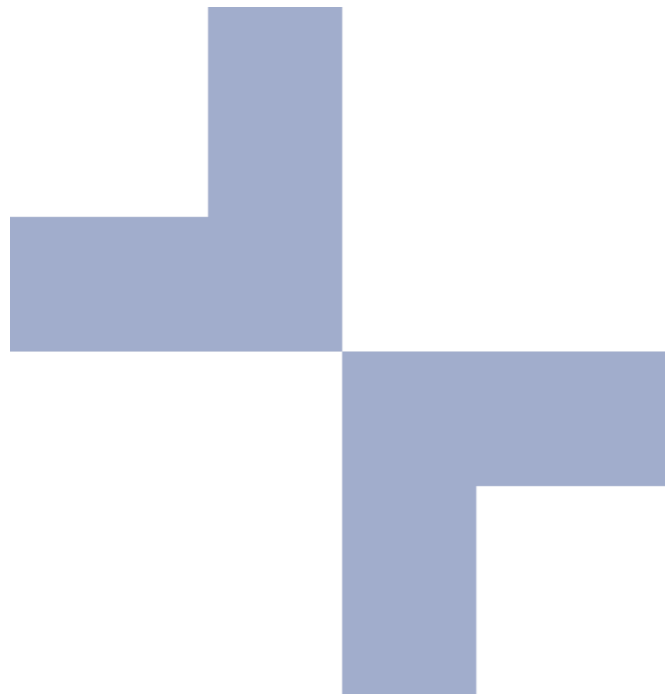

User Guide

Family Planning Market Analyzer



Recommended Citation: Reidy, Meghan, Nicole Bellows, and Michelle Weinberger. 2020. *User Guide: Family Planning Market Analyzer*. Rockville, MD: Sustaining Health Outcomes through the Private Sector Plus Project, Abt Associates Inc.

Cooperative Agreement: AID-OAA-A-15-00067

About SHOPS Plus: Sustaining Health Outcomes through the Private Sector (SHOPS) Plus is USAID's flagship initiative in private sector health. The project seeks to harness the full potential of the private sector and catalyze public-private engagement to improve health outcomes in family planning, HIV/AIDS, maternal and child health, and other health areas. SHOPS Plus supports the achievement of US government priorities and improves the equity and quality of the total health system.



Abt Associates Inc.
6130 Executive Boulevard
Rockville, MD 20852 USA
Tel: +1.301.347.5000
abtassociates.com

American College of Nurse-Midwives | Avenir Health
Broad Branch Associates | Banyan Global | Insight Health Advisors
Iris Group | Population Services International | William Davidson Institute at the
University of Michigan

User Guide

Family Planning Market Analyzer

Disclaimer: This report is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of the report are the sole responsibility of Abt Associates and do not necessarily reflect the views of USAID or the United States government.

Contents

- Acronyms vi**
- Introduction 1**
 - What is the Family Planning Market Analyzer? 1
 - Tool structure.....1
- Getting started..... 2**
- Current national landscape..... 3**
 - Understanding the current market 3
 - Additional functionality 4
- Explore policy scenarios..... 5**
 - Policy scenario generator..... 5
 - Build your own scenario by changing method mix..... 8
 - Build your own scenario by changing source mix..... 9
 - Build your own scenario by changing both method and source mix 10
- Explore by age and marital status 12**
- Explore by urban/rural residence 14**
- Explore by income level..... 15**

Acronyms

DHS	Demographic and Health Survey
LARC	Long-acting reversible contraceptives
mCPR	Modern contraceptive prevalence rate
SSA	Sub-Saharan Africa
STM	Short-term methods
TMA	Total market approach
UNPD	United Nations Population Division
WB	World Bank
WRA	Women of reproductive age

Introduction

What is the Family Planning Market Analyzer?

The Family Planning Market Analyzer is an interactive web-based tool that allow users to look at the current FP market and explore potential scenarios for a total market approach (TMA). It combines method mix and source mix data from Demographic and Health Surveys (DHS), FP2020's projections of modern contraceptive prevalence (mCPR), and projections of the number of women of reproductive age (WRA) from the UN Population Division, as well as poverty headcount data from the World Bank (WB).

The tool can be used to inform TMA discussions by providing key results linked to probing questions. For example, if the private sector doubled its role in implant provision, how many more services would need to be provided? This tool translates theoretical discussions about making changes in the public or private sector into what those changes would mean in terms of users, visits, and commodities.

Using another example, consider the question: “what would be the implications of increasing the use of the private sector in urban areas?” The tool can help us explore this question from a few different perspectives:

- First is a composition question – how would the change in urban areas change the overall picture? In countries that are primarily rural, the change in the urban area might have little impact on the national picture.
- Next is a feasibility question – how many more clients would the private sector need to serve, and would that change be feasible given the number of providers?
- Finally, we can look at method choice – if the private sector primarily only provides pills and condoms, what implications would the shift have for method choice among urban women?

Tool structure

The tool itself is organized into modules. There are two general modules which let us explore the national picture. The first looks at the current national landscape, focusing on the number of users by method and sector. The “current” situation is a 2020 projection. The second module lets you explore policy scenarios by changing method mix, source mix, or both together. This module also includes a policy scenario generator which lets you look at key questions around potential shifts to the market in the future, which in the tool is 2023.

There are also three additional modules to look at the market among key segments: age and marital status, urban/rural residence, and income level. For each of these modules there are results exploring the baseline 2020 scenario, then projections can be made based on changes to the source mix for each segment.

Getting started

The tool can be accessed at <http://fpmarketanalyzer.org>. If you open the website, you can follow along as we walk through the structure and functionality of the tool.

When you first open the website, there are two initial steps:

1. The first thing you need to do is select a country from the dropdown list. The tool is pre-loaded with data for nearly 60 countries.
2. Next, on the side bar you will find the modules – you can click on these to navigate through the tool. The following sections of this user guide will introduce you to each of the modules:
 - a. Current national landscape
 - b. Explore policy scenarios
 - c. Explore by age and marital status
 - d. Explore by residence
 - e. Explore by income



Current national landscape

The “Current national landscape” module gives an overview of the current FP market. Here the tool uses a projection of both users and mCPR in 2020, as opposed to the most recent DHS, therefore taking into account the role of population growth and increases in mCPR. This module first shows a graph of the mCPR trend projection.



Understanding the current market

Here, and throughout the tool, there are prompting questions for the user to help inform discussions and facilitate use of the data. For example, when looking at the data, you are encouraged to think about what role each sector plays in the market and how that varies by method.

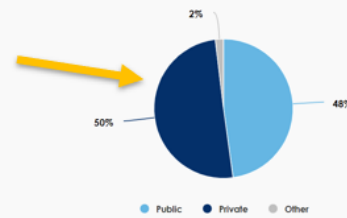
As you can see below, the module presents a pie chart showing the overall split of FP use by sector. In this example from Afghanistan, we see that about 60% of women get their method from public sources.

Then, there is a bar chart which breaks the same information out by method. It shows both the method mix (i.e. how many women are using each method) and source mix (how many women are getting their method from each sector). In this chart, the height of the bars represents the total number of users (in millions). This way, you can see not only see the relative share for each method, but also how that translates to total user numbers.

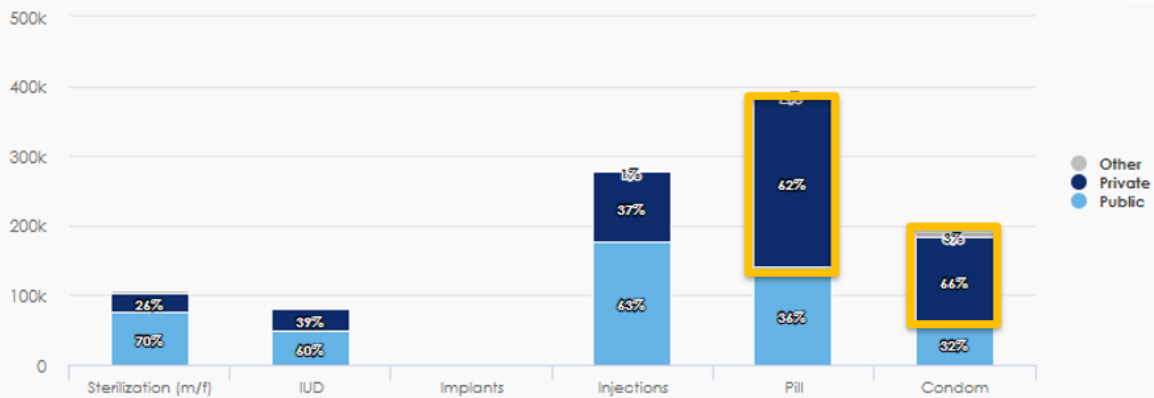
What methods do women use, and where do they get them?

These graphs show the breakdown of current users by method and source. When looking at these graphics, think about:

- What role does each sector play overall?
- What methods are most common?
- How does the role of the public and private sector vary by method?



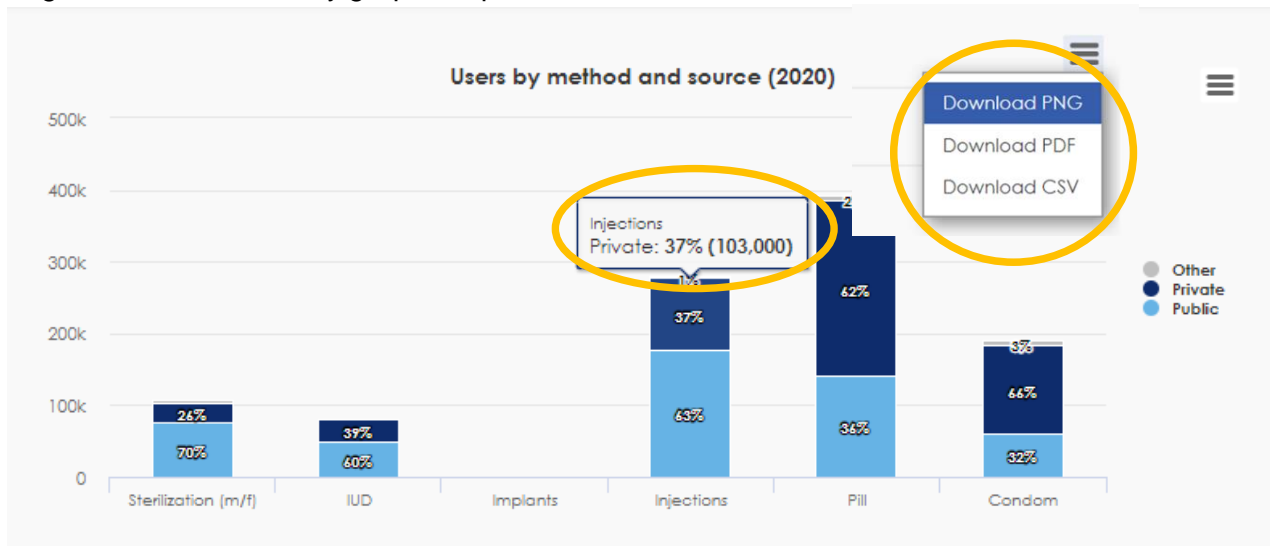
Users by method and source (2020)



Additional functionality

Within the user interface of the tool, you can hover over graphs to get additional information about each segment, including details such as the absolute number of users represented by each percentage.

Also, all graphs can be downloaded as pictures in PNG or PDF files or as raw data in a CSV file that can be read in Excel. To access the download feature, click on the three lines in the upper right-hand corner of any graph to open the menu.



Explore policy scenarios

This module looks to the future, allowing you to project changes based on three types of shifts:

- **Method mix:** if method mix changes (with no changes to where women get their methods), the source mix will change. For example, if a method that is primarily accessed in the public sector increases its share, so too will the public sector share increase.
- **Source mix:** correspondingly, if overall source mix changes (with no changes in method mix by source), the method mix will change. For example, if the role of the private sector increases and the private sector primarily provides pills and condoms, then these methods will increase in the method mix.
- **Method and source mix:** finally, both method and source mix both changing at the same time.

For all of these shifts, we consider such questions as: How many users will be impacted by the change? How will the change influence the overall market? How many more or fewer users will be accessing each sector and are there enough providers to accommodate all the new clients?

The module has four different sections. The first is a Policy Scenario Generator, which includes pre-built policy scenarios. The last three allow you to project changes on your own using the three types of shifts described above.

Policy Scenario Generator

The Policy Scenario Generator projects changes for you automatically using four pre-build policy scenarios. You can use this as a starting place to get a feeling for how the tool works and how making different sorts of changes impacts the market.

The screenshot shows the 'Family Planning Market Analyzer' interface. On the left is a navigation menu with options like 'Select country' (Kenya), 'Current national landscape', 'Explore policy scenarios' (with 'Policy Scenario Generator' highlighted), 'Explore by age and marital status', 'Explore by residence', and 'Explore by income'. The main content area is titled 'Policy Scenario Generator' and contains a text prompt: 'Pick one of the scenarios described below to see how it will impact method and source mix, as well as the resulting visits and number of commodities required.' Below this are four radio button options for different scenarios, with the fourth option selected.

Policy Scenario Generator

Pick one of the scenarios described below to see how it will impact method and source mix, as well as the resulting visits and number of commodities required.

- Scenario 1: Without changes in method mix or source mix (status quo), what efforts are needed to keep up with increases in users?
- Scenario 2: What if task sharing allowed the private sector (e.g., pharmacies) to increase its share of injectables?
- Scenario 3: What if implants increase in popularity, but the sources where they are available stays the same?
- Scenario 4: What if barriers were removed to allow the private sector to play a greater role in LARC provision as implants increase in popularity?

The first scenario looks at where things would be in 2023 with no changes to the method mix or source mix. This provides a baseline to look at what is needed just to keep up with an increasing number of users because of projected population and mCPR growth.

The second scenario looks at task-sharing injectables in the private sector. Here we see what happens if the share of injectable users going to the private sector increased to match the same share as pill users going to the private sector.

Scenarios three and four look at implant provision. First, in scenario three, what happen if the share of implants in the method mix doubles, with no other changes to the market. Then, in scenario four, we couple this change with an increase in the role of the private sector providing LARCs. In this projection, the share of private sector providers inserting IUDs and implants increases by 20 percentage points.

The tables below use Kenya as an example to illustrate the changes going on behind the scenes in the Scenario Generator.

Method mix (%)

	Status Quo	New
Sterilization (m/f)	5.73	5.73
IUD	5.86	5.86
Implants	18.20	36.40
Injections	47.83	35.39
Pill	14.01	10.36
Condom	8.12	6.01
Other modern	0.26	0.26
Total	100.00	100.00

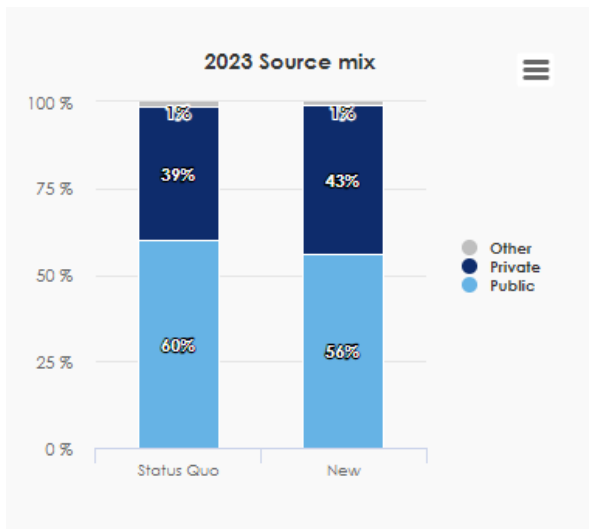
1 Implant use doubles

2 Private sector shares of both IUDs and Implants increase by 20 percentage points

Source mix (%)

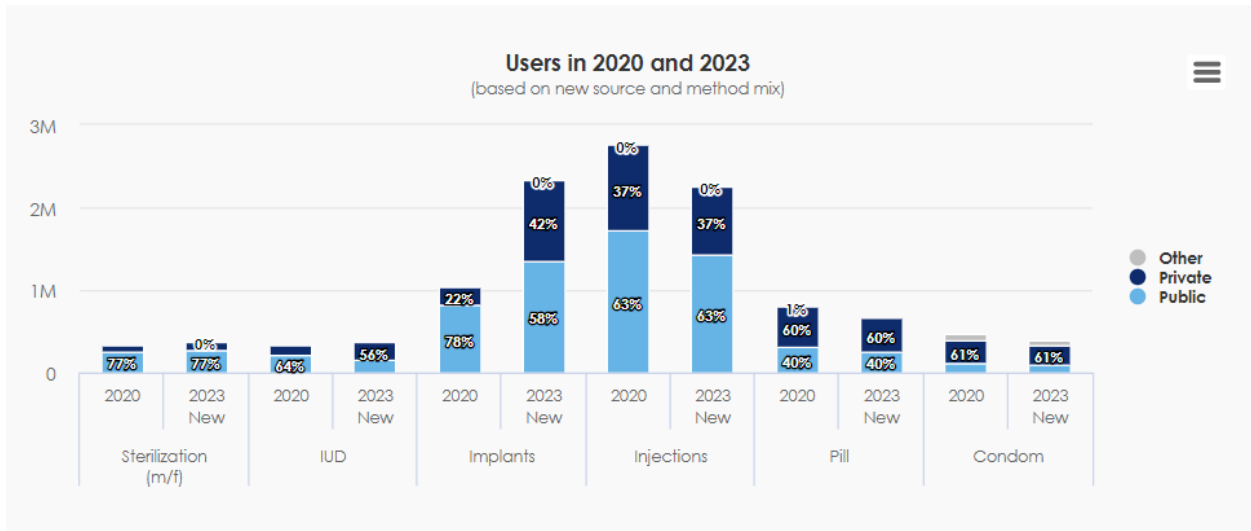
	Public		Private	
	Status Quo	New	Status Quo	New
Sterilization (m/f)	77.18	77.18	22.53	22.53
IUD	64.40	44.40	35.60	55.60
Implants	78.29	58.29	21.71	41.71
Injections	62.88	62.88	37.12	37.12
Pill	39.78	39.78	59.52	59.52
Condom	24.11	24.11	60.87	60.87
Other with source	0.00	0.00	0.00	0.00

These tables show how the individual shares shift, but what do these changes mean to the market overall? The graphs below show the source mix changes overall and method by method:

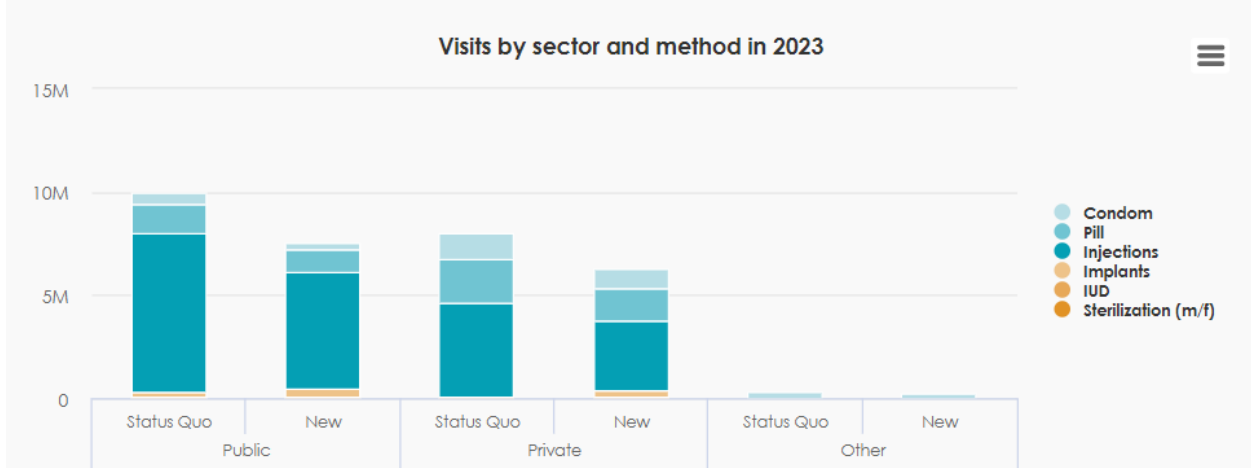


The overall shift in source mix is limited. Why is that? Look at the method by method changes below:

- The public sector share of implants is still large (greater than 50%)
- Increased implant use results in a decrease in STM users (many of whom go to the private sector)
- Continued large number of public sector injectable users



The tool also provides graphs that look at the changes in visits, rather than the number of users.



In this example, we see the number of visits in 2023 if we had maintained the status quo (i.e. no changes to method or source mix) versus with the changes in scenario four (increase in implants, shift to private sector). For the public sector, we see a resulting decline in visits. This could help inform discussions about what could be done with the additional capacity. In the private sector, we also see an overall decline, but the changes mean nearly 300,000 additional implant insertions are done by private providers. Ask yourself, is there the infrastructure and training in place for this to happen?

Following these graphs, there are tables showing detailed results for the number of visits by sector and the number of commodities.

You can see how with this model, we have moved from a high level question about the potential role of the private sector in providing LARC to actual numbers that can be used to support discussions about what is feasible, what would be needed to make these changes, and what the results of the changes would likely be.

Build your own scenario by changing method mix

The remaining sections of this module allow you to build your own scenarios. The first section allows you to see what results when method mix changes (with no changes to where women get their methods). The source mix will change, because women tend to get different types of methods from different sources, and the number of visits will change, because different methods require different frequencies of resupply.

☰ 🌀 Family Planning Market Analyzer

Select country
Kenya

Current national landscape

Explore policy scenarios

Policy Scenario Generator

Build your own scenario by changing method mix

Build your own scenario by changing source mix

Build your own scenario by changing both method and source mix

Explore by age and marital status

Explore by residence

Explore by income

How would method mix changes impact source mix?

In this section you can change the method mix and see the implications for the public and private sectors assuming there is no change in the share of each method that each sector provides. For example, if there is a substantial increase in implants and other long-term methods, what might this mean for the private sector, which tends to be a smaller provider of clinical methods? Additionally, you can examine more closely how changes in the method mix influence the number of total FP visits are required, since long-term and permanent FP methods generally require fewer FP visits per year compared to short-term methods.

Change the method mix in the "New" column below

Method mix (%)	Status Quo	New
Sterilization (m/f)	5.73	5.73
IUD	5.86	5.86
Implants	18.20	18.20
Injections	47.83	47.83
Pill	14.01	14.01
Condom	8.12	8.12
Other modern	0.26	0.26
Total	100.00	100.00

Submit

Method mix in 2023

Within the interface of the tool, you change the method mix by inputting new values into the “Method mix” table in the blue column labeled “New”.

Method mix (%)

	Status Quo	New
Sterilization (m/f)	5.73	5.73
IUD	5.86	5.86
Implants	18.20	18.20
Injections	47.83	47.83
Pill	14.01	14.01
Condom	8.12	8.12
Other modern	0.26	0.26
Total	100.00	100.00

Input new values here to look at the changes resulting from a new method mix. Make sure that the total adds up to 100%.

Press the submit button when finished to see the results. The results are shown in the same graphs and tables described in the section above.

Build your own scenario by changing source mix

The next section similarly allows you to see what results when source mix changes (with no changes to where women get different types of methods). The method mix will change, because different sources tend to predominantly supply different types of methods, and the number of visits will change, because different methods require different frequencies of resupply.

Family Planning Market Analyzer

Select country: Kenya

Current national landscape

Explore policy scenarios

Policy Scenario Generator

Build your own scenario by changing method mix

Build your own scenario by changing source mix

Build your own scenario by changing both method and source mix

Explore by age and marital status

Explore by residence

How would source changes impact method mix?

In this section you can change the source mix and see the implications for the method mix, assuming there is no change in the share of each method that each sector provides. For example, if there is users getting their methods from the private sector, what might this mean for the use of long-term methods, which are often provided by the public sector?

Change the source mix in the "New" column below

	Status Quo	New
Public Hospital	20.06	20.06
Public Other	40.14	40.14
NGO / FBO	3.56	3.56
Private Medical	21.17	21.17
Private Pharmacy / Shop	13.73	13.73
Other	1.34	1.34
Total	100.00	100.00

Submit

Source mix in 2023

Legend: Other, Private Pharmacy / Shop, Private Medical, NGO / FBO, Public Other, Public Hospital

In the tool, you change the source mix by inputting new values into the “Source mix” table in the blue column labeled “New”.

Source mix (%)

	Status Quo	New
Public Hospital	20.06	20.06
Public Other	40.14	40.14
NGO / FBO	3.56	3.56
Private Medical	21.17	21.17
Private Pharmacy / Shop	13.73	13.73
Other	1.34	1.34
Total	100.00	100.00

Input new values here to look at the changes resulting from a new source mix. Make sure that the total adds up to 100%.

Press the submit button when you’re done to update the graphs and tables. The results are shown in the same graphs and tables described in the section above.

Build your own scenario by changing both method and source mix

The final section allows you to see what happens when you change both the method mix and the source mix at the same time.

Family Planning Market Analyzer

Select country: Kenya

Current national landscape: Policy Scenario Generator

Build your own scenario by changing both method and source mix

What if method mix and source mix both changed?

In this section you can change both the method mix and the source mix at the same time. For example, if you saw both an increase the number of implant users and the number of private providers who are insert implants.

First, change the method mix in the “New” column below. Then, adjust the public sector share up or down for each method.

	Status Quo	New
Sterilization (m/f)	5.73	5.73
IUD	5.86	5.86
Implants	18.20	18.20
Injections	47.83	47.83
Pill	14.01	14.01
Condom	8.12	8.12
Other modern	0.26	0.26
Total	100.00	100.00

	Public		Private	Other	
	Status Quo	New		Status Quo	Other
Sterilization (m/f)	77.18	77.18	22.53	22.53	0.30
IUD	64.40	64.40	35.60	35.60	0.00
Implants	78.29	78.29	21.71	21.71	0.00
Injections	62.88	62.88	37.12	37.12	0.00
Pill	39.78	39.78	59.52	59.52	0.70
Condom	24.11	24.11	60.87	60.87	15.02
Other with source	0.00	0.00	0.00	0.00	0.00

Submit

This section has two input tables. One to change the method mix and a second to change the source of each method.

Method mix (%)

	Status Quo	New
Sterilization (m/f)	5.73	5.73
IUD	5.86	5.86
Implants	18.20	18.20
Injections	47.83	47.83
Pill	14.01	14.01
Condom	8.12	8.12
Other modern	0.26	0.26
Total	100.00	100.00

Input new values here to look at the changes resulting from a new method mix. Make sure that the total adds up to 100%.

Move the slider towards or away from the public sector to change the percentage of women who get each method from the public and private sectors. Press the submit button when finished to update the graphs and tables below.

Source mix (%)

	Public			Private		Other
	Status Quo	New		New	Status Quo	
Sterilization (m/f)	77.18	77.18		22.53	22.53	0.30
IUD	64.40	64.40		35.60	35.60	0.00
Implants	78.29	78.29		21.71	21.71	0.00
Injections	62.88	62.88		37.12	37.12	0.00
Pill	39.78	39.78		59.52	59.52	0.70
Condom	24.11	24.11		60.87	60.87	15.02
Other with source	0.00	0.00		0.00	0.00	0.00

Explore by age and marital status

The next module allows you to look at the current market segmented by age and marital status.

☰
Family Planning Market Analyzer

Select country
Kenya

Current national landscape

Explore policy scenarios

Policy Scenario Generator

Build your own scenario by changing method mix

Build your own scenario by changing source mix

Build your own scenario by changing both method and source mix

Explore by age and marital status

What is the current situation?

How would source mix changes by marital status impact the overall picture?

Explore by residence

Explore by income

About

Explore analysis by age and marital status

In this section you can examine FP use by age, with a focus on youth, to better understand how method and source mix differ in this group.

How do women and their patterns of use vary by age?

Population distribution and use by age (latest DHS)

Age Group	Modern method user	Traditional method user	Has not had sex	Non-user
15-19	~2%	~0%	~12%	~86%
20-24	~7%	~1%	~2%	~90%
25-29	~10%	~1%	~0%	~89%
30-34	~8%	~1%	~0%	~91%
35-39	~6%	~1%	~0%	~93%
40-44	~4%	~1%	~0%	~95%
45-49	~3%	~1%	~0%	~96%

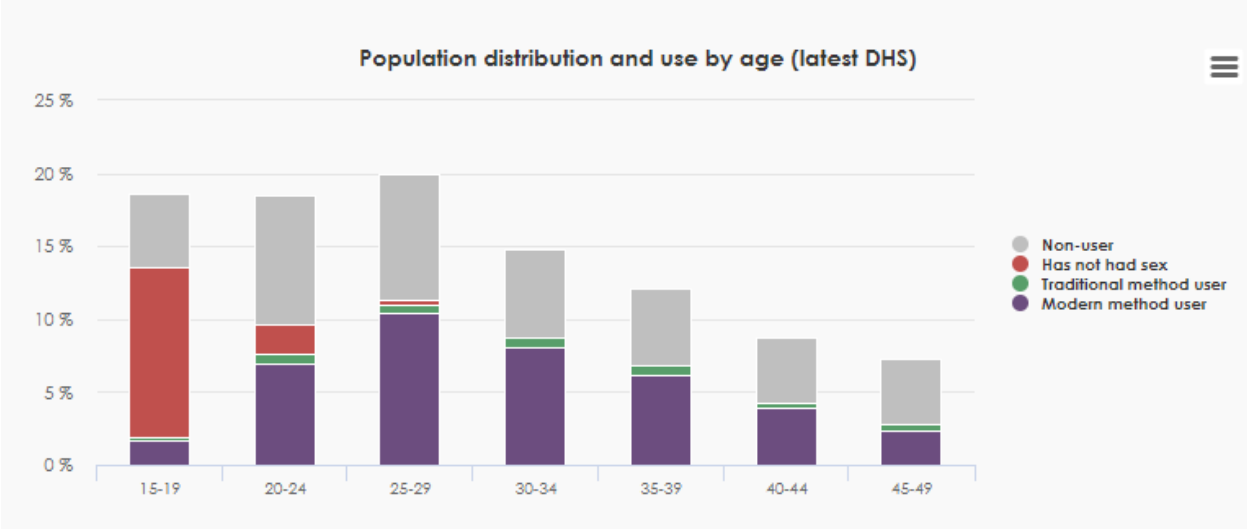
This graph and the one below show the breakdown of the population and modern FP users by age. When looking at these graphs, think about:

- What is the distribution of the population and FP users by age?
- How does family planning use vary by age?
- Do women of different ages choose different FP methods?
- How does age at first sex impact potential mCPR growth among youth (aged 15-24)?

Method mix by age

Age Group	Other modern	Condom	Pill	Injections	Implants	IUD	Sterilization (m/f)
15-19	~0%	~0%	~0%	~0%	~0%	~0%	~100%
20-24	~0%	~0%	~0%	~0%	~0%	~0%	~100%
25-29	~0%	~0%	~0%	~0%	~0%	~0%	~100%
30-34	~0%	~0%	~0%	~0%	~0%	~0%	~100%
35-39	~0%	~0%	~0%	~0%	~0%	~0%	~100%
40-44	~0%	~0%	~0%	~0%	~0%	~0%	~100%
45-49	~0%	~0%	~0%	~0%	~0%	~0%	~100%

The first section illustrates the current situation, breaking down use and non-use by age and initiation of sexual activity. It also shows method mix and source mix by age and marital status.



In this example from Kenya (above), you can see that the majority of non-users in the 15-19 year old category have never had sex (seen in red). While in many countries low contraceptive

use among youth might seem like a big opportunity for mCPR growth, need for FP in this age group is often low due to large share of young women being unmarried and not sexually active and/or young married women trying to get pregnant (or already pregnant).

In the other section of this module, you can adjust the share of women by marital status accessing their methods from the public or private sector by moving the slider. Press the submit button to update the graphs and tables below.

Marital status source mix (%)

	Public			Private		
	Status Quo	New		New	Status Quo	Other
Unmarried	46.72	46.72		48.13	48.13	5.15
Married	63.32	63.32		36.24	36.24	0.45

Explore by urban/rural residence

Like the age and marital status module, you can also explore the current market segmented by urban and rural residence. As seen previously, the “current” market is a projection to 2020.

The screenshot shows the Family Planning Market Analyzer interface for Kenya. The left sidebar contains navigation options: 'Select country' (Kenya), 'Current national landscape', 'Explore policy scenarios' (Policy Scenario Generator, Build your own scenario by changing method mix, Build your own scenario by changing source mix, Build your own scenario by changing both method and source mix), 'Explore by age and marital status', 'Explore by residence' (highlighted with a yellow box), and 'Explore by income'. The main content area is titled 'Explore analysis by residence (urban/rural)'. It features two main sections: 'Where do women and modern users live?' with a stacked bar chart showing 59% Rural and 41% Urban for WRA, and 57% Rural and 43% Urban for Modern Users; and 'How does modern contraceptive prevalence vary by residence?' with two charts: 'mCPR by residence (latest DHS)' showing Urban at ~40%, Rural at ~35%, and Overall at ~38%; and 'Method mix of users by residence (2020)' showing a stacked bar chart for Urban and Rural areas with categories like Other modern, Condom, IUD, Injections, Implants, and Sterilization (m/f).

In the first section of this module, you can see the breakdown of use, mCPR, method mix, and source mix by urban and rural residence. In the second section, you can see what happens to the market in terms of method mix, users, and visits if you change the source mix.

Move the sliders to change the source mix and press the submit button to update the graphs and tables on the page below.

Residence source mix (%)

	Public			Private		Other
	Status Quo	New		New	Status Quo	
Urban	47.19	47.19		51.22	51.22	1.59
Rural	70.15	70.15		28.72	28.72	1.13

Explore by income level

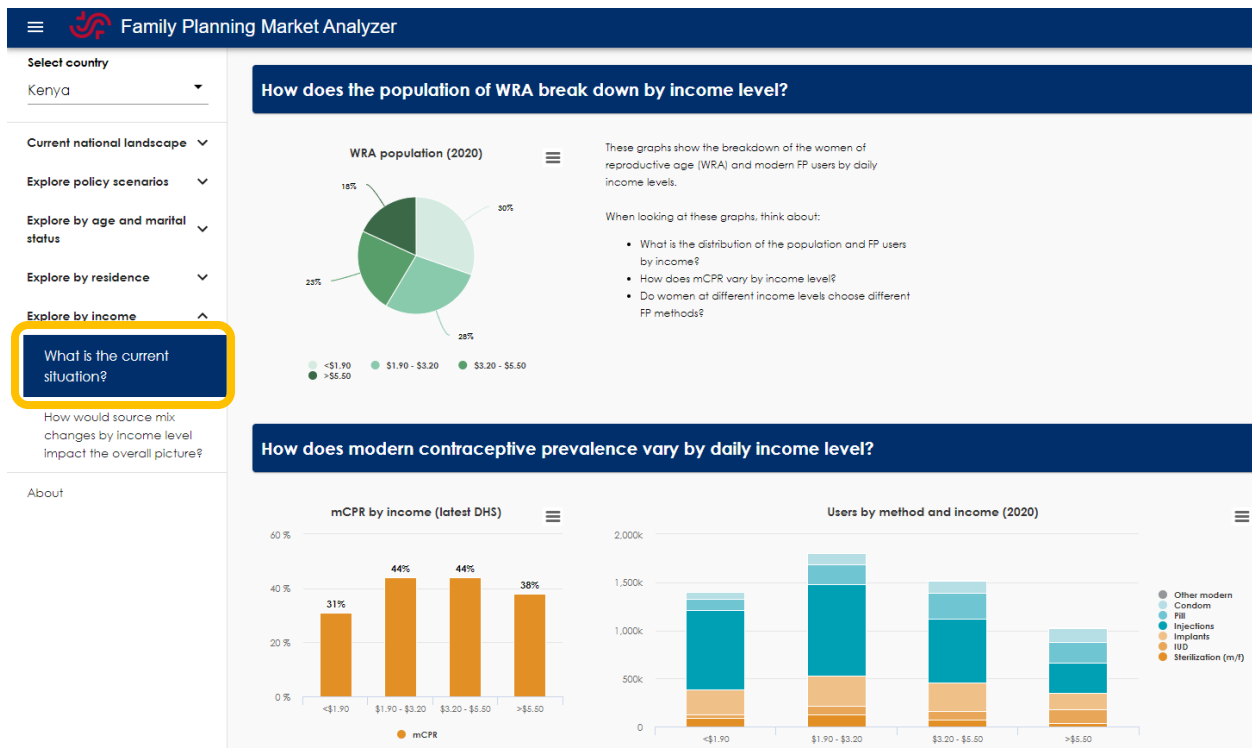
In the final section, you are able to examine the market segmented by income level. The *Family Planning Market Analyzer* uses income level, based on the WB poverty headcounts, to examine socio-economic position, as opposed to the more commonly used DHS wealth quintiles.

Referencing the WB International Poverty Line and other poverty headcount thresholds allows you to consider a woman's ability to pay for services from private providers when thinking about the potential roles of the public and private sector. Please reference our methodology brief for more details on the use of income levels. It can be found at: <https://shopsplusproject.org/resource-center/examining-socioeconomic-position-family-planning-market-analyzer>

Wealth Quintiles are a **relative** measure while *poverty lines* are an **absolute** measure.

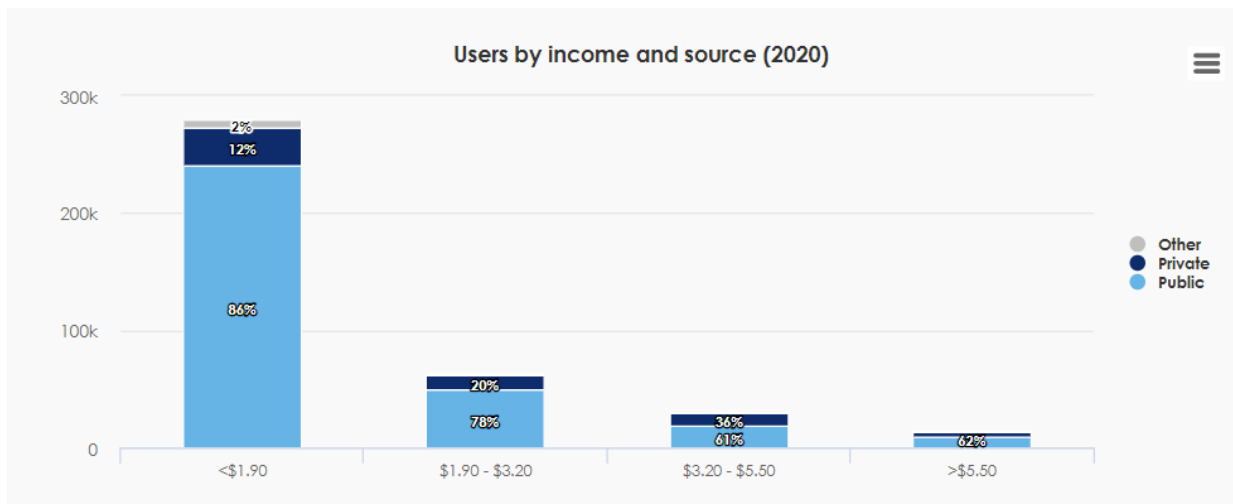
Both can be helpful for different types of decision making.

The "current situation" section looks at the distribution of WRA by income level, as well as mCPR, method mix, and source mix.

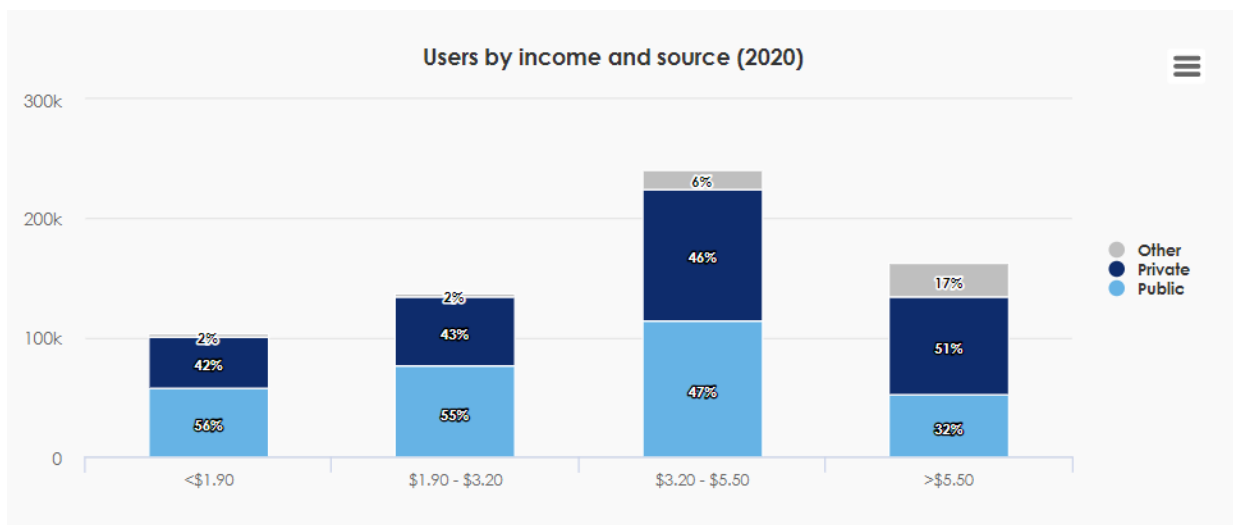


Looking at how many women fall into each income level segment gives a very different picture than looking at quintiles in many countries. For wealth quintiles, households are equally distributed into five segments (quintiles). When looking at income level, households in Sub-Saharan Africa are often disproportionately in the lower income levels. In this tool, we are specifically looking at WRA and users, so this is influenced by the distribution of women by income and the mCPR by income. We can see how the distribution of users by income level and sector varies by comparing two countries that are both classified as low-income: Burundi and Haiti.

Burundi



Haiti



While both countries are low-income, the distribution of users by income level is very different and the source mix within each income level is also very different between the two countries. In most countries, we tend to see the role of the private sector increase with income level. Using this lens of absolute wealth can bring an additional perspective that might be missed looking at this data only by wealth quintiles. However, it is important to remember that even living above the highest income level of \$5.50 per day does not mean that these women are necessarily “rich” and may not indicate an ability to pay for FP.

Finally, as we saw in the other modules, you can modify the source mix for each income level.

Income source mix (%)

	Public			Private		Other
	Status Quo	New		New	Status Quo	
<\$1.90	75.76	75.76		23.33	23.33	0.91
\$1.90 - \$3.20	66.90	66.90		31.49	31.49	1.62
\$3.20 - \$5.50	52.64	52.64		46.12	46.12	1.24
>\$5.50	38.34	38.34		60.13	60.13	1.53

LEARN MORE

Explore the Family Planning Market Analyzer yourself by visiting: www.FPMarketAnalyzer.org

