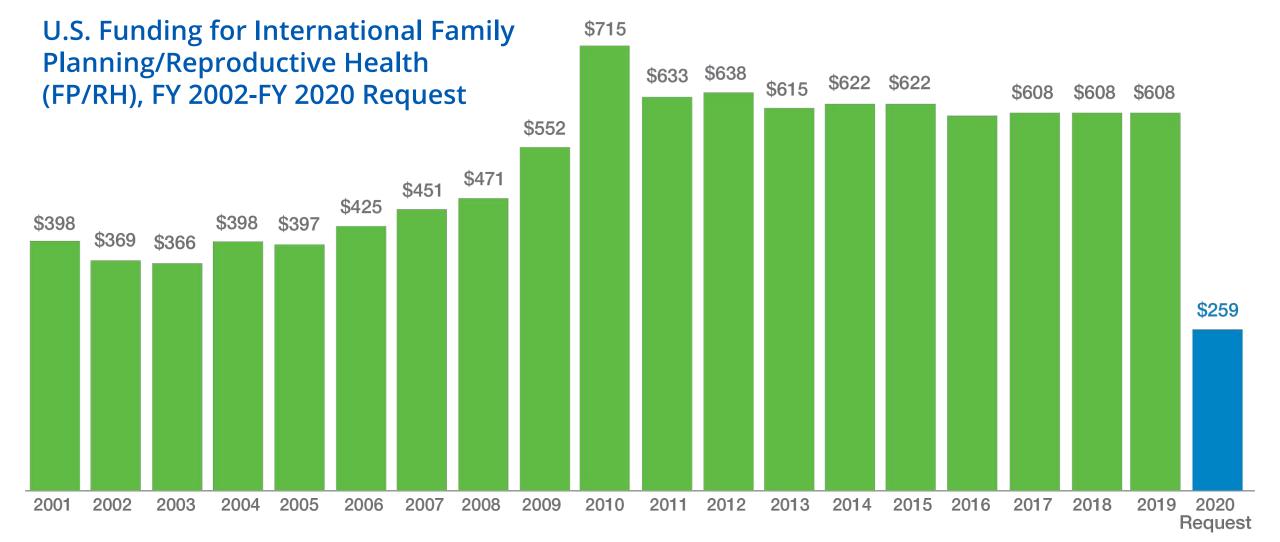
Source: Huda, F. A. et al. 2017 Photo by Charu Chaturvedi on Unsplash

What does meeting the global unmet need for Family Planning look like?

- Currently, family planning programs receive just 1% of all overseas development assistance.
- Fully meeting the current unmet need for family planning services for the 214 million women in developing regions would cost \$12.1 billion annually.
- Family Planning 2020 estimates that in 2016, total spending for family planning was \$3.4 billion.
 - Of this total, 48% was from donors
 - · 34% was from national governments
 - · 14% was out-of-pocket
 - 4% was from corporations, NGOs, and other domestic organizations

Funding Breakdown

- Following the 1994 International Conference on Population and Development (ICPD), 179 UN member states agreed on a costed implementation plan to expand access to reproductive health care.
- The ICPD Programme of Action called for 2/3 of the annual cost to be covered by low-income countries and for the remaining 1/3 to be covered by donor nations.
 - Donor nations are expected to contribute 1/3 of the \$12.1 billion total cost or \$4.033 billion.
 - Final calculation produces a recommendation of \$1.66 billion for FY 2020 as the appropriate U.S. share of total funding to meet unmet need.



Q

CONCLUSIONS

- Family planning programs receive 1% of all overseas development assistance, and yet are some of the most cost-efficient and effective investments a country can make.
- Slowing population growth through rights-based innovations like voluntary planning services and girls' education will be necessary in achieving the UN's medium-projection of 9.7 billion people by 2050.
- For high-fertility countries, fertility decline is driven by various factors of human development, including expanded access to reproductive healthcare services like family planning.



CONCLUSIONS

- Population growth contributes to climate vulnerability around the world.
- Slowing population growth through voluntary family planning will positively affect global efforts to mitigate the effects of climate change, and will increase resilience for populations most at-risk.
- Investments in comprehensive reproductive healthcare foster sustainable development and reduce climate impacts around the world.

Sources

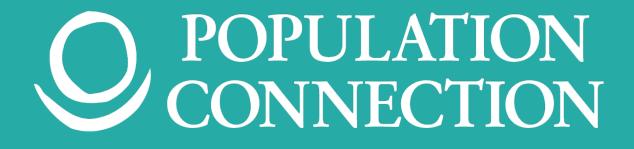
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