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FROM THE AMERICAN PEOPLE

Achieving the *Grand Convergence*

A Case for Investing in Family Planning Supplies and Supply Chains

FEBRUARY 2016

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USAID | DELIVER PROJECT, Task Order 4
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Abstract
Inspired by the 20th anniversary of the first World Development Report, which focused on health, the Lancet Commission on Investing in Health released the *Global Health 2035* report in 2013. This visionary report asserts that we can achieve significant health gains in low- and middle-income countries by 2035, thus achieving a *grand convergence*.

Aligned with *Global Health 2035*, a new report—*Advancing Social and Economic Development by Investing in Women's and Children's Health: a New Global Investment Framework* —mapped the health, economic, and social gains resulting from a greater investment in women's and children's health during the same time period. Contraceptive commodity costs and the associated supply chain operational costs required to minimize the unmet need for family planning are important elements of the overall Framework costs.

The USAID | DELIVER PROJECT collaborated with the Framework authors to present this new companion piece; it outlines the contraceptive commodity costs and related supply chain costs. The findings are disaggregated by region and key constituency needs. By knowing these costs, international donors, governments, and program managers can ensure that funds are available to meet commitments for increased access to comprehensive family planning commodities and services.

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Acronyms

EAP	East Asia and Pacific
ECA	Europe and Central Asia
FP2020	Family Planning 2020
GFF	Global Financing Facility
HIP	High Impact Practices in Family Planning
LAC	Latin America and Caribbean
LMIC	low- and middle-income countries
MCH	maternal and child health
MENA	Middle East and North Africa
MOH	Ministry of Health
RMNCH	reproductive, maternal, neonatal, and child health
SA	South Asia
SSA	sub-Saharan Africa
TFR	total fertility rate
UHC	universal health coverage
USAID	U.S. Agency for International Development
WHO	World Health Organization

Executive Summary

Inspired by the 20th anniversary of the first World Development Report, which focused on health, the Lancet Commission on Investing in Health released the *Global Health 2035* report (Jamison et al. 2013) in 2013. This visionary report asserts that we can achieve significant health gains in low- and middle-income countries by 2035, thus achieving a *grand convergence*.

Aligned with *Global Health 2035*, a new report—*Advancing Social and Economic Development by Investing in Women's and Children's Health: a New Global Investment Framework* (the Framework) (Stenberg et al. 2014)—mapped the health, economic, and social gains resulting from a greater investment in women's and children's health during the same time period. Contraceptive commodity costs and the associated supply chain operational costs required to minimize the unmet need for family planning are important elements of the overall Framework costs.

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Background

In 1993, the World Bank published the World Development Report, *Investing in Health* (World Bank 1993). This pioneering report made a persuasive case for investing in health to achieve benefits that include improved public health, as well as greater economic prosperity. Inspired by the 20th anniversary of the report, the Lancet Commission on Investing in Health was launched; the Commission published *Global Health 2035* (Jamison et al. 2013) in 2013. This visionary report reaffirms and strengthens the case for investing in health. In light of the experiences of the last two decades, it provides a framework for bringing infectious, child, and maternal mortality rates in low- and middle-income countries (LMIC) down to levels now found in the best-performing middle-income countries by 2035, achieving what it referred to as a *grand convergence*.

Aligned with *Global Health 2035*, a group of organizations and researchers developed a new Global Investment Framework for Women's and Children's Health (the Framework) (Stenberg et al. 2014), which maps the health, economic, and social gains that can result from a larger investment in women's and children's health during the same time period.

The Framework estimates the cost differential between a high coverage investment scenario and a low coverage investment scenario to be U.S. $5.00 per person by 2035. By increasing the spending across the RMNCH continuum of care in the high coverage scenario, the contribution of family planning services and commodities would avert an additional 69 million child deaths and 2.9 million maternal deaths between 2013 and 2035.

Methodology

The Framework presents high-level data for six reproductive, maternal, neonatal, and child health (RMNCH) intervention packages; family planning is one of the six. The Framework analysis highlights that an investment in family planning is cost effective, significantly contributes to a reduction in maternal- and child-mortality, and generates measurable healthcare savings. The Framework's family planning analysis is comprehensive; it can be used to estimate the total investments required, including costs in the areas of health system infrastructure, human resources, program management, and commodities.

The World Health Organization (WHO) estimated that approximately one-third of the world's population lacks reliable access to essential medicines, including contraceptives (Hogerzeil and Mirza 2011). Moreover, strengthening supply chain management, within the overall health system, is one of several "high-impact practices in family planning," which a technical advisory group of international experts identified (HIP 2012). While the Framework's family planning analysis factored in the country-specific commodity and supply chain costs, the report did not disaggregate supply chain costs by type of commodity.

Since the publication of the original Framework, the USAID | DELIVER PROJECT (the project) collaborated with the Framework authors to refine the analysis so it reflects the newest supply chain costing methodology; highlights the contraceptive commodity and supply chain resources required; and presents the data, based on the needs of specific constituencies and initiatives.

These findings build on and complement the Framework's methodology and help support global- and regional-advocacy and planning for the required family planning supplies and supply chains. The supply chains in this analysis are integrated, not parallel supply chains specific to family planning supplies.

In particular, the supplemental analysis performed by the project and Framework authors does the following—

- Reflects the most current evidence base for supply chain costing; this report presents newly refined supply chain costs, including commodity costs.
- Disaggregates the investments needed for contraceptive commodities and for operating the associated supply chains between 2016 and 2035.
- Disaggregates the Framework results for key subsets of countries; the disaggregated results are provided for the following—
  - regionally—Latin America and Caribbean Region (LAC), South Asia, sub-Saharan Africa
  - Family Planning 2020 (FP2020) focus countries
  - USAID priority countries for maternal and child health (MCH)
  - Global Financing Facility (GFF) front-runner countries.

Some key assumptions used in the original Framework are also used in this supplementary analysis:

- The contraceptive commodity costs used in the Framework, and in this report, are based on commodity pricing in 2011; they do not reflect subsequent market actions, such as contraceptive implant price reductions. Similarly, the method mix is assumed to remain constant, over time.
- The supply chain operational costs used in the original Framework were derived from a report published in 2009 (Sarley, Allain, and Akkihal 2009). The project—using its latest supply chain costing methodology and data available—calculated updated supply chain costs. All charts presented in this report are based on these newly updated supply chain costs.
- Both the Framework and this report presume that supply chain costs, as a percentage of product value, remain constant; regardless of whether the coverage level is high, medium, or low. Although, in reality, these percentages may vary due to a number of factors, sufficient evidence is not currently available to support these calculations.

Figure 1 summarizes additional basic assumptions used in the Framework's methodology for calculating costs for contraceptive commodities and for operating the related supply chains. The analysis performed by the USAID | DELIVER PROJECT also uses these assumptions to calculate the results presented in this report, which are consistent with the original Framework.

Figure 1. Methods for Calculating Costs for Contraceptive Commodities and Supply Chains

Tool for Framework Development

OneHealth Tool was created as a multi-agency initiative with broad international support.

Geographic Levels for Presentation of Results

- 74 low- and middle-income countries studied
- 72 countries (all countries studied, with the exception of China and India)
- Geographic regions

Modern Family Planning Methods Package

Oral contraceptives, female and male condoms, injectables, IUDs, implants, female sterilization, male sterilization, vaginal barrier methods, and vaginal tablets

Family Planning Delivery Channels

Hospital, first-level facility, outreach, and community

Family Planning Supply Chain Costs

Estimated in the Framework as a percentage of product value—which vary across countries and commodity types—for 2013–2035, based on methodology published in 2009 (Sarley, Allain, and Akkihal 2009).

Framework Coverage Scenarios

- Low: maintaining 2012 coverage levels
- Medium: scale-up per current trends
- High: current scale-up trends accelerated, based on the fastest rate of positive change achieved since 1990 in other countries with comparable starting coverage levels.

Family planning through contraceptive use increases, based on trend model data, with the rate of growth restricted to a maximum of 3% per year. Coverage was set to flatline when the total fertility rate (TFR) reaches 2.1. Moreover, for those countries where TFR was below 2.1 in the base year, the contraceptive prevalence rate was kept at a constant level.

Costs across Sectors

The Framework's analysis encompasses costs across all market sectors.

Estimated Resource Requirements for Family Planning Supplies and Supply Chains—in Support of the *Grand Convergence*

Figure 2. Yearly Family Planning Commodity Costs, 2016–2035, 72 Countries

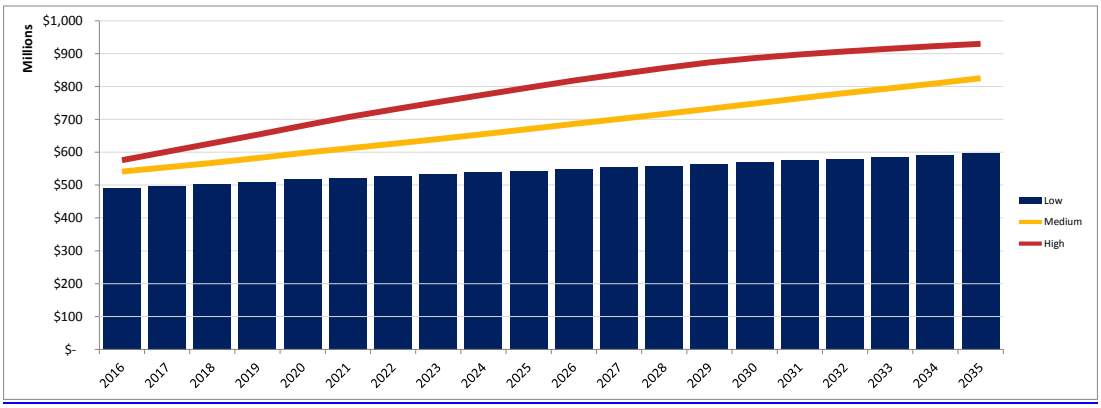
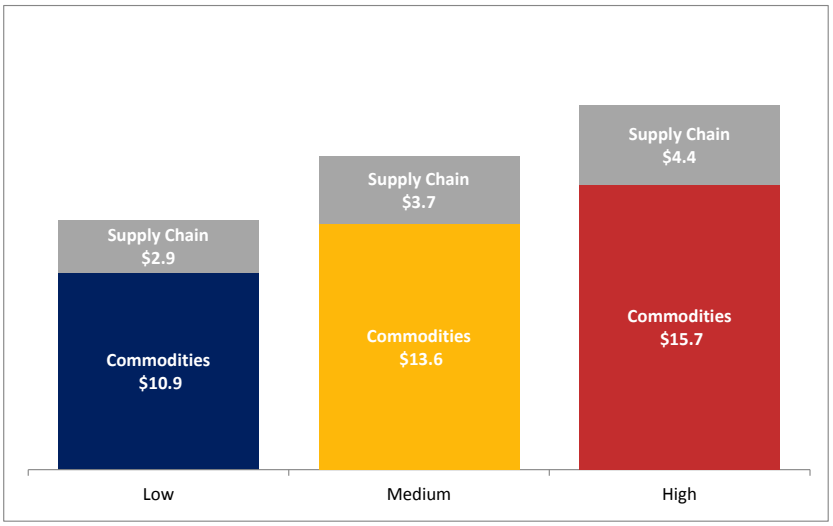


Figure 2 illustrates the yearly contraceptive commodity costs estimated by the Framework for 2016–2035 for the 74 countries in the Framework study, with the exception of China and India.[1] By 2035, these commodity costs grow to approximately U.S. $600 million with the low coverage scenario, U.S. $800 million with the medium coverage, and U.S. $900 million with the high coverage scenario. The steady growth rate in the Framework, under all three coverage scenarios, reflects underlying assumptions about increases in population and in-service coverage.

For the 2016–2035 timeframe, the combined contraceptive commodity and supply chain costs range from U.S. $13.8 billion under the low coverage scenario to U.S. $20.1 billion under the high coverage scenario for these 72 countries (see figure 3).

[1] The Framework presents results for the full set of 74 countries and also presents results for the 74 countries, with the exception of China and India. This companion report presents results for the 74 countries, with the exception of China and India, because these two countries have a disproportionate share of the worldwide population and cost impact.

Figure 3. Total Family Planning Commodity and Supply Chain Costs, 2016–2035, 72 Countries



While the investment required to implement the high coverage scenario across the RMNCH continuum of care is significantly more than for medium- or low-coverage, the projected health and economic benefits are also higher. The original Framework estimated that an additional 2.14 million maternal deaths would be prevented between 2013 and 2035 for the 72 countries if the high coverage scenario is implemented across the RMNCH continuum of care, when compared with medium coverage. Moreover, the economic benefits derived from lower rates of mortality and morbidity would accrue more rapidly with the high coverage scenario, as documented in the Framework report.

Disaggregated Requirements for Key Subsets of Countries

As stated earlier, this report presents contraceptive commodity and supply chain operational costs for key subsets of countries. This analysis reflects the need for more granular analysis to better understand the regional variations, as well as the specific requirements for global initiatives and donor priorities.

This disaggregation of data may help specific constituencies in advocacy and planning. For example, advocates may estimate the levels of projected funding for contraceptive commodities in a geographic region and compare these figures with the estimated requirements provided in this report. This will help determine if funding is sufficient to support the *grand convergence*.

Geographic Regions of Interest

The original Framework analysis reveals that investment requirements for the six health packages vary significantly from region to region (Stenberg et al. 2014). Table 1 lists the family planning commodity and supply chain costs disaggregated for the LAC region, South Asia, and sub-Saharan Africa; data for India is included in the figures presented for the South Asia region. See *appendix A* to identify the countries in each geographic region (based on the World Bank classification). As noted earlier, the supply chain operational costs used in the original Framework have been updated, reflecting the latest supply chain costing methodology and data available. Table 1 has the updated figures, disaggregated for geographic regions of interest.

The table illustrates that, as coverage of family planning services accelerates between now and 2035, the greatest level of investment is required in South Asia. However, if India were removed from this regional analysis, most of the investments required would be in sub-Saharan Africa. See appendix *B* for additional figures that show the needed investments for each of these three geographic regions of interest.

Examining contraceptive commodity and supply chain costs by geographic region enables the reproductive health community to estimate the overall needs for the regions of interest. It is also helpful to consider the contextual factors for each region in domains, such as demography and health outcomes. Sub-Saharan Africa has the highest percentage of women with unmet need; this region also has the highest projected population growth rate. Because of the potential impact of these trends on public health and on economic development, many in the global reproductive health community are focusing resources on expanding contraceptive uptake in this geographic region. While the percentages of women with unmet need across South Asia are lower than in sub-Saharan Africa, because of the size of the population in South Asia, the need for contraceptive commodities—and the supply chains to manage and deliver them—are still very significant. Additionally, in the LAC region, the percentage of women with unmet need is much lower than in either South Asia or sub-Saharan Africa; however, significant issues remain in this region: in some countries, inadequate access to family planning among the poorest quintiles; high adolescent pregnancy rates; and high maternal mortality rates, particularly among women aged 15–19.

Table 1. Total Family Planning Commodity and Supply Chain Costs by Region (U.S. $ billion), 2016–2035

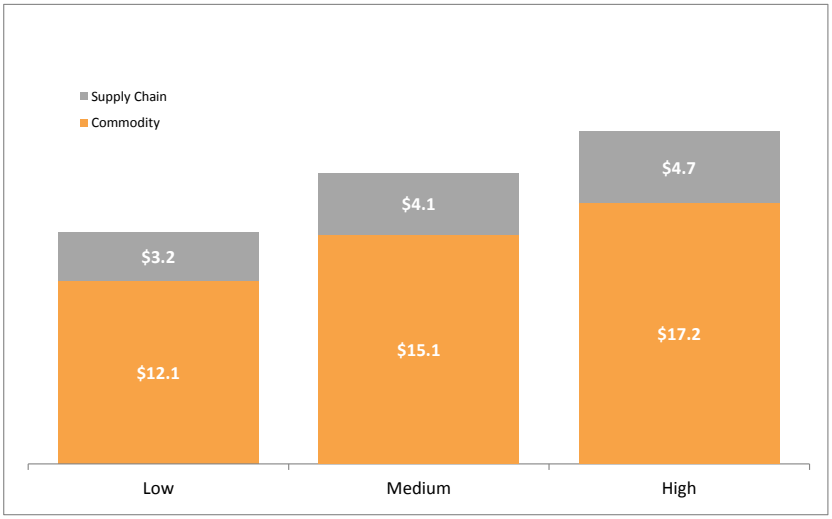
	Sub-Saharan Africa		South Asia		Latin America and Caribbean Region	
	Commodities	Supply Chain Operations	Commodities	Supply Chain Operations	Commodities	Supply Chain Operations
Low-coverage scenario	$2.7	$0.8	$5.8	$1.3	$1.7	$0.4
Medium-coverage scenario	$4.5	$1.4	$6.7	$1.6	$1.8	$0.4
High-coverage scenario	$6.3	$2.0	$6.9	$1.6	$1.8	$0.4

FP2020 Focus Countries

FP2020, a global partnership launched in 2012, supports the right of women and girls to decide freely—for themselves—whether, when, and how many children they want to have. To advance family planning, FP2020 monitors progress across 69 focus countries, with the goal of expanding access to family planning information, services, and supplies to an additional 120 million women by 2020. Because expanding financial commitments from countries and/or international partners

contributes significantly to increased family planning access, it is useful to examine the estimated contraceptive commodity and supply chain costs for the focus countries.[2] More than 30 FP2020 focus countries have publicly made commitments to take constructive, strategic actions to increase access to family planning services and commodities for their populations. In some cases, this includes dedicated budget line items. While many countries have financially committed to specific increases in their contraceptive commodity procurements, the commitment to system strengthening and to improved operation of the associated supply chains is often not as clear. The availability of funds to efficiently operate contraceptive commodity supply chains is critical to ensure that procured commodities are accessible to the people who need them. The steady growth rate under all three coverage scenarios in figure 4 reflects underlying assumptions about increases in population and in-service coverage.

Figure 4. Estimated Investment Needed for FP2020 Focus Countries



USAID Priority Countries for MCH

The U.S. Agency for International Development (USAID) invests in programs, innovations, interventions, and system strengthening to reduce the rates of maternal and child mortality in 24 priority countries. In light of these very significant investments, and the positive impact of family planning access on both maternal- and child–mortality rates, it is instructive to examine contraceptive commodity and supply chain costs for the USAID priority countries. See *appendix A* for a list of the USAID priority countries for maternal and child health. For the subset of USAID MCH priority countries, this report examines the family planning commodity and supply chain costs for 23 of the 24 priority countries. The priority country of South Sudan was not included in the Framework because of data limitations; their costs are not included here.

[2] Refer to *appendix A* for a list of the FP2020 focus countries. For the subset of FP2020 focus countries, this report examines the family planning commodity and supply chain costs for 61 of the 69 focus countries. The FP2020 focus countries of Bhutan, Honduras, Mongolia, Nicaragua, South Sudan, Sri Lanka, State of Palestine, Timor-Leste, and Western Sahara were not included in the Framework; their costs are not included here.

Figure 5. Estimated Investment Needed for USAID MCH Priority Countries

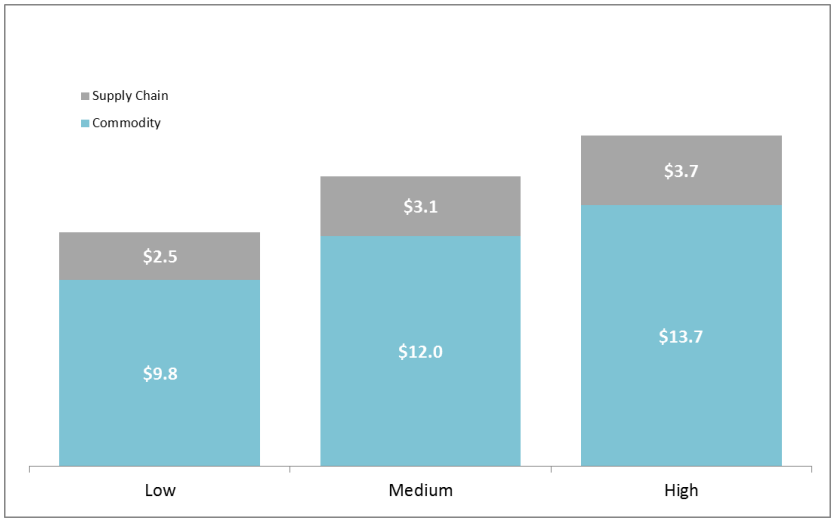


Figure 5 depicts the estimated total funds required to support the *grand convergence* by 2035 in the USAID priority countries for maternal and child health. The combined contraceptive commodity and supply chain costs range from U.S. $12.3 billion, for the low coverage scenario; to U.S. $17.4 billion, for the high coverage scenario.

The total investments required in the USAID priority countries, and in the FP2020 focus countries, are so high, compared with the totals in figure 3, because of the impact of the inclusion of India as a USAID priority country and a FP2020 focus country.

Global Financing Facility Front-Runner Countries

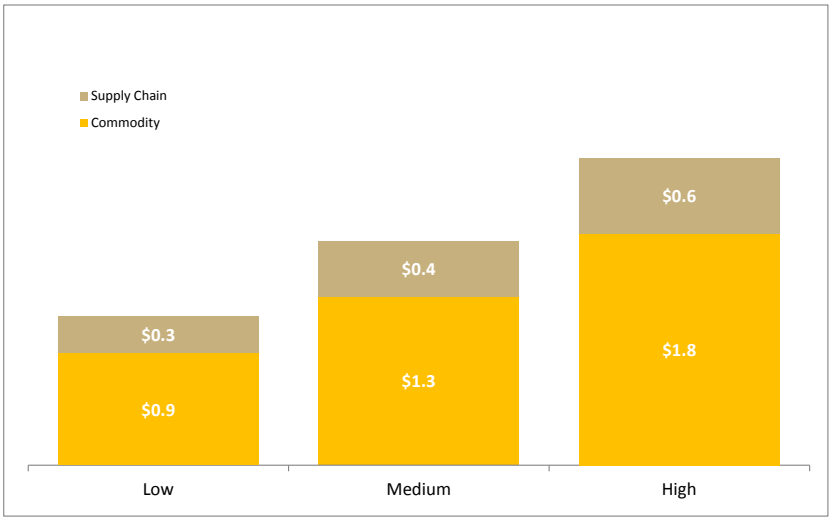
The initiation of a GFF for RMNCH was first announced at the United Nations General Assembly in September 2014 by the World Bank Group and the Governments of Canada, Norway, and the United States. In July 2015, the GFF was formally launched at the International Conference on Financing for Development in Ethiopia. Also, in July 2015, additional donors were announced, including the Government of Japan and the Bill & Melinda Gates Foundation.

In support of the *Every Woman Every Child* initiative, the GFF is a mechanism for mobilizing support for LMICs to end preventable maternal-, neonatal-, and child deaths by 2030. It focuses on financing evidence-based, high-impact RMNCH interventions, while also maintaining a rights-based approach. The GFF also supports health systems strengthening interventions and activities—human resources for health, financing, supply chain management, and information systems.

The GFF was first implemented in four front-runner countries: Democratic Republic of the Congo, Ethiopia, Kenya, and Tanzania. Country-specific investment cases were developed for each front-runner country; GFF funding was provided to support those investment cases.

Going forward, it will be important to ensure that country-specific investment cases address issues that include commodity procurement, capacity building in supply chain management, and quality assurance for commodities. Figure 6 displays the estimated contraceptive commodity and supply chain costs for the combined four front-runner countries. The figure shows the combined contraceptive commodity and supply chain costs for 2016–2035—from U.S. $1.2 billion for the low coverage scenario to U.S. $2.4 billion for the high coverage scenario.

Figure 6. Estimated Investment Needed for GFF Front-Runner Countries



Opportunities for Action

The *Global Health 2035* report and the Framework make a strong case for accelerated and targeted investments to achieve a *grand convergence* for infectious-, child-, and maternal–mortality rates by 2035; family planning plays a critical role in achieving the health goals set for 2035. This report has explained, in detail, the corresponding investments needed for contraceptive commodities and for the supply chains that will manage these commodities between 2016 and 2035, based on the most current supply chain costing methodology available. Opportunities for action at the country- or global-level that may catalyze progress toward the *grand convergence*, in the specific area of family planning, include the following:

Refinement of Framework Data and Assumptions

New and enhanced family planning interventions are being implemented across many LMICs to increase women's access to a broad range of contraceptive commodities. Examples include programs for community health workers, improving last mile distribution, and introducing new contraceptive technologies.

To ensure that progress toward *Global Health 2035* goals is being assessed accurately, it is important to continue assessing contraceptive commodity and supply chain costs and to periodically update the modeling process.

Country-Level Analysis

The Framework was used to estimate health, social, and economic outcomes of investments across the RMNCH continuum of care for a large number of countries. Health ministries can also conduct similar country-specific analyses by using the OneHealth Tool and engaging in-country stakeholders in planning and prioritizing health system interventions, and estimating financial resource requirements.

Universal Health Coverage

The *Global Health 2035* report strongly advocates for providing universal health coverage (UHC), to support the goals. Any country-specific policy instrument, program, or health financing mechanism that is developed to increase equity and quality in service provision and financial protection—supporting a *grand convergence* by 2035—should include providing family planning services and commodities, as well as operating the systems to deliver services and commodities (Cotlear et al. 2015).[3] Moreover, policymakers must design these programs and mechanisms to ensure that appropriate incentives are in place for providers to equitably offer quality services and commodities, and for low-income clients to have quality family planning access at no charge.

[3] *Satisfaction of family planning* is the first of 11 indicators suggested for "assessing the coverage of essential health services."

Advocacy

Advocacy will be required at the global- and country-levels to ensure that appropriate health financing mechanisms are designed, interventions are implemented, and countries are on track to reach the *grand convergence* by 2035. Advocacy is needed to support the commitments of the appropriate levels of government and international partner funding, procurement, and provision of family planning commodities, as well as for related systems strengthening efforts.

Total Market Approach

In almost any LMIC, the participation of all market sectors is required to sustain high levels of access for a range of quality, affordable family planning services and commodities. Governments need to assess policies, such as those governing family planning service provision, importation, and procurement. As appropriate, they should then take constructive action through policy- and market-interventions to facilitate the alignment—and subsequent expansion—of providing family planning services and commodities from all sectors: public, subsidized, and private/commercial. This may include the deletion of policies and regulations that unnecessarily hinder private-sector activity, such as taxes/duties or limitations on commodity distribution. Local manufacturing of family planning commodities may also be facilitated, where appropriate.

At the global level, to support the availability of a broad range of acceptable, affordable, and high-quality family planning options, the reproductive health community should continue to look for innovative solutions for the areas of new family planning technologies and market shaping initiatives.

Systems Strengthening

Governments and international partners should continue to invest in systems strengthening to ensure that appropriate quantities of a range of family planning commodities are manufactured, forecasted, procured, and administered to end-users. The quality and performance of the public health supply chains is driven by a broad range of factors: supply chain financing, design, information systems, forecasting, inventory management, distribution, human resources, governance, and accountability to the public. Each of these must be considered in systems strengthening efforts.

Stewardship

Undoubtedly, strong public health systems and supply chains require mature and continuous stewardship, or oversight, from the public sector. The stewardship role of the state is designed to ensure that actors from all sectors—public, subsidized, and private/commercial—offer their products and services competently, equitably, and cost-effectively. For example, stewardship is needed to ensure that all market sectors adhere to national guidelines and promote equitable access for all women and girls of reproductive age to a range of family planning services and commodities, including in rural settings and urban slums. Without effective stewardship from the public sector, a country cannot achieve the public health goals set out in the *Global Health 2035* report.

In Conclusion

The expanded provision of equitable, affordable, high-quality family planning services and commodities is crucial for achieving the *grand convergence* by 2035 and for realizing the health and economic benefits that have been forecasted. We now know what estimated levels of investment are needed in family planning to support the dramatic gains in public health outlined by the *Global Health 2035* and by the Framework. Investments must ensure that appropriate quantities of high-quality commodities are procured and available, when and where they are needed—with individuals' access aligned with their ability to contribute to the costs of those products and services.

A country's progress toward the *Global Health 2035* goals can be supported by country-specific analysis, continued refinement of data and assumptions, universal health coverage programs, advocacy, total market approaches, and systems strengthening efforts. Entities—ministries, regulatory bodies, international partners, civil society organizations, and private sector actors—will all play vital roles in ensuring success. And, the stewardship role played by the public sector is absolutely critical to guide, shape, and oversee the policy direction and the required public health financial-, operational-, and regulatory-systems.

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Appendix A

Framework Countries

Country	World Bank Income Classification	World Bank Region	USAID Priority Country	FP2020 Focus Country
Afghanistan	Low income	SA	Yes	Yes
Angola	Upper middle income	SSA		
Azerbaijan	Upper middle income	ECA		
Bangladesh	Low income	SA	Yes	Yes
Benin	Low income	SSA		Yes
Bolivia	Lower middle income	LAC		Yes
Botswana	Upper middle income	SSA		
Brazil	Upper middle income	LAC		
Burkina Faso	Low income	SSA		Yes
Burundi	Low income	SSA		Yes
Cambodia	Low income	EAP		Yes
Cameroon	Lower middle income	SSA		Yes
Central African Republic	Low income	SSA		Yes
Chad	Low income	SSA		Yes
China	Upper middle income	EAP		
Comoros	Low income	SSA		Yes
Democratic Republic of Congo	Low income	SSA	Yes	Yes
Republic of Congo	Lower middle income	SSA		Yes
Côte d'Ivoire	Lower middle income	SSA		Yes
Djibouti	Lower middle income	MENA		Yes
Egypt	Lower middle income	MENA		Yes
Equatorial Guinea	High income	SSA		
Eritrea	Low income	SSA		Yes
Ethiopia	Low income	SSA	Yes	Yes
Gabon	Upper middle income	SSA		
Gambia	Low income	SSA		Yes
Ghana	Lower middle income	SSA	Yes	Yes

Country	World Bank Income Classification	World Bank Region	USAID Priority Country	FP2020 Focus Country
Guatemala	Lower middle income	LAC		
Guinea	Low income	SSA		Yes
Guinea-Bissau	Low income	SSA		Yes
Haiti	Low income	LAC	Yes	Yes
India	Lower middle income	SA	Yes	Yes
Indonesia	Lower middle income	EAP	Yes	Yes
Iraq	Upper middle income	MENA		Yes
Kenya	Low income	SSA	Yes	Yes
Democratic People's Republic of Korea	Low income	EAP		Yes
Kyrgyzstan	Low income	ECA		Yes
Lao PDR	Lower middle income	EAP		Yes
Lesotho	Lower middle income	SSA		Yes
Liberia	Low income	SSA	Yes	Yes
Madagascar	Low income	SSA	Yes	Yes
Malawi	Low income	SSA	Yes	Yes
Mali	Low income	SSA	Yes	Yes
Mauritania	Lower middle income	SSA		Yes
Mexico	Upper middle income	LAC		
Morocco	Lower middle income	MENA		
Mozambique	Low income	SSA	Yes	Yes
Myanmar	Low income	EAP		Yes
Nepal	Low income	SA	Yes	Yes
Niger	Low income	SSA		Yes
Nigeria	Lower middle income	SSA	Yes	Yes
Pakistan	Lower middle income	SA	Yes	Yes
Papua New Guinea	Lower middle income	EAP		Yes
Peru	Upper middle income	LAC		
Philippines	Lower middle income	EAP		Yes
Rwanda	Low income	SSA	Yes	Yes
Sao Tome and Principe	Lower middle income	SSA		Yes
Senegal	Lower middle income	SSA	Yes	Yes
Sierra Leone	Low income	SSA		Yes
Solomon Islands	Lower middle income	EAP		Yes
Somalia	Low income	SSA		Yes
South Africa	Upper middle income	SSA		Yes

Country	World Bank Income Classification	World Bank Region	USAID Priority Country	FP2020 Focus Country
Sudan	Lower middle income	SSA		Yes
Swaziland	Lower middle income	SSA		
Tajikistan	Low income	ECA		Yes
United Republic of Tanzania	Low income	SSA	Yes	Yes
Togo	Low income	SSA		Yes
Turkmenistan	Upper middle income	ECA		
Uganda	Low income	SSA	Yes	Yes
Uzbekistan	Lower middle income	ECA		Yes
Vietnam	Lower middle income	EAP		Yes
Yemen	Lower middle income	MENA	Yes	Yes
Zambia	Lower middle income	SSA	Yes	Yes
Zimbabwe	Low income	SSA		Yes

Appendix B

Estimated Regional Investments Required

Following are figures that depict the investments needed for three geographic regions: SSA, SA, and LAC. Refer to appendix A for a listing of the Framework countries included in each region.

As the figures show, the investments needed for scaling up in SSA and SA are significantly higher than those in the Framework's LAC countries. Additionally, if India were removed from the SA calculations, SSA by far, requires the greatest investment

Figure 7. Total Cost 2016–2035, Sub-Saharan Africa (U.S. $ billions)

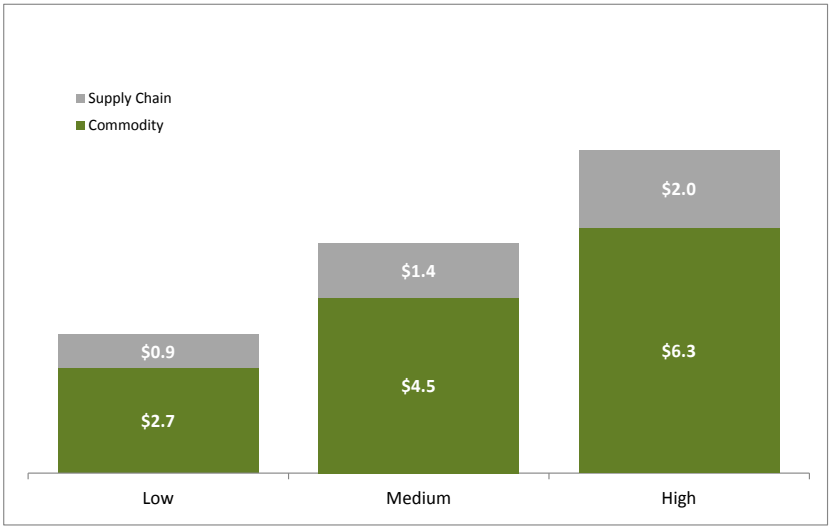


Figure 8. Total Cost 2016–2035, South Asia (U.S. $ billions)

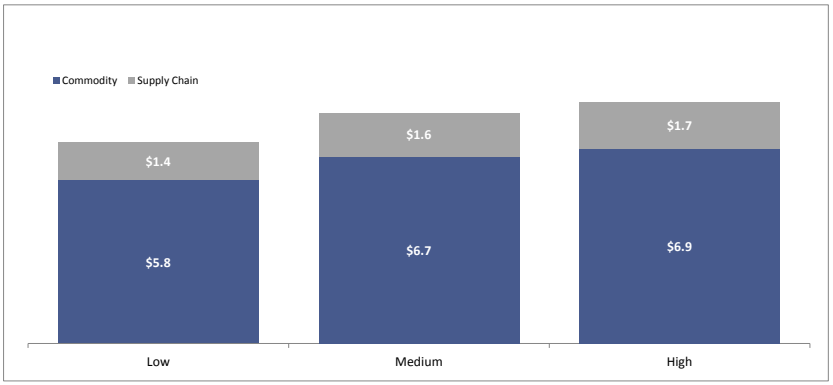
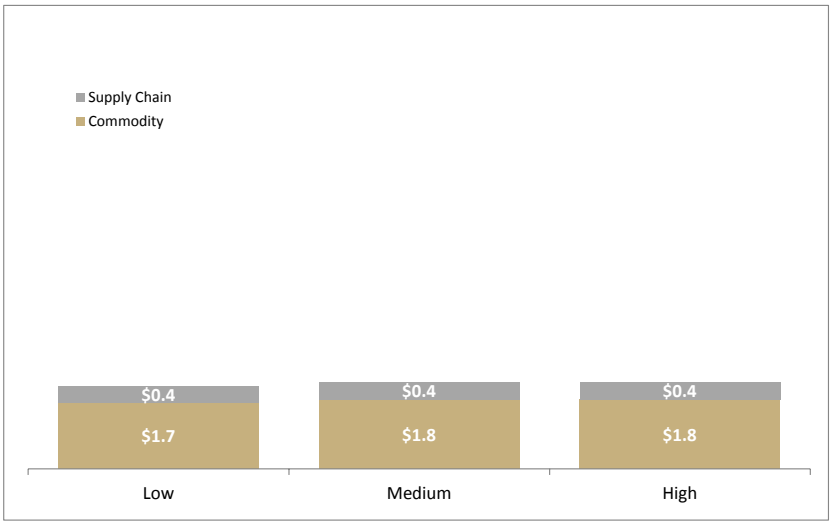


Figure 9. Total Cost 2016–2035, LAC (U.S. $ billions)



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