

Exploring Opportunities for Private Sector Family Planning Growth in Nepal: *An Analytic Approach*

Market Size Estimation Presentation

February 15, 2024

Recognizing the need for private sector engagement in FP markets, this activity builds on the market description conducted in Nepal



FHMENGAGE
Healthy Markets for Healthy People



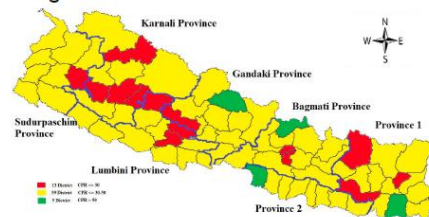
Frontier Health Markets (FHM) Engage Healthy Markets for Healthy People Nepal Market Description

December 2023

mCPR Stage 2 of the S Curve: Potential for rapid acceleration

Stage 2: Growth
Length of
period and speed of
growth varies

Nationally, Nepal has an ambitious mCPR (CMW) target of 70% by 2030. Of the 7 Provinces, Province 2 & Karnali are where unmet needs are higher.



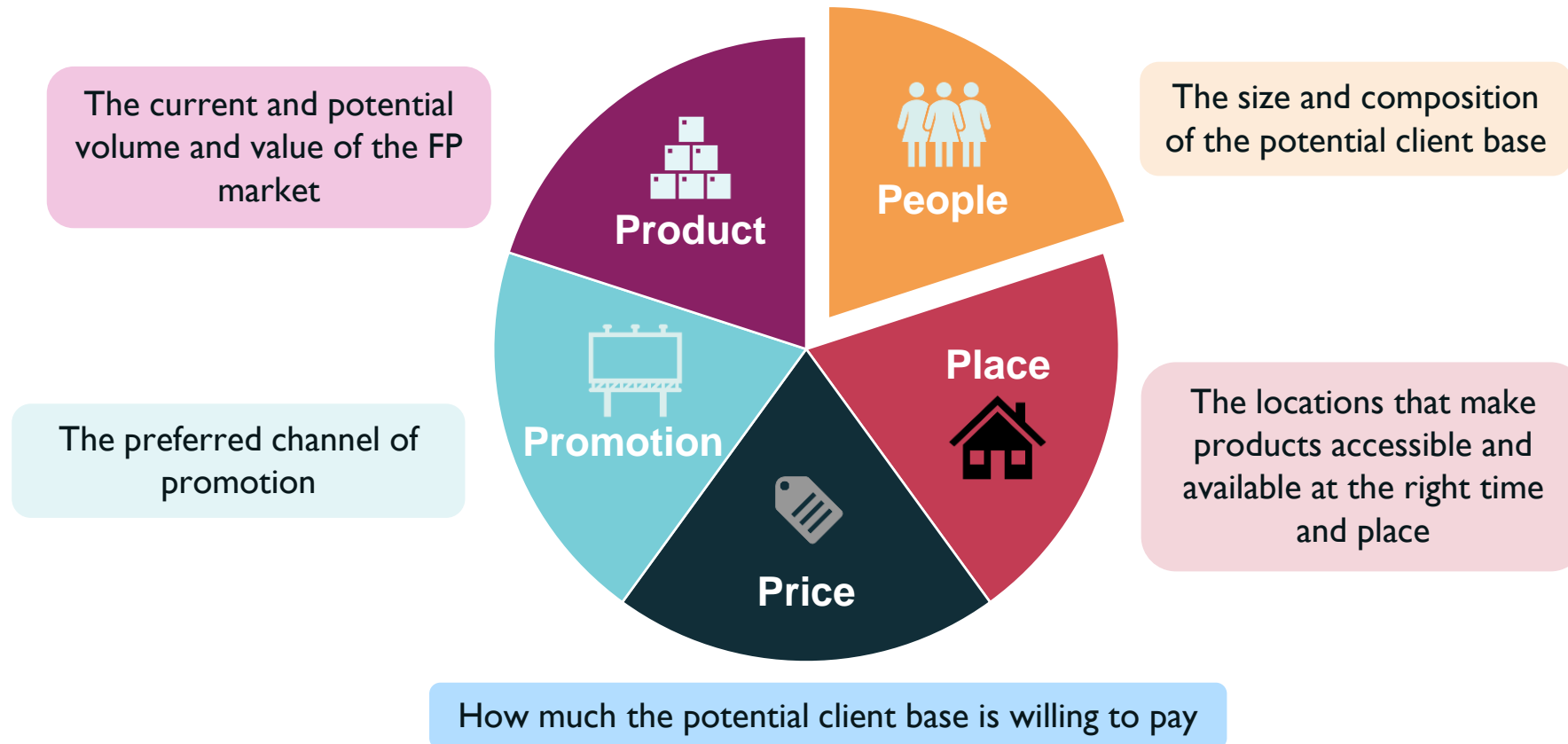
Source: * 2022 Track 20 Nepal

Recent FHM Engage activity in Nepal described the overall demand, supply, and enabling environment of FP market in Nepal.

- Provides national- and provincial-level perspectives on FP use in Nepal
- Identifies the regions and demographic groups in which FP uptake has fallen behind, information also needed by private sector partners

Data constraints limit the availability of market intelligence

For making market entry and expansion decisions, private sector FP actors would like information on:



**However, the data often has one or more of the constraints:
Does not exist | Poor quality | Too sparse**

Our solution: Utilize existing data to generate more detailed estimates tailored to the private sector information needs with consultation with stakeholders

Analysis

Describe the characteristics and distribution of existing and potential new private sector clients through existing data triangulation

Suggested consultation

Provide insights for private sector actors to guide further investigation on potential new markets for private FP services and products



New maps of district- and province-level market intelligence were created using the three most recent DHS surveys and 2021 Nepal Census data

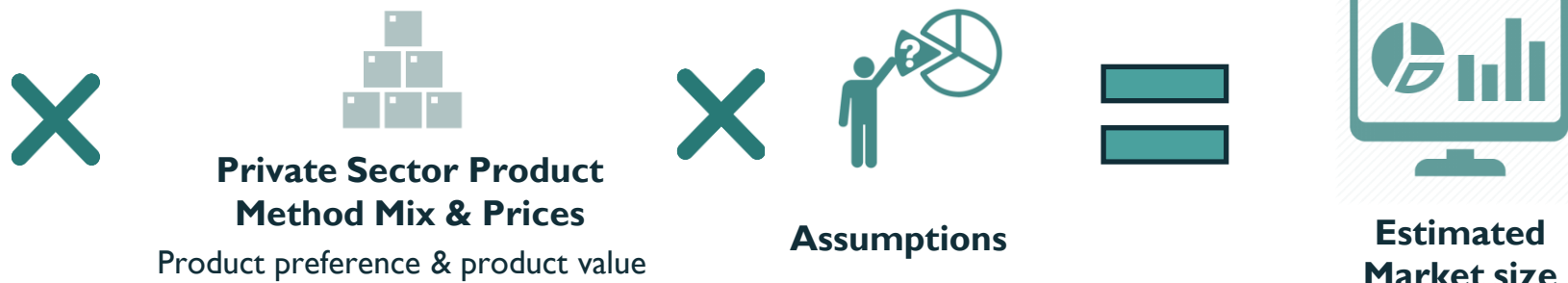
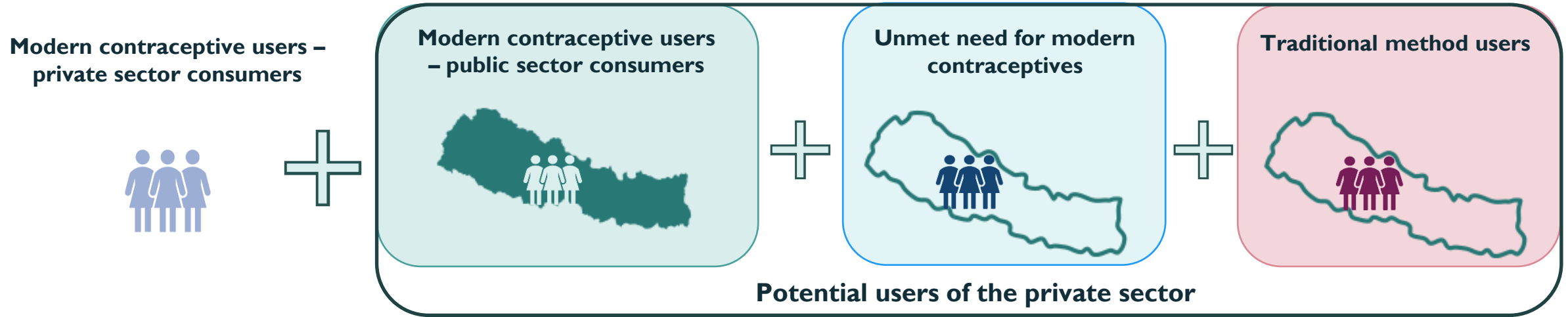


Data source	Information
DHS surveys	Individual level data on: <ul style="list-style-type: none"> • Contraceptive usage status • Contraceptive need • Contraceptive source • Demographic information • Wealth quintile (3rd quintile and above) • Location information
M4M's Asset to Income Estimator	• Median daily household income (3 rd wealth quintile) ~ \$18.05 (USD)
Census	Women of reproductive age population by district and province
Health facility registry	<ul style="list-style-type: none"> • Private health facilities • Location information
CRS	<ul style="list-style-type: none"> • Pharmacies and chemists • Location information

Estimated proportions at district and region level are calculated using a hierarchical Bayesian model that incorporates all individual level data from each survey that leverages spatio-temporal smoothing and produces probabilistic estimates with uncertainty intervals. Median results are presented.¹

¹ Mercer, Lu, & Proctor. Sub-national levels and trends in contraceptive prevalence, unmet need, and demand for family planning in Nigeria with survey uncertainty. *BMC Public Health* 19, 1752 (2019). <https://doi.org/10.1186/s12889-019-8043-z>

We considered potential users of the private sector to include current non-private users and non-modern method users to estimate *potential new FP volume and value*



We applied the following definitions for the analyses:

Sector

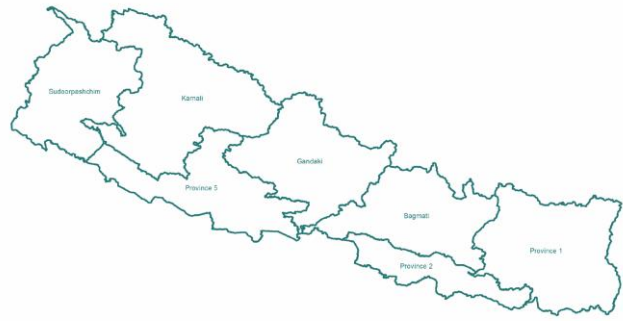
Private	For-profit, non-profit, social marketing actors, faith-based organizations
Public	Government

Methods

Short-term methods	Condoms, oral contraceptive pills, injectables, emergency contraceptive pills
Long-term reversible methods	Intrauterine devices, implants

Financial capacity	Women living in a household in third or higher wealth quintile (Median daily household income (3rd wealth quintile) ~ \$18.05 (USD))
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Two types of analyses: 1) maps visualizing subnational estimates and 2) national-level volume and value estimates

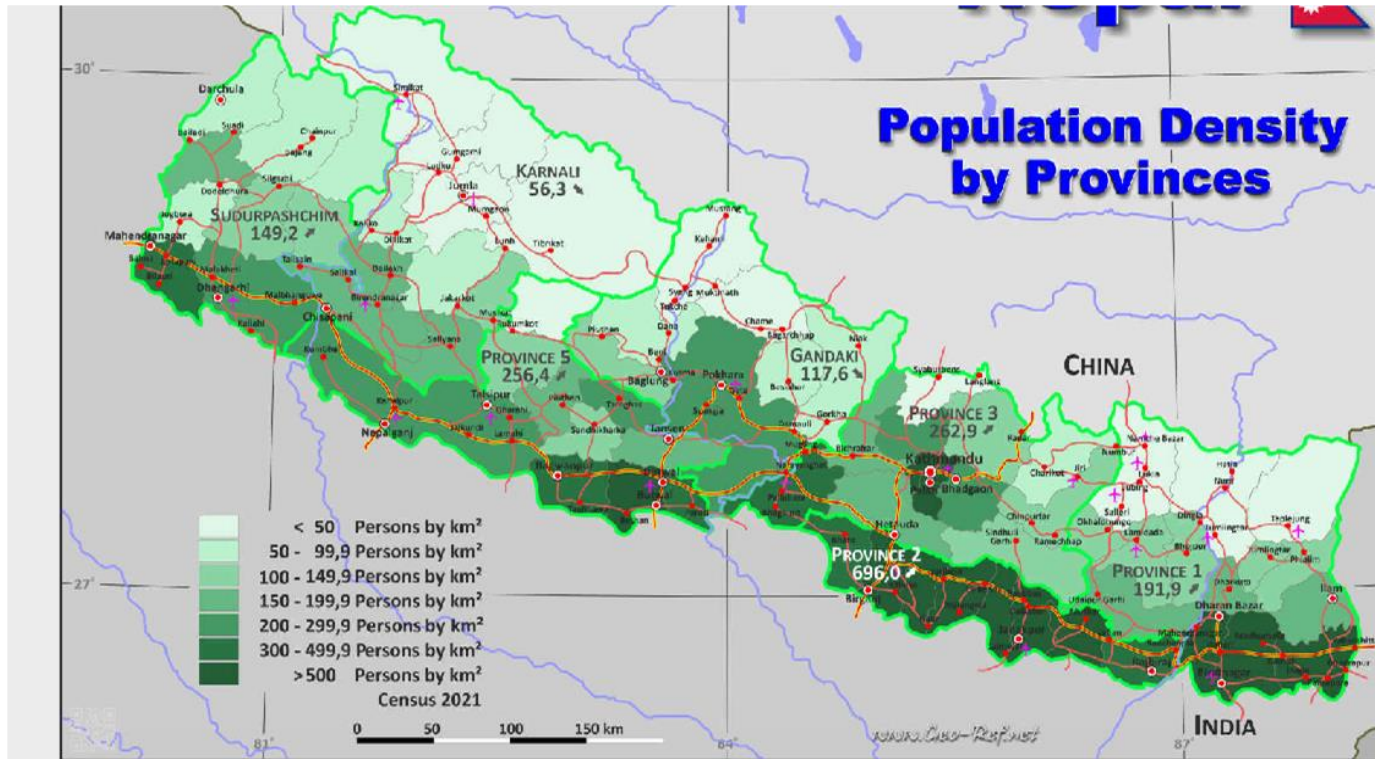


Current modern method users	<p>Women of reproductive age using a modern contraceptive method</p> <ul style="list-style-type: none"> ● All ● Those obtained from a private source ● By method type: private source vs. non-private source with financial capacity
Potential modern method users: women with an unmet need for contraception	<p>Women of reproductive age with an unmet need for contraception</p> <ul style="list-style-type: none"> ● All ● Those with financial capacity
Potential modern method users: traditional method users	<p>Women of reproductive age using any traditional method</p> <ul style="list-style-type: none"> ● All ● Those with financial capacity



Volume and Value (national)	<ul style="list-style-type: none"> ● Current Private Sector ● Potential New Private Sector Clients (convertible non-private sector consumers, convertible women with an unmet need, convertible traditional method users)
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Before diving into the analyses, there is some background information to note



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The current use of contraceptives differs by sector in Nepal, likely linked to the distribution channel, availability, and affordability of various types of contraceptives.

Proportion of contraceptive users last obtained their method in each sector by contraceptive method

Method	Private sector	Public Sector
Injectables	29.7%	70.3%
OCP	49.9%	50.1%
Male condoms	71.9%	28.1%
Implants	10.6%	89.4%

Note that ECPs are not included in the subsequent analyses in Nepal due to the lack of availability of reliable ECP use data

Current Modern Method Users

Women 15 to 49
using a modern
contraceptive
method

Modern contraceptive users –
private sector consumers

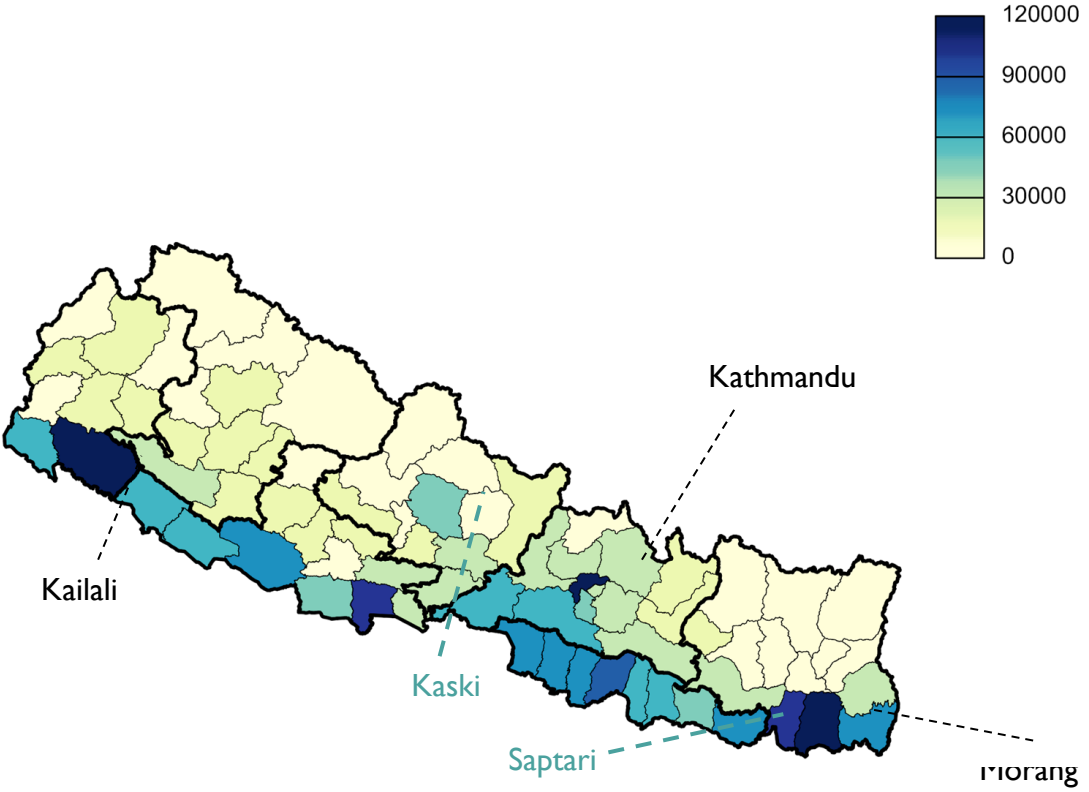


Modern contraceptive users
– public sector consumers





Population density partially explains variations in modern contraceptive use across districts



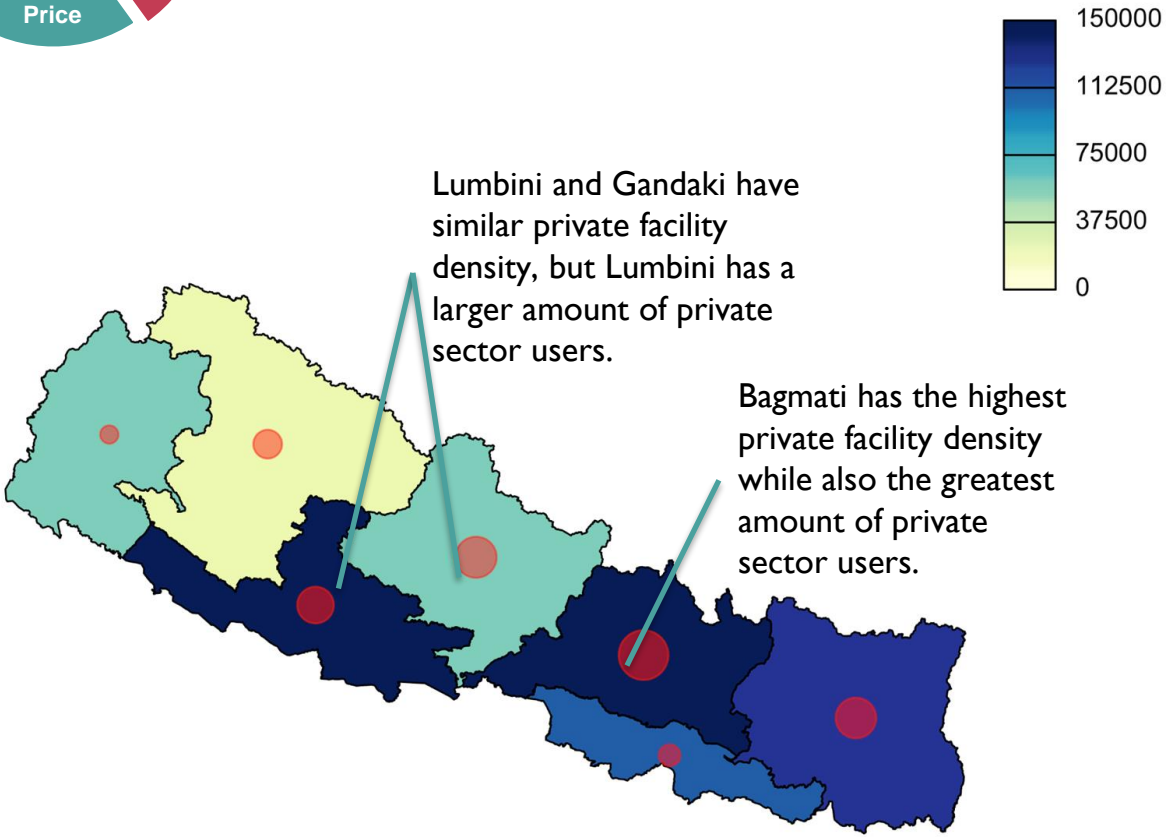
Number of WRA using a modern contraceptive method by district

Top 5 districts with the highest number of WRA using a modern contraceptive

Province	District	Estimated number of WRA using a modern contraceptive method
Bagmati	Kathmandu	170,000
Sudurpashchim	Kailali	121,000
Koshi	Morang	115,000
Koshi	Sunsari	101,000
Lumbini	Rupandehi	95,000
National		2,696,000



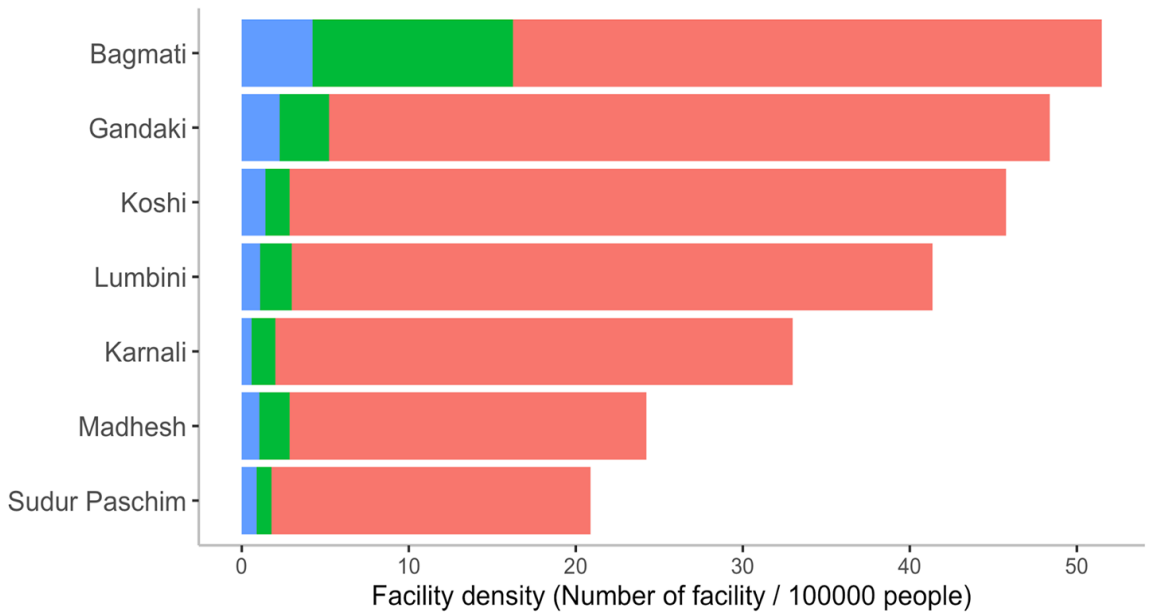
Private sector use is not directly correlated with population density



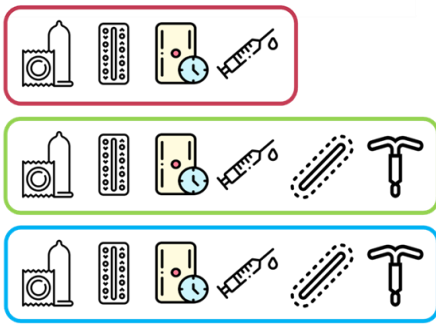
Private sector facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of WRA using a modern contraceptive method from a private source



Facility type: Pharmacies/Chemists (red), Private health facilities (green), Private hospitals (blue)

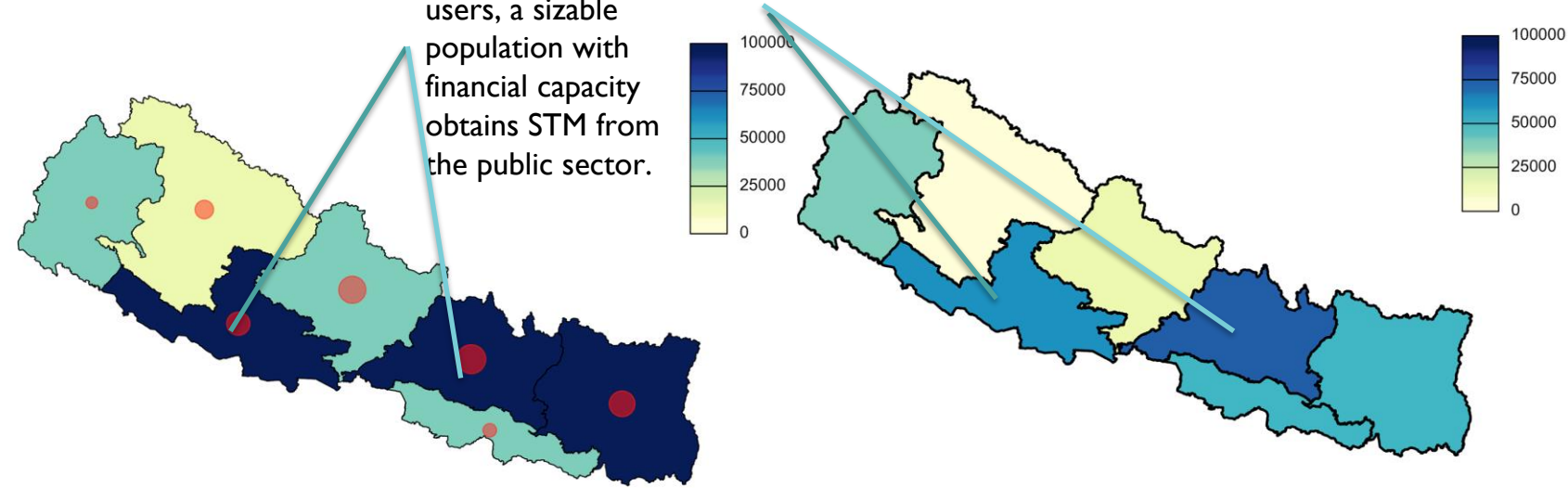


Private facility composition and density

Market actors may be able to target efforts in several provinces to encourage sourcing of short-term contraceptive methods from the private sector



While Bagmati and Lumbini have the highest STM private sector users, a sizable population with financial capacity obtains STM from the public sector.



Private sector facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of WRA using short-term contraceptives from a private source

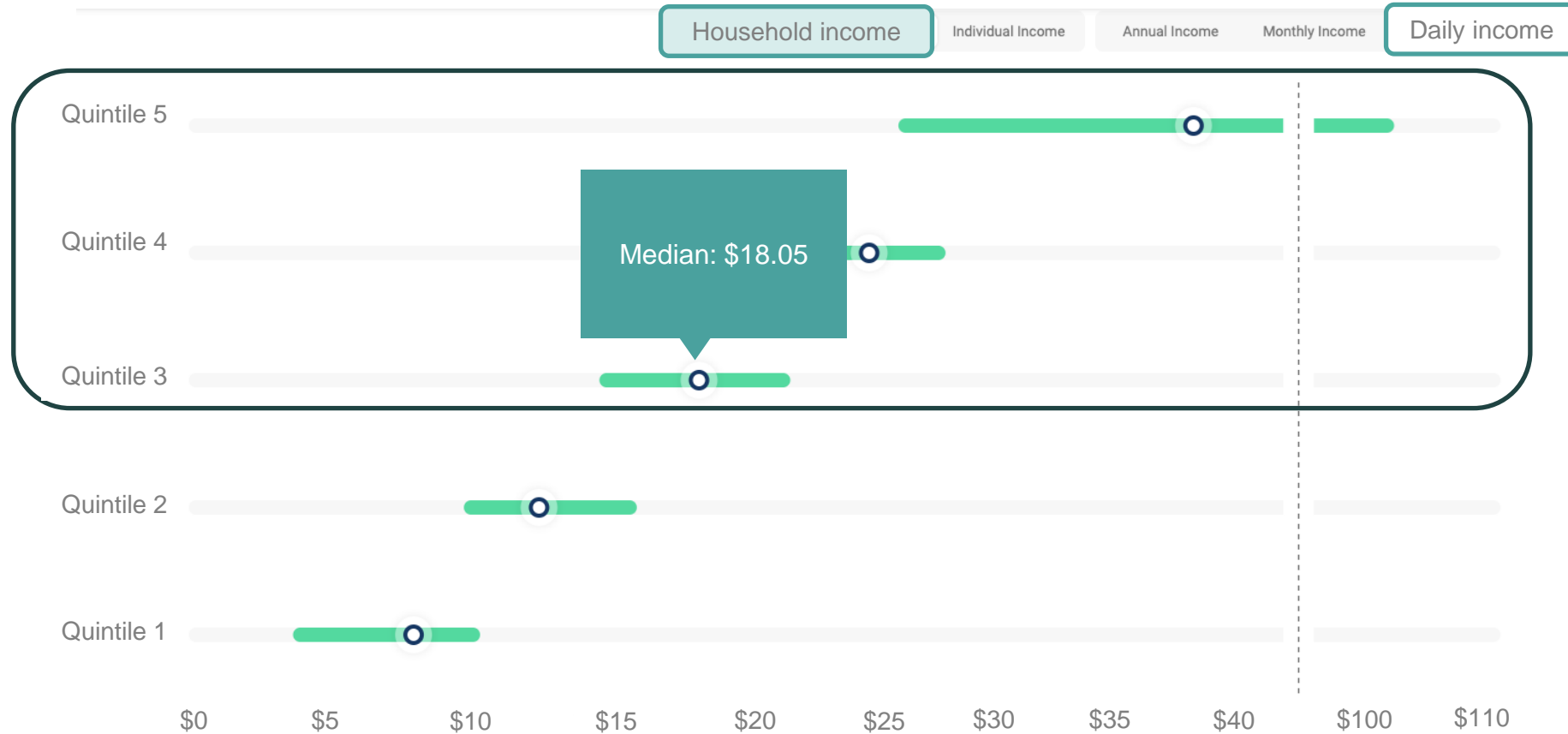
Number of WRA using short-term contraceptives from a public source with financial capacity*

Top 5 provinces with the highest number of WRA using short-term contraceptives from a public source with financial capacity

Province	Private source	Public source with financial capacity*
Bagmati	172,000	75,000
Lumbini	97,000	61,000
Madhesh	37,000	55,000
Koshi	89,000	54,000
Sudur Paschim	36,000	36,000
National	518,000	290,000

* Financial capacity is defined as belonging to a household in the top 3 wealth quintiles; equivalent to having at least \$18.05 USD daily household income

Brief explanation: what is financial capacity?

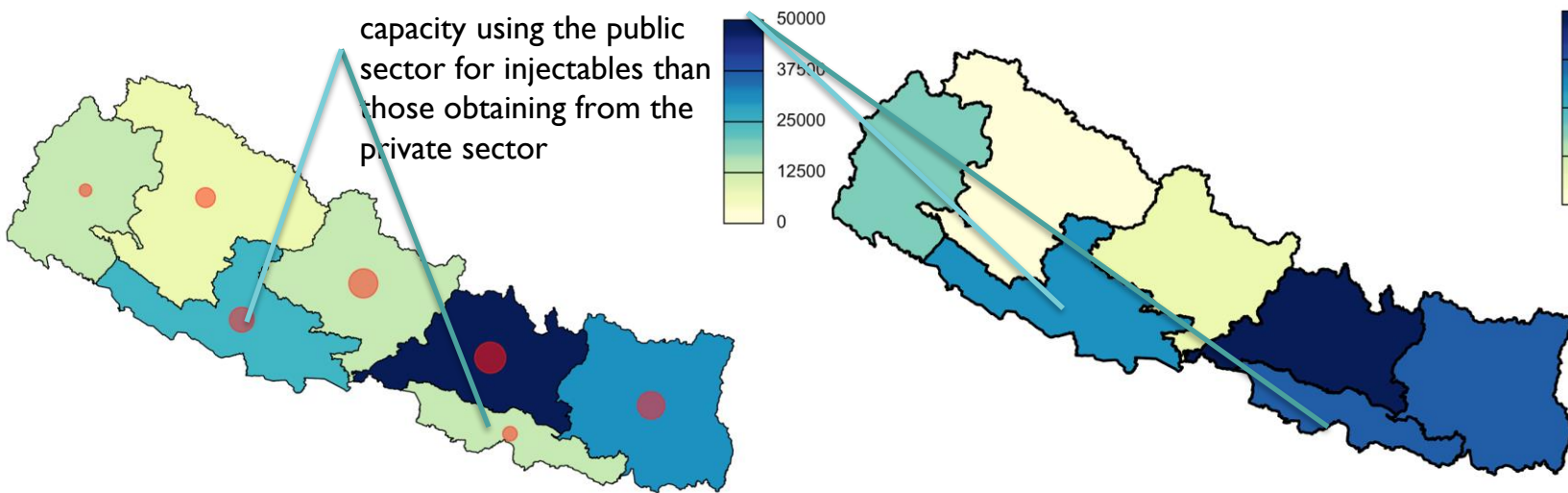


To indicate women's potential ability to pay, we defined financial capacity as women living in a household being in the top 3 wealth quintiles (top 60% of women based on the distribution of household wealth). Using the Asset to Income Estimator, the overall daily household income in Nepal ranges from \$3.6 to ~\$100, and the third quintile has \$18.05 daily household income.



Injectable contraceptive users: Significant numbers of women with financial capacity currently use the public sector to access injectables

Madhesh and Lumbini have more women with financial capacity using the public sector for injectables than those obtaining from the private sector



Private sector facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of WRA using injectable method from a private source

Number of WRA using injectable method from a public source with financial capacity

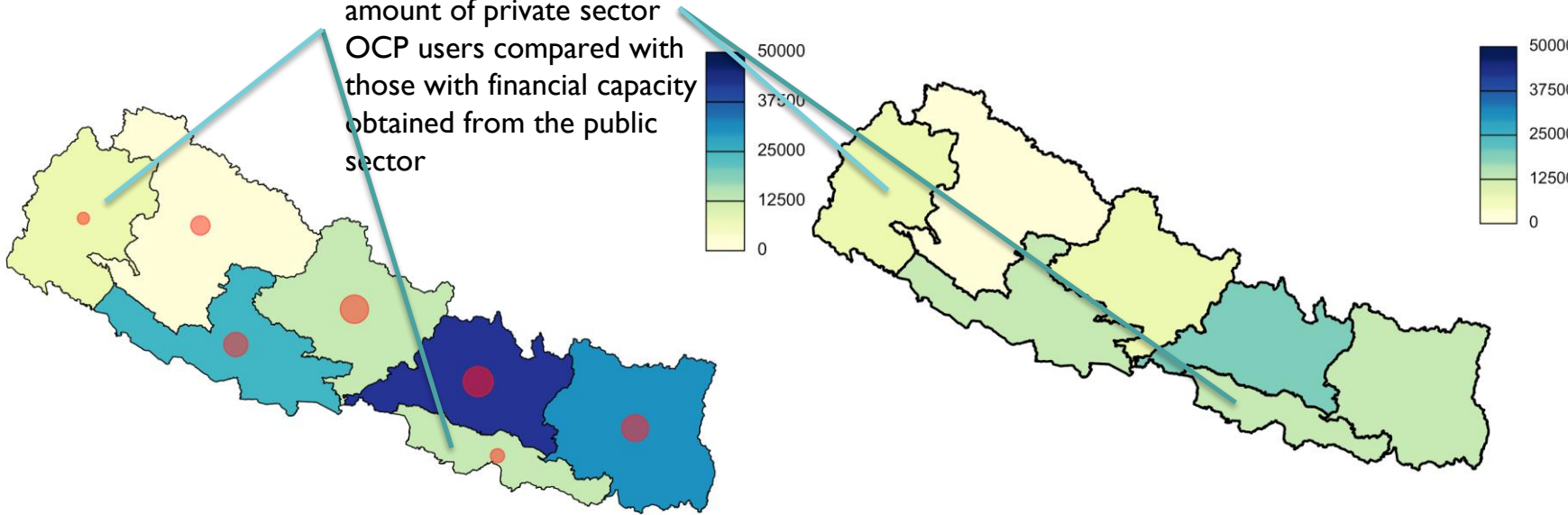
Top 5 provinces with the highest number of WRA using injectables from a non-private source with financial capacity

Province	Private source	Public source with financial capacity
Bagmati	58,000	47,000
Koshi	33,000	36,000
Madhesh	12,000	35,000
Lumbini	27,000	32,000
Sudur Paschim	12,000	17,000
National	172,000	169,000



OCP users: While many women already obtain OCPs from the private sector, an estimated 70,000 women with a financial capacity obtaining them from the public sector

Madhesh and Sudur Paschim have similar amount of private sector OCP users compared with those with financial capacity obtained from the public sector



Top 5 provinces with the highest number of WRA using OCPs from a public source with financial capacity

Province	Private source	Public source with financial capacity
Bagmati	39,000	18,000
Madhesh	13,000	16,000
Lumbini	23,000	15,000
Koshi	32,000	14,000
Sudur Paschim	6,000	8,000
National	140,000	70,000

Private sector facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of WRA using OCP method from a private source

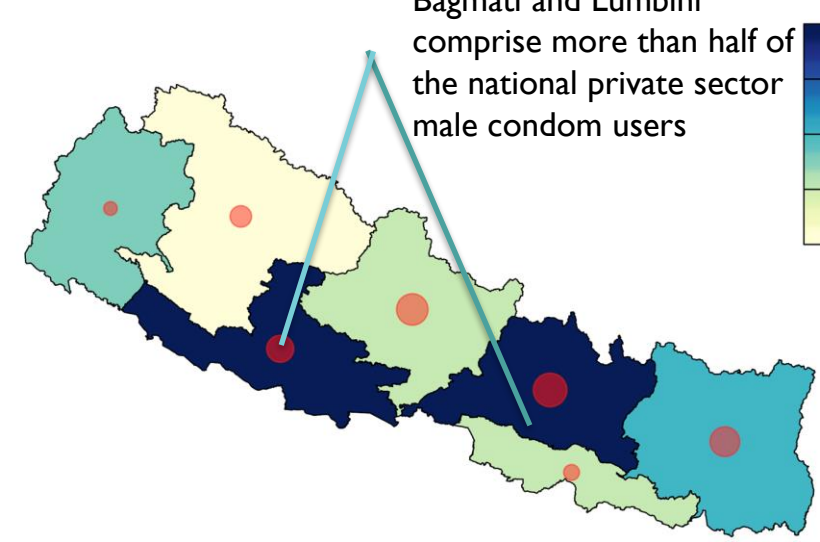
Number of WRA using OCP method from a public source with financial capacity



Male condom users: Although many women obtain male condoms from the private sector, an estimated 50,000 women with financial capacity obtain them from the public sector



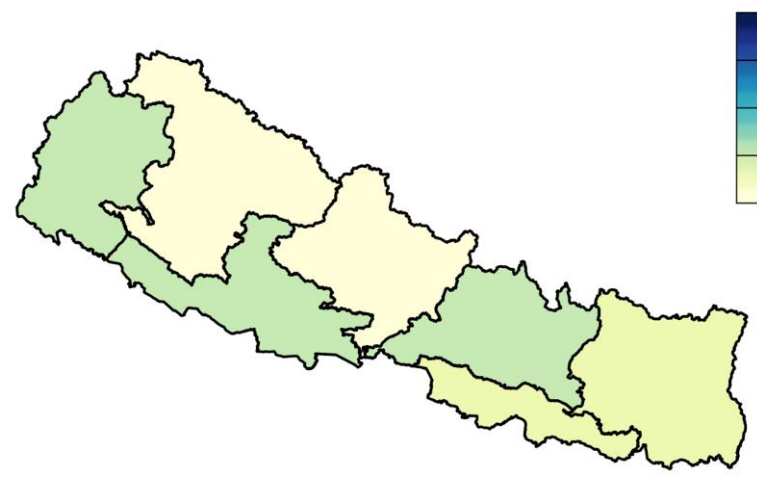
Bagmati and Lumbini comprise more than half of the national private sector male condom users



Private sector facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of WRA using male condoms from a private source



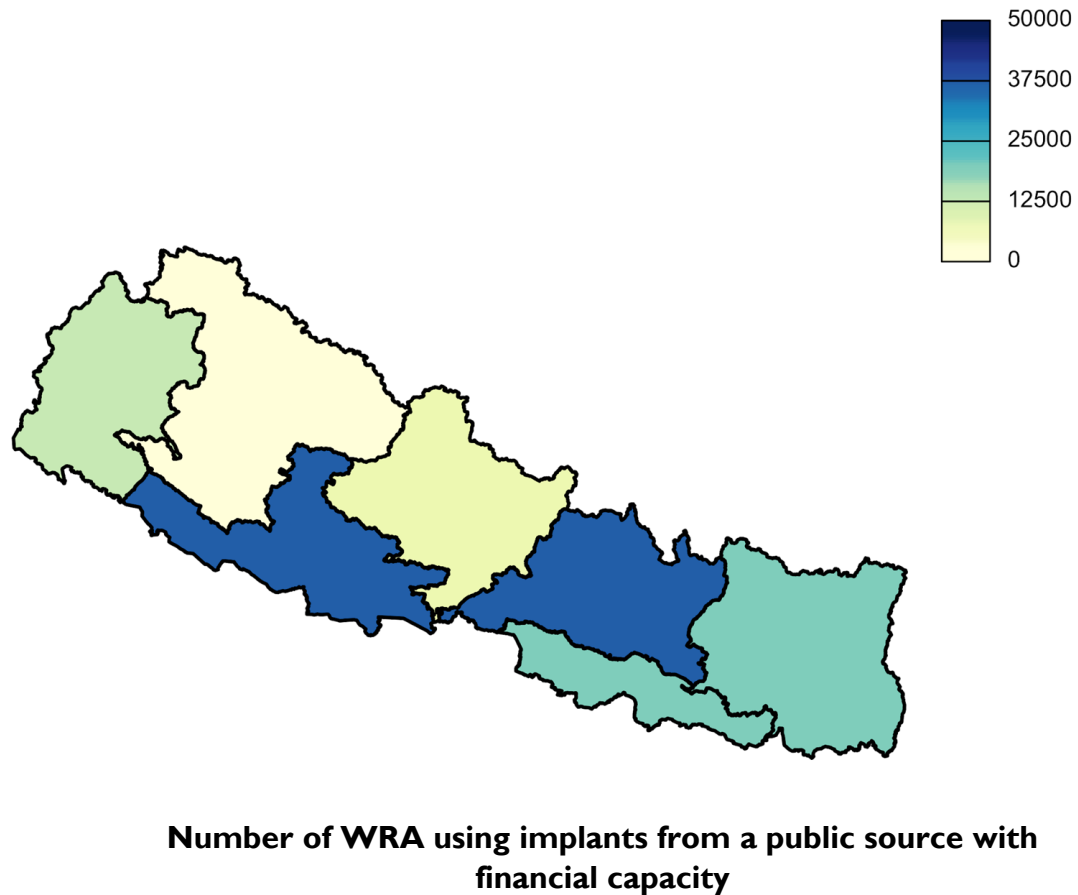
Number of WRA using male condoms from a public source with financial capacity

Top 5 provinces with the highest number of WRA using male condoms from a public source with financial capacity

Province	Private source	Public source with financial capacity
Lumbini	45,000	15,000
Bagmati	69,000	12,000
Sudur Paschim	19,000	11,000
Koshi	24,000	7,000
Madhesh	13,000	7,000
National	207,000	50,000



Implant users: over 130,000 implant users with financial capacity currently use the public sector to access implants



Top 5 provinces with the highest number of WRA using implants from a public source with financial capacity

Province	Private source	Public source with financial capacity
Bagmati	5,000	35,000
Lumbini	11,000	33,000
Koshi	6,000	21,000
Madhesh	4,000	17,000
Sudur Paschim	4,000	11,000
National	40,000	134,000

Note: No map is shown for private sector implant utilization due to very low numbers.

Potential Modern Method Users

Women 15 to 49
with an **unmet**
need for
contraception

**Women with an unmet need
for modern contraceptives**

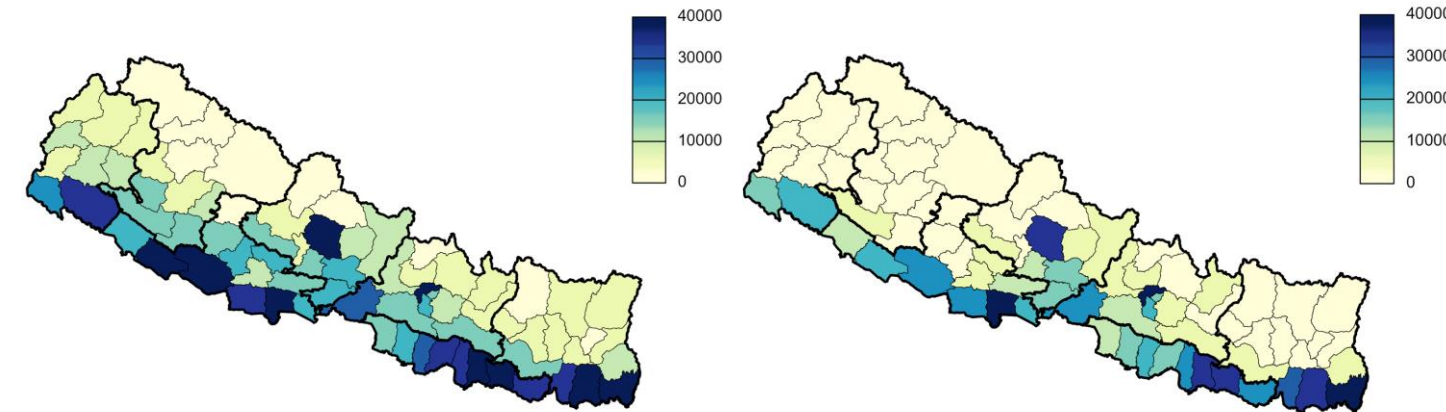




Several districts have a high proportion of women with financial capacity that have an unmet need for contraception, but the actual need may be further explored

The definition of unmet need may mask a significant proportion of potential need from women whose husbands are away, but return for periods during the year.

Top 5 districts with the highest number of WRA with an unmet need for contraception and those with financial capacity



Number of WRA with an unmet need for contraception

Number of WRA with an unmet need for contraception with financial capacity

District	Estimated number of WRA with an unmet need	Those with financial capacity
Kathmandu	67,000	65,000
Dhanusha	54,000	35,000
Siraha	53,000	34,000
Morang	46,000	35,000
Rupandehi	43,000	37,000
National	1,293,000	751,000

Potential Modern Method Users

Women 15 to 49
currently using a
**traditional
method**

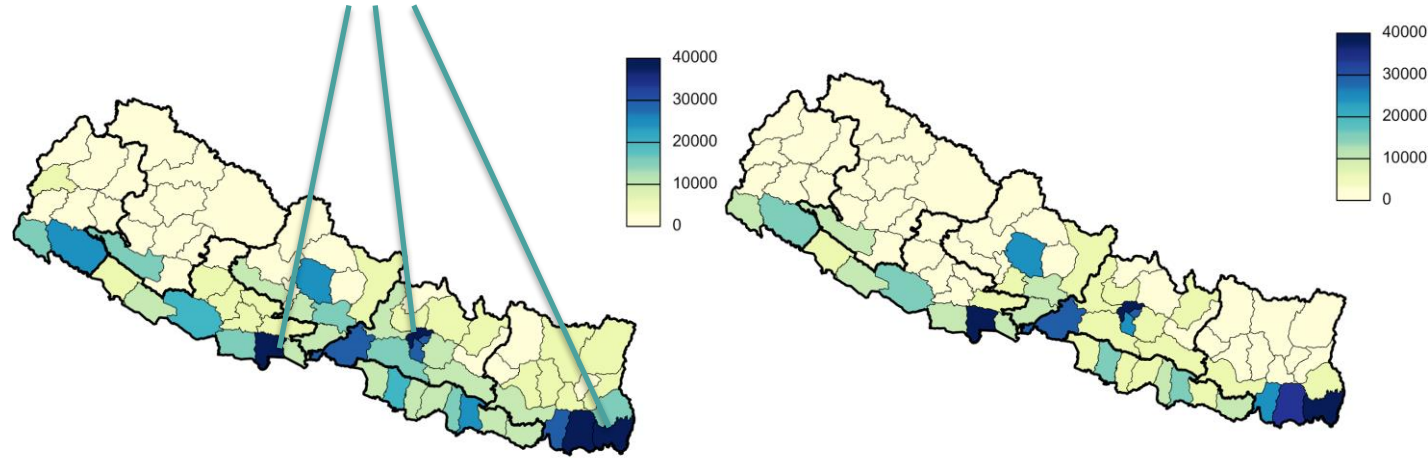
Women who are traditional
method users





The most highly populated districts have a higher proportion of traditional method use, and the majority have financial capacity

Kathmandu, Rupandeh, and Jhapa have close to a quarter of the national estimated traditional method users



Number of WRA using a traditional method by district

Number of WRA using a traditional method with financial capacity by district

Top 5 districts with the highest number of WRA using a traditional contraceptive method and those with financial capacity

District	Estimated number of WRA using a trad method	Those with financial capacity
Kathmandu	106,000	104,000
Rupandehi	56,000	55,000
Jhapa	51,000	45,000
Morang	39,000	33,000
Chitawan	30,000	28,000
National	906,000	680,000

Total Market Size Estimation

Estimated volume and value by type of contraceptive product





Assumptions needed in estimating potential new private sector users

Public sector users to become private sector users



Using *1) Bangladesh or 2) the Philippines as aspiring examples*, if Nepal has either of these countries' private sector utilization for contraception among those with financial capacity, we estimated how many current non-private users could become private users:

Low: 29%
High: 34%

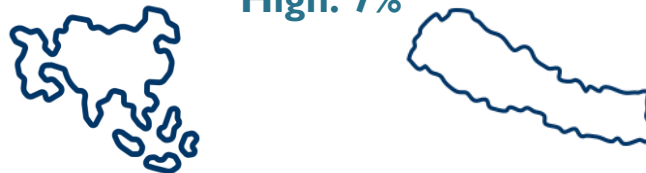


Women with an unmet need to become private sector users

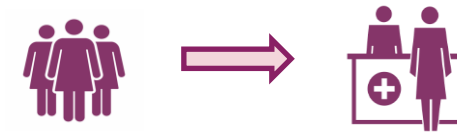


Reviewing the literature on interpersonal communication interventions in South Asia and changes to mCPR in Uganda during the period of DMPA-SC expansion, modern contraceptive use **may increase by 4 - 10%**; within those, about two-thirds (based on Bangladesh / the Philippines private sector utilization) may use the private sector:

Low: 2%
High: 7%



Traditional method users to become private sector users



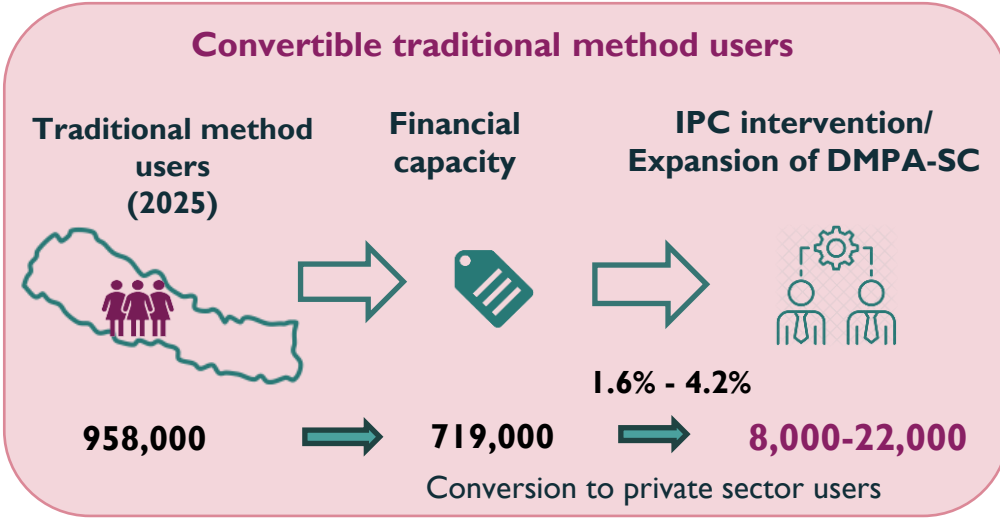
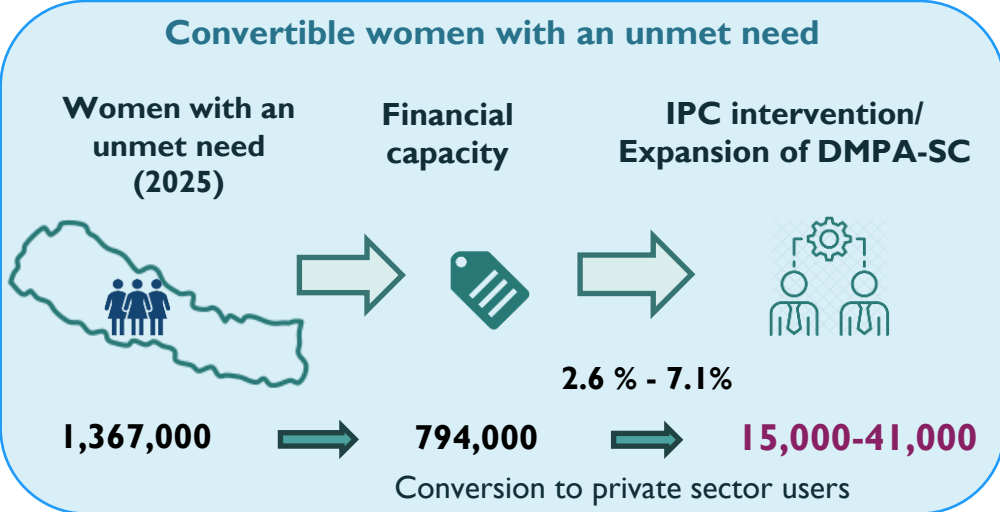
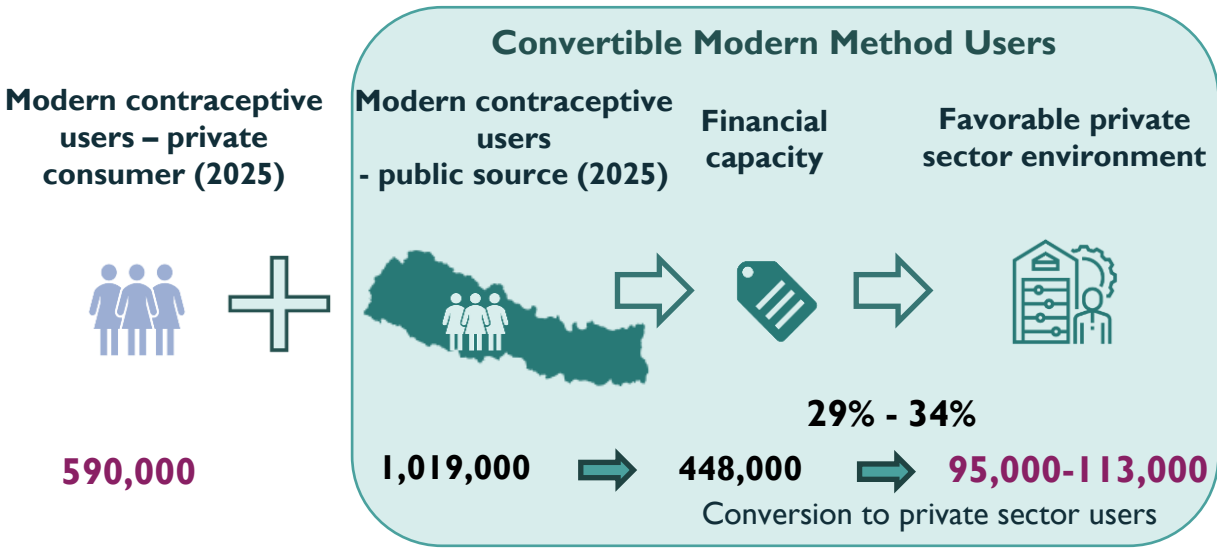
One study of interpersonal communication interventions in South Asia found that effects on more educated women were **only 0.6 of the overall intervention effect**. Nepal's traditional method users comprise more educated women. Using Bangladesh / the Philippines private sector utilization, the proportion of traditional method users who may use the private sector:

Low: 1.6%
High: 4.2%





Estimation of users: Nepal exhibits a high potential for private sector utilization under an enabling market environment



* Methods of interest include injectables, OCP, male condoms, and implants. ** Conversion to private sector users assumes the current private sector method mix.



Product Pricing Estimates

Product	Unit	Retail price (Nepalese Rupee range)	Average retail price (USD)	USD per year for 1 CYP
Injectables (DMPA-IM, DMPA-SC)	3-month injectable	NPR 80	\$0.6	\$2.4
Oral Contraceptive Pills**	Monthly pack	NPR 80	\$0.6	\$9
Male condoms***	Pack of 3	(Plain) NPR 30 – 50, (Enhanced) NPR 100	\$0.49	\$19.5
Emergency Contraceptive Pills (ECP)	Single use	NPR 80	\$0.6	–
Implants	5 years	NPR 1067 – 1733	\$10.5	

Source: FHM Engage Market Visit Observations in Oct 2023.

* Commodity price does not reflect facility visit fees for insertion and removal of reversible contraceptive methods; the value estimation does not consider the length of implant use.

** The price of second-generation OCPs is used.

*** The average price of male condoms was calculated by calculating the mean of the minimum retail price (NPR 30) and the enhanced product retail price (NPR 100). USD per year for 1 CYP takes into account the package of 3 condoms in 1 unit, i.e. 40 packs required for 1 CYP.



Current private sector volume and value (2025): ECP and OCP together contribute significant market value; injectables' limited value underscores the need for more private sector access

FP product	Estimated current private sector clients (2025)	Estimated private volume* - unit (annual, 2025)	Estimated private value** (annual, 2025)
	All WRA	All WRA	All WRA
Injectables (DMPA-IM)	180,000	721,000	\$433,000
Injectables (DMPA-SC)	1,200	4,600	\$2,800
OCP	147,000	2,211,000	\$1,327,000
Male condoms	219,000	26,261,000	\$4,267,000
Implant	42,000	42,000	\$445,000
ECP*		2,244,000	\$1,347,000

Note: Long-acting reversible contraceptives do not consider the duration of product use.

* Conversion from the number of private sector clients to product volume is based on the number of product(s) needed for one full-year CYP, as per USAID CYP conversion. E.g., 120 male condoms are required for 1 CYP.

**Due to the uncertain validity of DHS data for ECP estimation, ECP private sector market value was estimated using CRS sales data in 2022. CRS estimates that they have 50% of the ECP market share.



Estimated potential volume and value: male condoms may remain the leading product in sales with the current private sector method mix

FP product	Estimated convertible private sector clients (2025)		Estimated convertible private volume - unit (annual, 2025)		Estimated convertible private sector use value* (annual, 2025)	
	Low	High	Low	High	Low	High
Injectables (DMPA-IM)	36,000	54,000	145,000	215,000	\$87,000	\$129,000
Injectables (DMPA-SC)	200	300	900	1,400	\$600	\$800
OCP	30,000	44,000	443,000	659,000	\$266,000	\$395,000
Male condoms*	44,000	65,000	5,265,000	7,825,000	\$855,000	\$1,271,000
Implant	8,000	13,000	8,000	13,000	\$89,000	\$132,000

Note: Long-acting reversible contraceptives do not consider the duration of product use.

* Conversion from the number of private sector clients to product volume is based on the number of product(s) needed for one full-year CYP, as per USAID CYP conversion. E.g., 120 male condoms are required for 1 CYP.



Estimated total value: Potential 20% to 30% increase in value of private sector sales

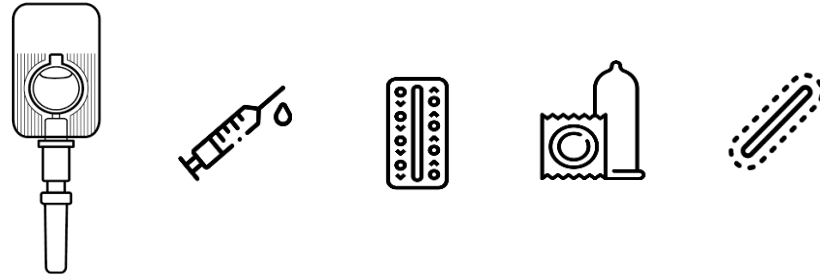
FP product	Estimated private value (annual, 2025)*	Estimated potential value (annual, 2025)*		Estimated total value (annual, 2025)*	
	All WRA	Low	High	Low	High
Injectables (DMPA-IM)	\$433,000	\$87,000	\$129,000	\$519,000	\$561,000
Injectables (DMPA-SC)	\$2,800	\$600	\$800	\$3,300	\$3,600
OCP	\$1,327,000	\$266,000	\$395,000	\$1,593,000	\$1,722,000
Male condoms	\$4,267,000	\$855,000	\$1,271,000	\$5,123,000	\$5,539,000
Implant	\$445,000	\$89,000	\$132,000	\$534,000	\$577,000
Total	\$6,474,000	\$1,298,000	\$1,929,000	\$7,772,000	\$8,403,000

Using the current private sector method mix, the estimated total value of the 4 types of contraceptive products can be **between 7.8M to 8.4M**, with *revenue primarily driven by male condoms*.

* Note that the value estimation does not consider the duration of use in LARC products



Hypothetical change to Nepal's private sector method mix under the assumption of DMPA-SC expansion



The current situation in Nepal:

Health clinics and pharmacies/chemists can distribute both DMPA-IM and DMPA-SC. A recent publication found high acceptability of DMPA-SC in Nepal.¹ Analysis of Nepal's Market Description described a limited supply of DMPA-SC, which restricts the access of DMPA-SC.

Example from Uganda:

DMPA-SC has been introduced, scaled up, and added to the National Essential Medicine List in Uganda in 2016. Self-injection has also been approved. In 2017, Uganda changed the policy to allow licensed and accredited drug shops to stock and administer injectable contraception (including DMPA-SC), further increasing access to injectables.

Method-mix change with DMPA-SC expansion:

Comparison of survey data from PMA between 2016 and 2022:

Method	% change
DMPA-IM	-58%
DMPA-SC	14.8 percentage points
OCP	-3%
Male condoms	-26%
Implants	80%



Estimated potential volume and value – applying the hypothetical alternative private sector method mix

FP product	Estimated convertible private sector clients (2025)		Estimated convertible private volume - unit (annual, 2025)		Estimated convertible private sector use value* (annual, 2025)	
	Low	High	Low	High	Low	High
Injectables (DMPA-IM)	15,000	22,000	59,000	88,000	\$35,000	\$53,000
Injectables (DMPA-SC)	24,000	36,000	96,000	143,000	\$58,000	\$86,000
OCP	29,000	44,000	436,000	647,000	\$262,000	\$388,000
Male condoms	32,000	48,000	3,894,000	5,788,000	\$633,000	\$941,000
Implant	15,000	22,000	15,000	22,000	\$155,000	\$232,000

*Note: Long-acting reversible contraceptives do not consider the duration of product use.



Estimated total value from alternative private sector method mix: Market value may drop by 3% compared to the current private sector method mix

FP product	Estimated current private value (annual, 2025)*	Estimated potential value (annual, 2025)*		Estimated total potential value (annual, 2025)*	
	All WRA	Low	High	Low	High
Injectables (DMPA-IM)	\$433,000	\$35,000	\$53,000	\$468,000	\$485,000
Injectables (DMPA-SC)	\$2,800	\$58,000	\$86,000	\$60,000	\$88,000
OCP	\$1,327,000	\$262,000	\$388,000	\$1,589,000	\$1,715,000
Male condoms	\$4,267,000	\$633,000	\$941,000	\$4,900,000	\$5,208,000
Implant	\$445,000	\$155,000	\$232,000	\$599,000	\$676,000
Total	\$6,474,000	\$1,142,000	\$1,699,000	\$7,617,000	\$8,173,000

Under the alternative private sector method mix, the estimated total value of the 4 types of contraceptive products can be **between 7.6M to 8.2M**, primarily driven by a reduction in male condom sales.

* Note that the value estimation does not consider the length of use in LARC products



Policy Scenario from FP Market Analyzer: Nepal's private sector method mix if barriers removed to allow the private sector to play a greater role in LARC provision as implants increase in popularity



The current situation in Nepal:

Previous FHM analysis to compare method mix with earlier DHS Survey in Nepal (2016) showed an increase in the popularity of implants. The provision of LARCs is predominantly by the public sector, especially for implants (89% by the public sector).

Policy scenario from FP Market Analyzer:

Policy Scenario 4 from the Family Planning Market Analyzer illustrates potential changes if barriers were removed to allow the private sector to play a greater role in LARC provision as implants increase in popularity. The change in the private sector method mix was estimated for this Policy Scenario and applied in the estimates.

Private sector method-mix under the policy scenario:

Method	% (of users sourced from the private sector)
DMPA-IM	14.3%
DMPA-SC	0.1%
OCP	11.7%
Male condoms	17.4%
Implants	28.8%



Estimated potential volume and value – applying the Policy Scenario private sector method mix

FP product	Estimated convertible private sector clients (2025)		Estimated convertible private volume - unit (annual, 2025)		Estimated convertible private sector use value* (annual, 2025)	
	Low	High	Low	High	Low	High
Injectables (DMPA-IM)	23,000	35,000	93,000	138,000	\$56,000	\$83,000
Injectables (DMPA-SC)	100	200	600	900	\$400	\$500
OCP	19,000	28,000	285,000	424,000	\$171,000	\$254,000
Male condoms	28,000	42,000	3,389,000	5,037,000	\$551,000	\$819,000
Implant	47,000	69,000	47,000	69,000	\$490,000	\$729,000

*Note: Long-acting reversible contraceptives do not consider the duration of product use.



Estimated total value from policy scenario private sector method mix: Market value similar to the current private sector method mix with the increase in implants

FP product	Estimated current private value (annual, 2025)*	Estimated potential value (annual, 2025)*		Estimated total potential value (annual, 2025)*	
	All WRA	Low	High	Low	High
Injectables (DMPA-IM)	\$433,000	\$56,000	\$83,000	\$488,000	\$515,000
Injectables (DMPA-SC)	\$2,800	\$400	\$500	\$3,000	\$3,000
OCP	\$1,327,000	\$171,000	\$254,000	\$1,498,000	\$1,581,000
Male condoms	\$4,267,000	\$551,000	\$819,000	\$4,818,000	\$5,086,000
Implant	\$445,000	\$490,000	\$729,000	\$935,000	\$1,174,000
Total	\$6,474,000	\$1,268,000	\$1,885,000	\$7,743,000	\$8,359,000

Under the policy scenario private sector method mix, the estimated total value of the 4 types of contraceptive products can be **between 7.7M to 8.4M**, as a reduction in male condom sales being complimented by an increase in implant sales.

* Note that the value estimation does not consider the length of use in LARC products

THANK YOU

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A

ANNEX

Estimation results for young women aged 15-24

Current Modern Method Users

Women aged 15-
24 using a modern
contraceptive
method

**Modern contraceptive users –
private sector consumers**

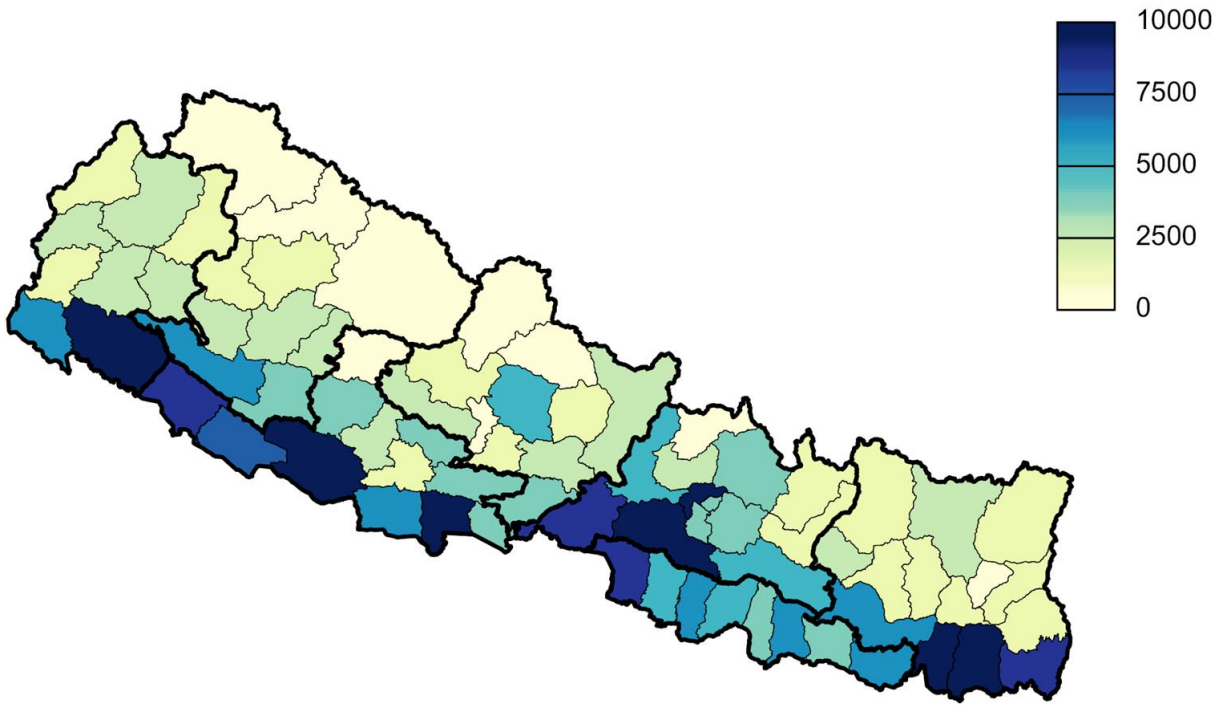


**Modern contraceptive users
– public sector consumers**





Distribution of young women using a modern contraceptive



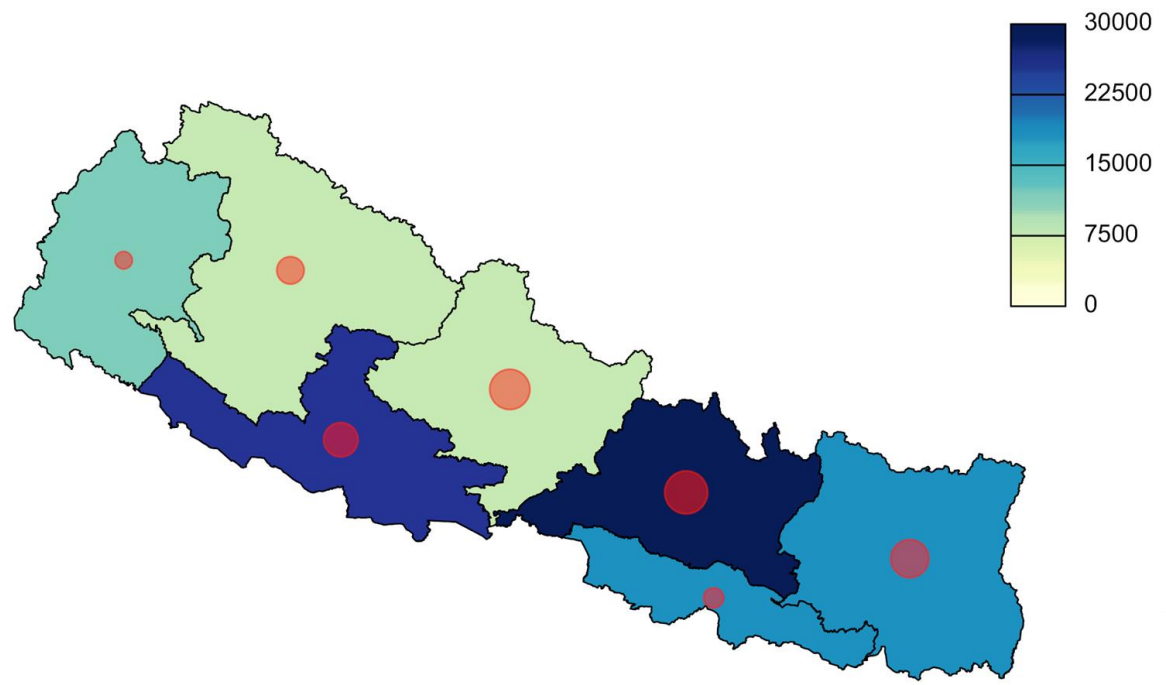
Number of young women using a modern contraceptive method by district

Top 5 districts with the highest number of young women using a modern contraceptive

Province	District	Estimated number of young women using a modern contraceptive method
Sudur Pashchim	Kailali	17,000
Bagmati	Kathmandu	15,000
Koshi	Morang	14,000
Lumbini	Dang	13,000
Koshi	Sunsari	12,000
National		300,000

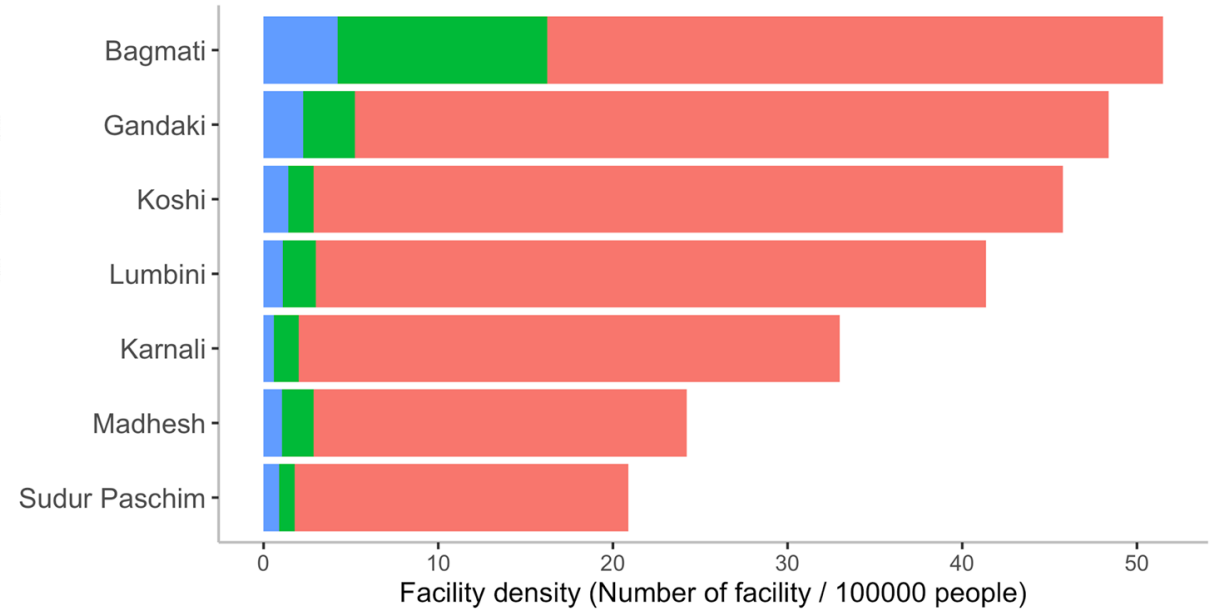


Distribution of young women's private sector use

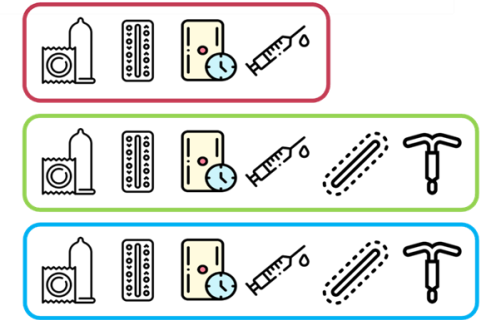


- Private facility density
- 5/100000 people
 - 25/100000 people
 - 50/100000 people

Number of young women using a modern contraceptive method from a private source



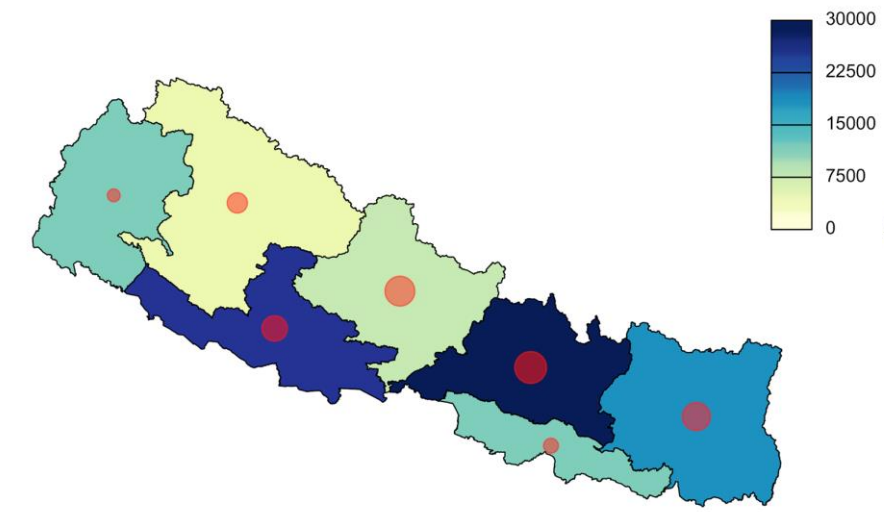
Facility type ■ Pharmacies/Chemists ■ Private health facilities ■ Private hospitals



Private facility composition and density



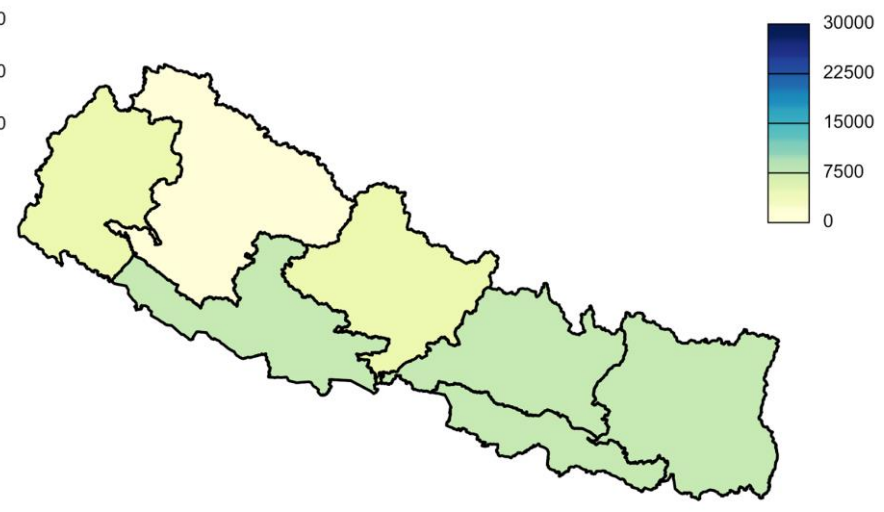
Comparison of distributions of short-term contraceptive users between private and public sector with financial capacity



Private facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of young women using short-term contraceptives from a private source



Number of young women using short-term contraceptives from a public source with financial capacity*

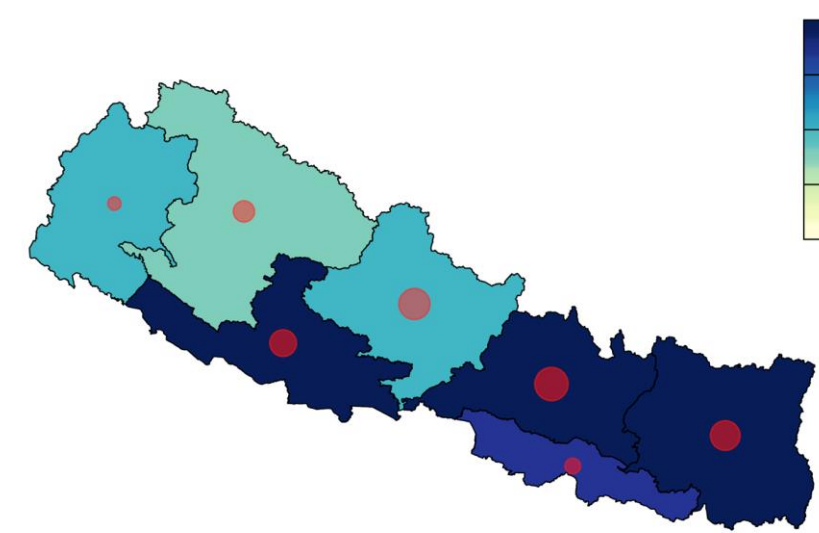
Top 5 provinces with the highest number of young women using short-term contraceptives from a public source with financial capacity

Province	Private source	Public source with financial capacity*
Bagmati	30,000	10,000
Madhesh	13,000	10,000
Lumbini	24,000	9,000
Koshi	17,000	8,000
Sudur Paschim	11,000	5,000
National	106,000	42,000

* Financial capacity is defined as belonging to a household in the top 3 wealth quintiles; equivalent to having at least \$18.05 USD daily household income



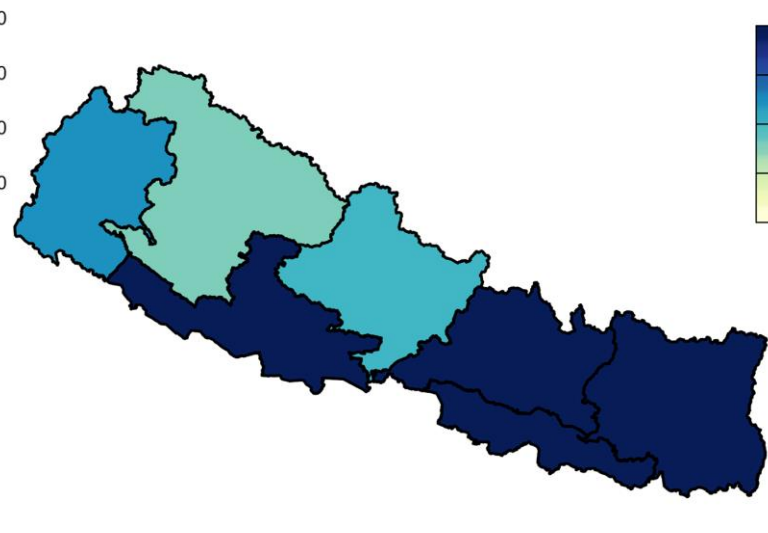
Comparison of distributions of injectable users between private and public sector with financial capacity



Private facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of young women using injectable method from a private source



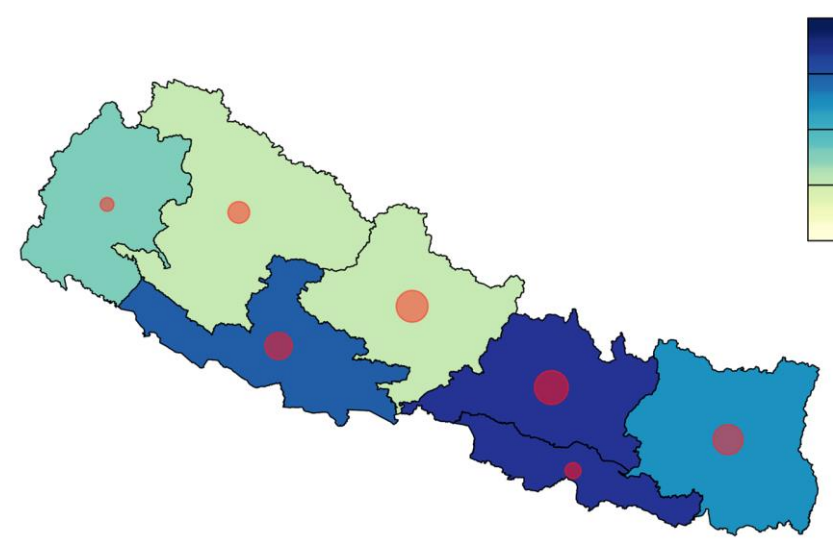
Number of young women using injectable method from a public source with financial capacity

Top 5 provinces with the highest number of WRA using injectables from a non-private source with financial capacity

Province	Private source	Public source with financial capacity
Madhesh	5,000	7,000
Bagmati	9,000	7,000
Lumbini	7,000	6,000
Koshi	6,000	6,000
Sudur Paschim	3,000	3,000
National	34,000	42,000



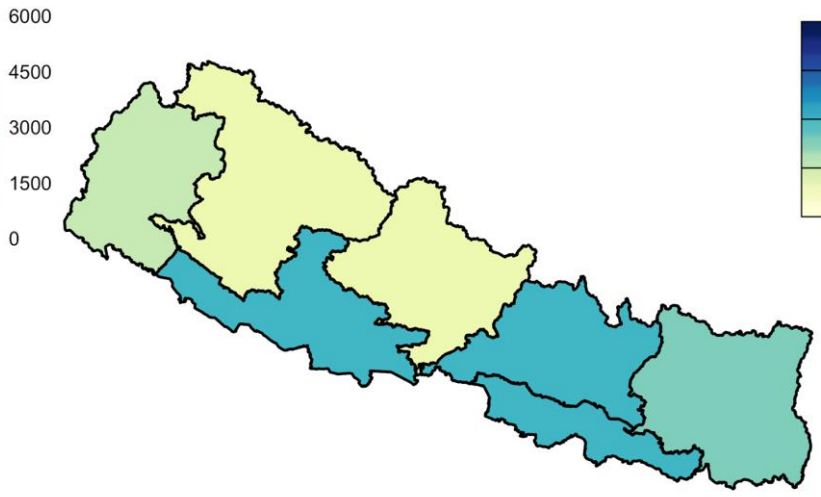
Comparison of distributions of OCP users between private and public sector with financial capacity



Private facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of young women using OCP method from a private source



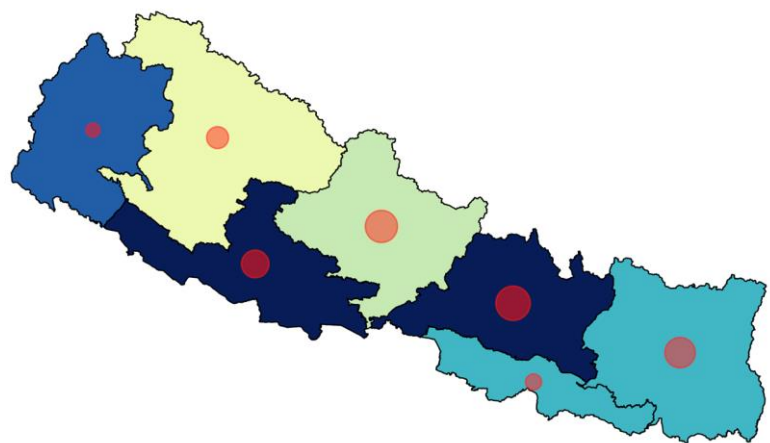
Number of young women using OCP method from a public source with financial capacity

Top 5 provinces with the highest number of young women using OCPs from a public source with financial capacity

Province	Private source	Public source with financial capacity
Bagmati	5,000	~3,000
Madhesh	5,000	~3,000
Lumbini	4,000	~3,000
Koshi	4,000	~3,000
Sudur Paschim	2,000	~2,000
National	25,000	~10,000



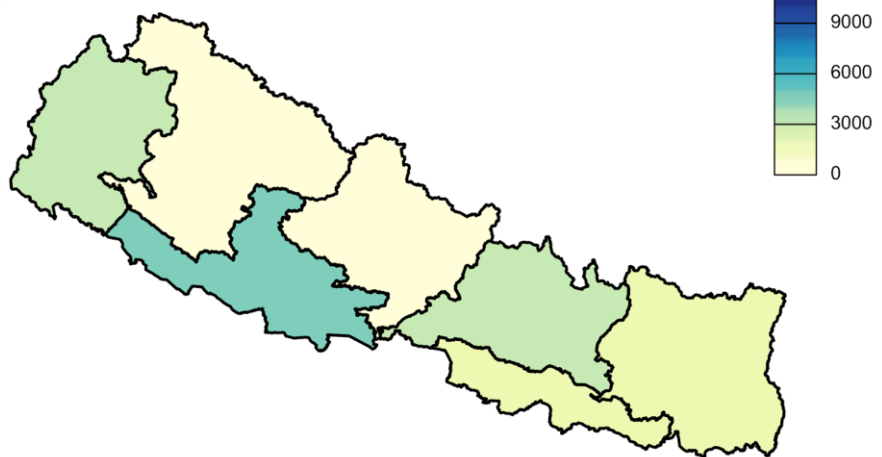
Comparison of distributions of male condoms users between private and public sector with financial capacity



Private facility density

- 5/100000 people
- 25/100000 people
- 50/100000 people

Number of young women using male condoms from a private source



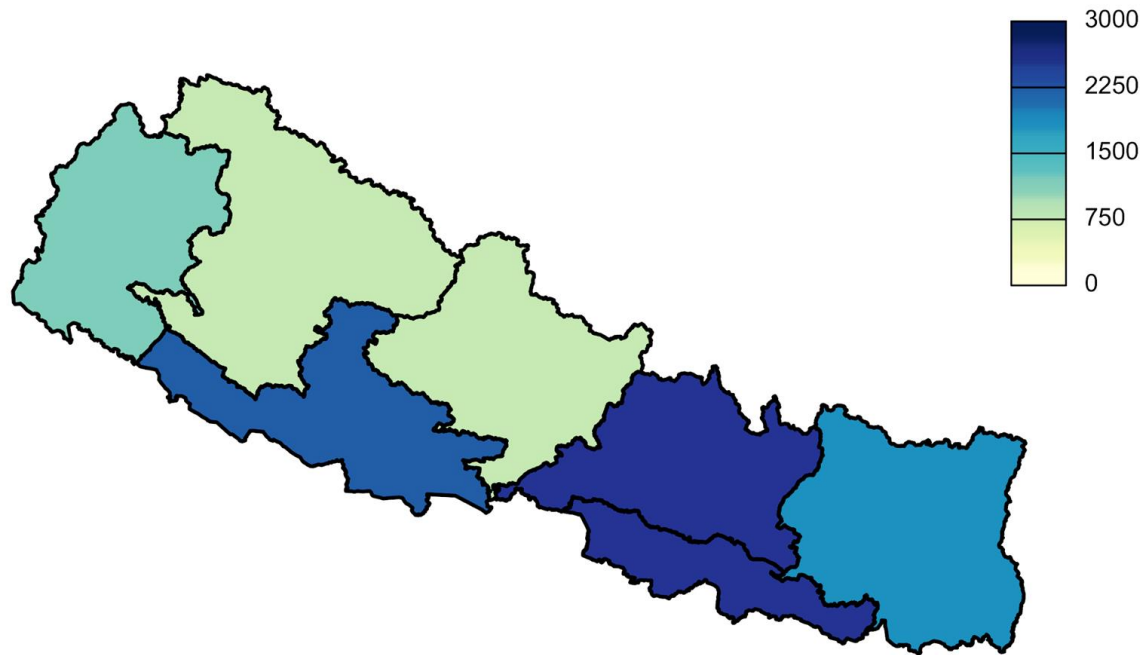
Number of young women using male condoms from a public source with financial capacity

Top 5 provinces with the highest number of young women using male condoms from a public source with financial capacity

Province	Private source	Public source with financial capacity
Lumbini	13,000	~4,000
Sudur Paschim	8,000	~3,000
Bagmati	15,000	~3,000
Madhesh	6,000	~2,000
Koshi	5,000	~2,000
National	46,000	~10,000



Comparison of implant users between private and public sector with financial capacity



Number of young women using implants from a public source with financial capacity

Top 5 provinces with the highest number of young women using implants from a public source with financial capacity

Province	Private source	Public source with financial capacity
Bagmati	2,000	~2,000
Lumbini	2,000	~2,000
Koshi	2,000	~2,000
Madhesh	1,000	~2,000
Sudur Paschim	1,000	~1,000
National	<10,000	~10,000

Note: No map is shown for private sector implant utilization due to very low numbers.

Potential Modern Method Users

Women aged 15 -
24 with an
unmet need for
contraception

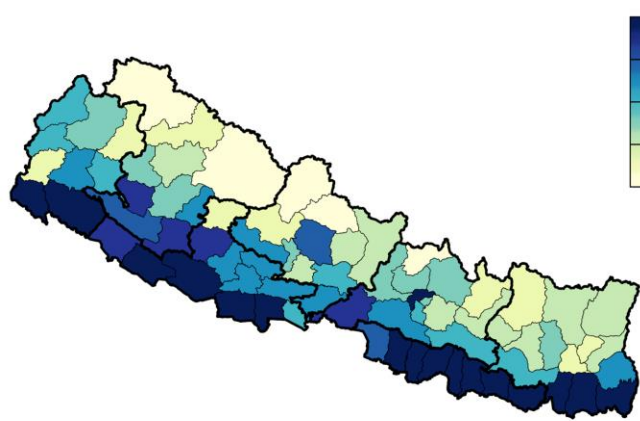
**Young women with an unmet
need for modern
contraceptives**



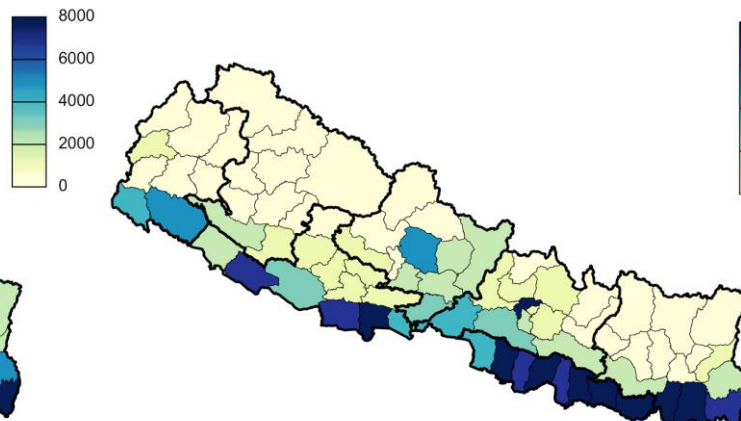


Distribution of young women with an unmet need for contraception and those with financial capacity

The definition of unmet need may mask a significant proportion of potential need from women whose husbands are away, but return for periods during the year.



Number of young women with an unmet need for contraception



Number of young women with an unmet need for contraception with financial capacity

Top 5 districts with the highest number of young women with an unmet need for contraception and those with financial capacity

District	Estimated number of young women with an unmet need	Those with financial capacity
Siraha	25,000	13,000
Dhanusha	19,000	11,000
Morang	16,000	9,000
Sarlahi	15,000	7,000
Rautahat	12,000	6,000
National	391,000	183,000

Potential Modern Method Users

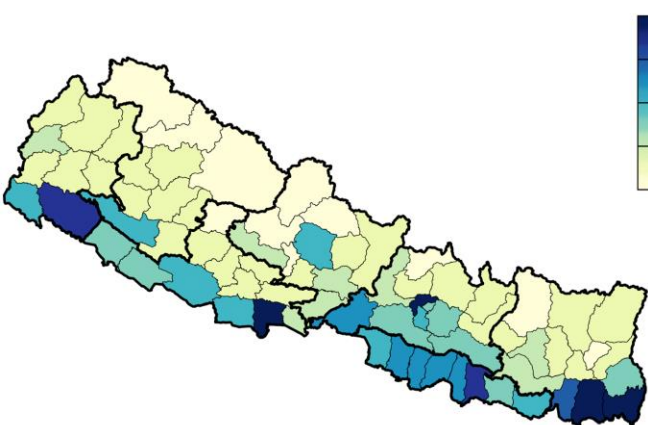
Women aged 15-
24 currently using
a **traditional**
method

Young women who are
traditional method users

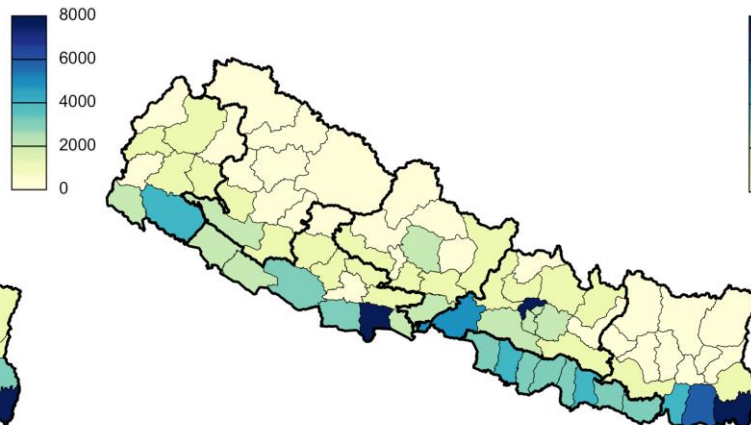




Distribution of young women using a traditional contraceptive method and those with financial capacity



Number of young women using a traditional method by district



Number of young women using a traditional method with financial capacity

Top 5 districts with the highest number of young women using a traditional contraceptive method and those with financial capacity

District	Estimated number of young women using a trad method	Those with financial capacity
Kathmandu	12,000	8,000
Jhapa	11,000	7,000
Rupandehi	9,000	9,000
Morang	8,000	5,000
Kailali	7,000	4,000
National	182,000	125,000

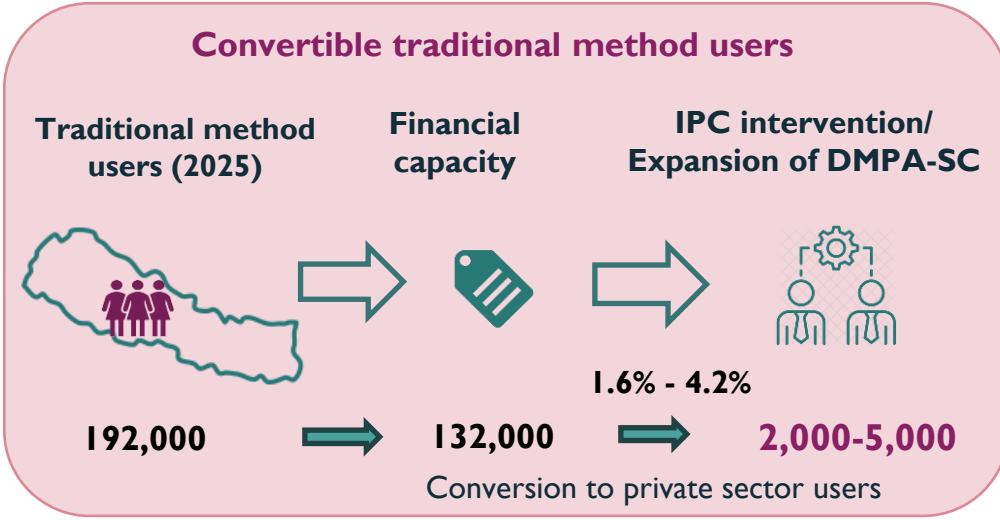
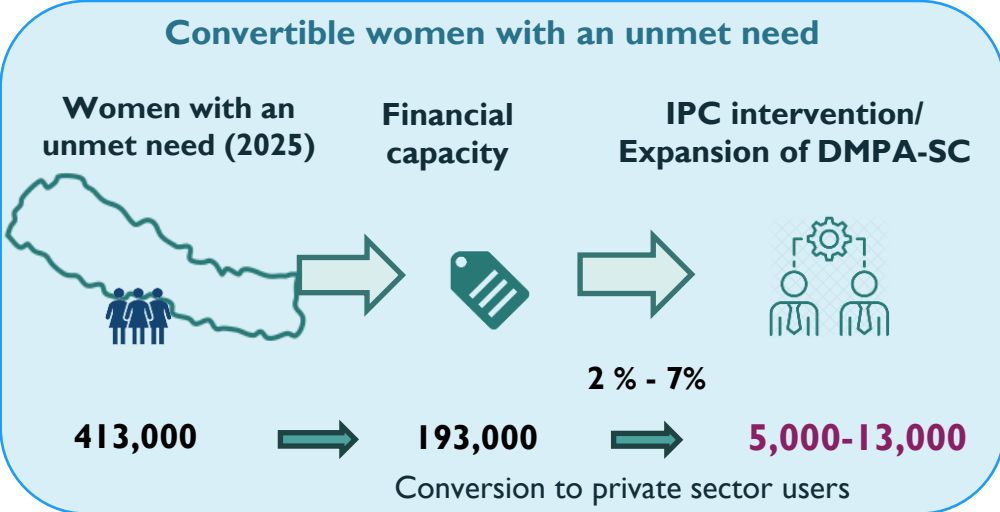
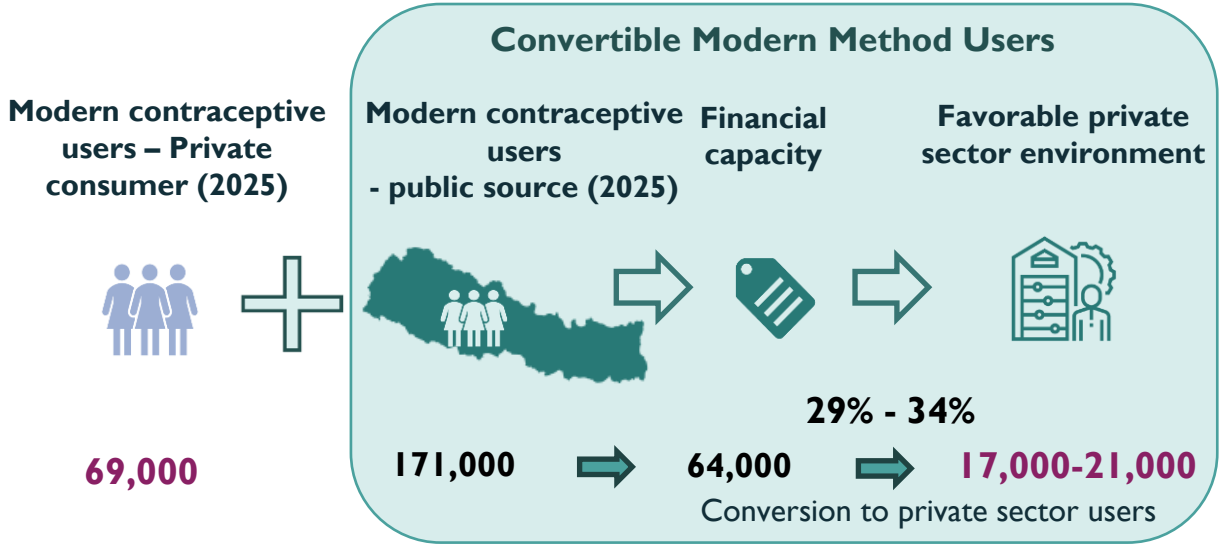
Market Size Estimation – Young women

Estimated volume and value by type of contraceptive product





Estimation of young private sector users



* Methods of interest include injectables, OCP, male condoms, and implants. ** Conversion to private sector users assumes the current private sector method mix.



Current private sector volume and value (young women)

FP product	Estimated current private sector clients (2025)	Estimated private volume - unit (annual, 2025)	Estimated private value* (annual, 2025)
	Young women	Young women	Young women
Injectables (DMPA-IM)	36,000	144,000	\$86,000
OCP	27,000	403,000	\$242,000
Male condoms	49,000	5,867,000	\$953,000
Implant	6,000	6,000	\$67,000

*Long-acting reversible contraceptives do not consider the duration of product use.

Note: Young women did not utilize DMPA-SC in the private sector (current private sector method mix).

As the sales data of ECP do not include disaggregation of users' age, no data is available to estimate young women's use of ECP in Nepal.



Estimated potential volume and value (young women)

FP product	Estimated convertible private sector clients (2025)		Estimated convertible private volume - unit (annual, 2025)		Estimated convertible private sector use value* (annual, 2025)	
	Low	High	Low	High	Low	High
Injectables (DMPA-IM)	7,300	11,800	29,000	47,000	\$18,000	\$28,000
OCP	5,500	8,800	82,000	132,000	\$49,000	\$79,000
Male condoms	10,000	16,000	1,199,000	1,925,000	\$195,000	\$313,000
Implant	1,300	2,100	1,300	2,100	\$14,000	\$22,000

* Long-acting reversible contraceptives do not consider the duration of product use.

Note: Young women did not utilize DMPA-SC in the private sector (current private sector method mix).



Estimated total value (young women)

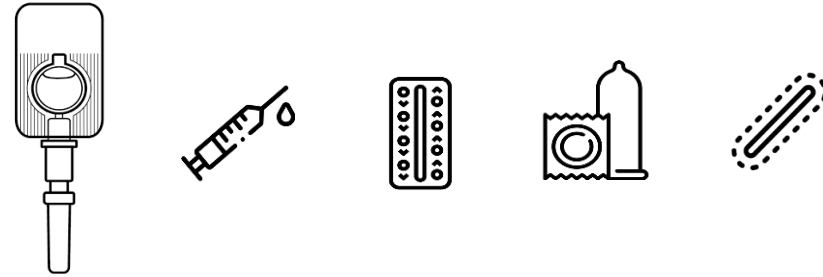
FP product	Estimated private value (annual, 2025)*	Estimated potential value (annual, 2025)*		Estimated total value (annual, 2025)*	
	All WRA	Low	High	Low	High
Injectables (DMPA-IM)	\$86,000	\$18,000	\$28,000	\$104,000	\$115,000
OCP	\$242,000	\$49,000	\$79,000	\$291,000	\$321,000
Male condoms	\$953,000	\$195,000	\$313,000	\$1,148,000	\$1,266,000
Implant	\$67,000	\$14,000	\$22,000	\$81,000	\$89,000
Total	\$1,348,000	\$276,000	\$443,000	\$1,624,000	\$1,791,000

Using the current private sector method mix, the estimated total value of the 4 types of contraceptive products can be increased by 20% - 33%, to a total of **between \$1.6M to \$1.8M**, with *revenue primarily driven by male condoms*.

* Note that the value estimation does not consider the length of use in LARC products; young women did not utilize DMPA-SC in the private sector (current private sector method mix).



Hypothetical change to Nepal's private sector method mix under the assumption of DMPA-SC expansion



The current situation in Nepal:

Health clinics and pharmacies/chemists can distribute both DMPA-IM and DMPA-SC. A recent publication found high acceptability of DMPA-SC in Nepal.¹ Analysis of Nepal's Market Description described a limited supply of DMPA-SC, which restricts the access of DMPA-SC.

Example from Uganda:

DMPA-SC has been introduced, scaled up, and added to the National Essential Medicine List in Uganda in 2016. Self-injection has also been approved. In 2017, Uganda changed the policy to allow licensed and accredited drug shops to stock and administer injectable contraception (including DMPA-SC), further increasing access to injectables.

Method-mix change with DMPA-SC expansion:

Comparison of survey data from PMA between 2016 and 2022:

Method	% change
DMPA-IM	-58%
DMPA-SC	14.8 percentage points
OCP	-3%
Male condoms	-26%
Implants	80%



Estimated potential volume and value applying the alternative private sector method mix (young women)

FP product	Estimated convertible private sector clients (2025)		Estimated convertible private volume - unit (annual, 2025)		Estimated convertible private sector use value* (annual, 2025)	
	Low	High	Low	High	Low	High
Injectables (DMPA-IM)	2,300	3,800	9,400	15,200	\$6,000	\$9,000
Injectables (DMPA-SC)	3,800	6,100	15,000	24,500	\$9,000	\$15,000
OCP	4,600	7,400	69,000	111,000	\$42,000	\$67,000
Male condoms	5,200	8,300	619,000	994,000	\$101,000	\$162,000
Implant	2,400	3,800	2,400	3,800	\$25,000	\$40,000

*Note: Long-acting reversible contraceptives do not consider the duration of product use.



Estimated total value from hypothetical alternative private sector method mix (young women)

FP product	Estimated private value (annual)*	Estimated potential value (annual)*		Estimated total value (annual)*	
	Young women	Low	High	Low	High
Injectables (DMPA-IM)	\$86,000	\$6,000	\$9,000	\$92,000	\$95,000
Injectables (DMPA-SC)		\$9,000	\$15,000	\$9,000	\$15,000
OCP	\$242,000	\$42,000	\$67,000	\$283,000	\$308,000
Male condoms	\$953,000	\$101,000	\$162,000	\$1,054,000	\$1,115,000
Implant	\$67,000	\$25,000	\$40,000	\$92,000	\$107,000
Total	\$1,348,000	\$182,000	\$292,000	\$1,530,000	\$1,640,000

Under the hypothetical alternative private sector method mix, the estimated total value of the 4 types of contraceptive products can be increased by 12% to 22%, to a total of **between \$1.5M to \$1.6M**, with *revenue primarily driven by male condoms*.

* Note that the value estimation does not consider the length of use in LARC products



Policy Scenario from FP Market Analyzer: Nepal's private sector method mix if barriers removed to allow the private sector to play a greater role in LARC provision as implants increase in popularity



The current situation in Nepal:

Previous FHM analysis to compare method mix with earlier DHS Survey in Nepal (2016) showed an increase in the popularity of implants. The provision of LARCs is predominantly by the public sector, especially for implants (89% by the public sector).

Policy scenario from FP Market Analyzer:

Policy Scenario 4 from the Family Planning Market Analyzer illustrates potential changes if barriers were removed to allow the private sector to play a greater role in LARC provision as implants increase in popularity. The change in the private sector method mix was estimated for this Policy Scenario and applied in the estimates.

Private sector method-mix under the policy scenario:

Method	% (of users sourced from the private sector)
DMPA-IM	14.3%
DMPA-SC	0.1%
OCP	11.7%
Male condoms	17.4%
Implants	28.8%



Estimated potential volume and value – applying the Policy Scenario private sector method mix (young women)

FP product	Estimated convertible private sector clients (2025)		Estimated convertible private volume - unit (annual, 2025)		Estimated convertible private sector use value* (annual, 2025)	
	Low	High	Low	High	Low	High
Injectables (DMPA-IM)	3,700	5,900	14,000	23,000	\$9,000	\$14,000
Injectables (DMPA-SC)	<100	<100	<100	<200	<\$100	\$100
OCP	3,000	5,000	45,000	73,000	\$27,000	\$44,000
Male condoms	4,500	7,200	539,000	865,000	\$88,000	\$141,000
Implant	7,400	12,000	7,400	12,000	\$78,000	\$125,000

*Note: Long-acting reversible contraceptives do not consider the duration of product use.



Estimated total value from policy scenario private sector method mix (young women)

FP product	Estimated current private value (annual, 2025)*	Estimated potential value (annual, 2025)*		Estimated total potential value (annual, 2025)*	
	All WRA	Low	High	Low	High
Injectables (DMPA-IM)	\$86,000	\$9,000	\$14,000	\$95,000	\$101,000
Injectables (DMPA-SC)		<\$100	\$100	<\$100	\$100
OCP	\$242,000	\$27,000	\$44,000	\$269,000	\$285,000
Male condoms	\$953,000	\$88,000	\$141,000	\$1,041,000	\$1,094,000
Implant	\$67,000	\$78,000	\$125,000	\$145,000	\$192,000
Total	\$1,348,000	\$202,000	\$324,000	\$1,550,000	\$1,672,000

Under the policy scenario private sector method mix, the estimated total value of the 4 types of contraceptive products can be **between 1.6M to 1.7M**, as a reduction in male condom sales being complimented by an increase in implant sales.

* Note that the value estimation does not consider the length of use in LARC products



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