



# Multiple Routes to the Last Mile

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# Measuring Access and the last mile in Nepal

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# The Problem

- Like many social marketing organizations, CRS has relied on numbers of outlets and outlets opened as their sole measure of access.
- “Number of Outlets opened” is not a reliable measure of availability in given areas due to variations in the concentration of outlets and consumers.
- Once an outlet has been “opened” with a sale, it is added to the cumulative number of existing outlets, but there is usually no mechanism to verify that outlets opened continue to sell the products.

# The Problem

- CRS, like most SMO's, has no parameters for deciding how many outlets is enough or where the last mile ends.
- The result is unfocused distribution efforts and inefficient use of resources for distribution efforts that may not be needed.
- The objective of increased access has not been balanced by efficiency objectives.







**How much of a barrier is the lack of product availability to increasing the use contraceptives?**

# Other factors seem to be more important than lack of access

## Discontinuation

Reasons for discontinuation of FP methods (NDHS 2016)	
Access Reasons	Percent
Lack of access/ Too far	0.70%
Cost too much	0.10%
Other reasons	
Husband away	46.90%
Side effects/health concerns	18.30%
Became pregnant	5.10%
Wanted more effective method	5.90%
Inconvenient to use	2.90%
Husband disapproved	1.20%

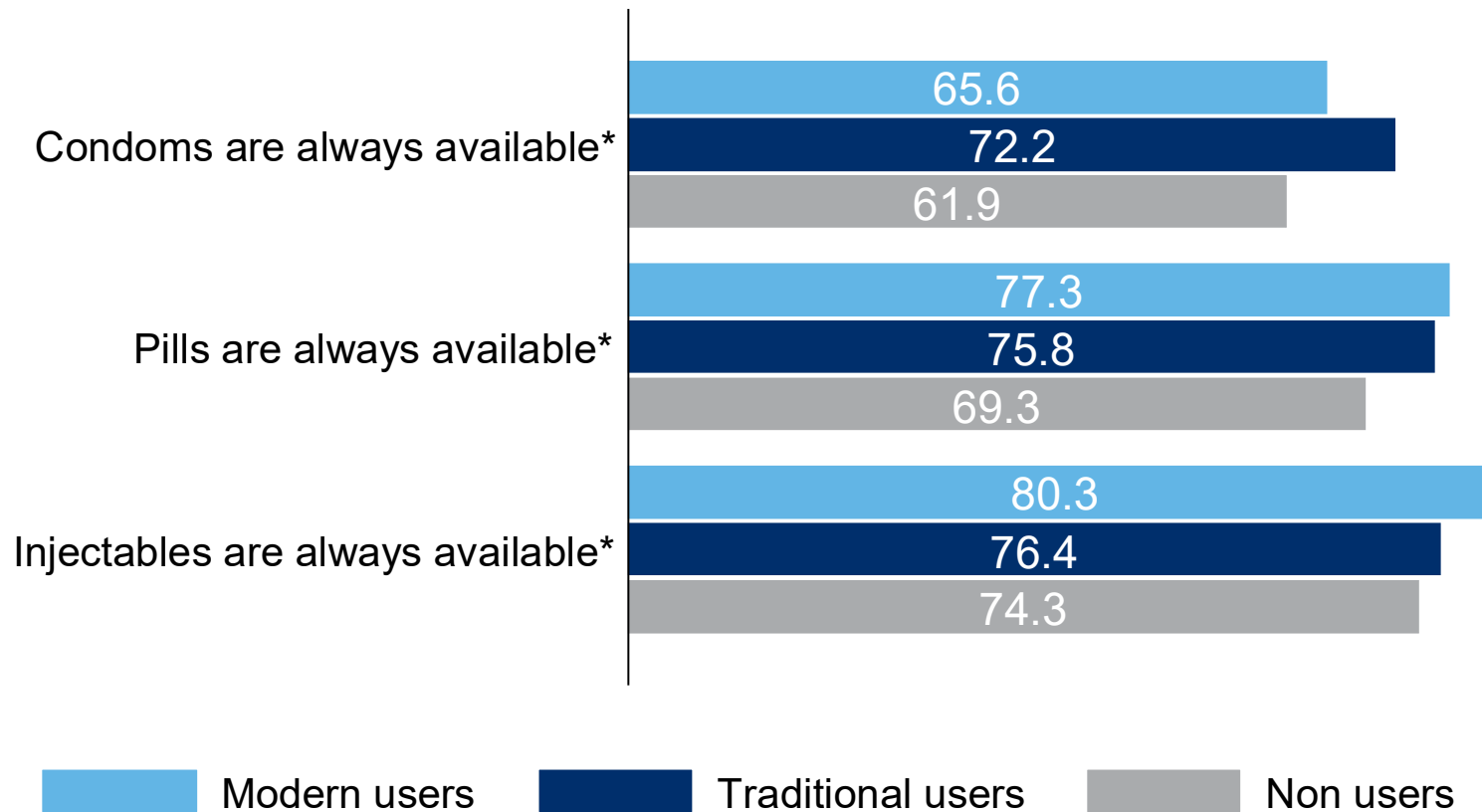
## Non-use

Reasons for non use of FP methods in Nepal:  
(Among women not using a contraceptive NDHS2016)

Access Reasons	Percent
Know no source	0.26%
Lack of access/too far	0.51%
Costs too much	0.15%
Preferred method not available	0.27%
Other Reasons	
No or infrequent sex	17.05%
Menopause/infertility	8.37%
Postpartum/Breastfeeding	13.73%
Fear of side effects	11.96%
Husband away	45.73%
Husband opposed	3.88%
Interferes with my body processes	2.63%

# GGMS KAP: Perceived availability of contraceptives is lower among non-users

FP Availability: Percent who agree with each statement by type of user  
(Among all respondents)

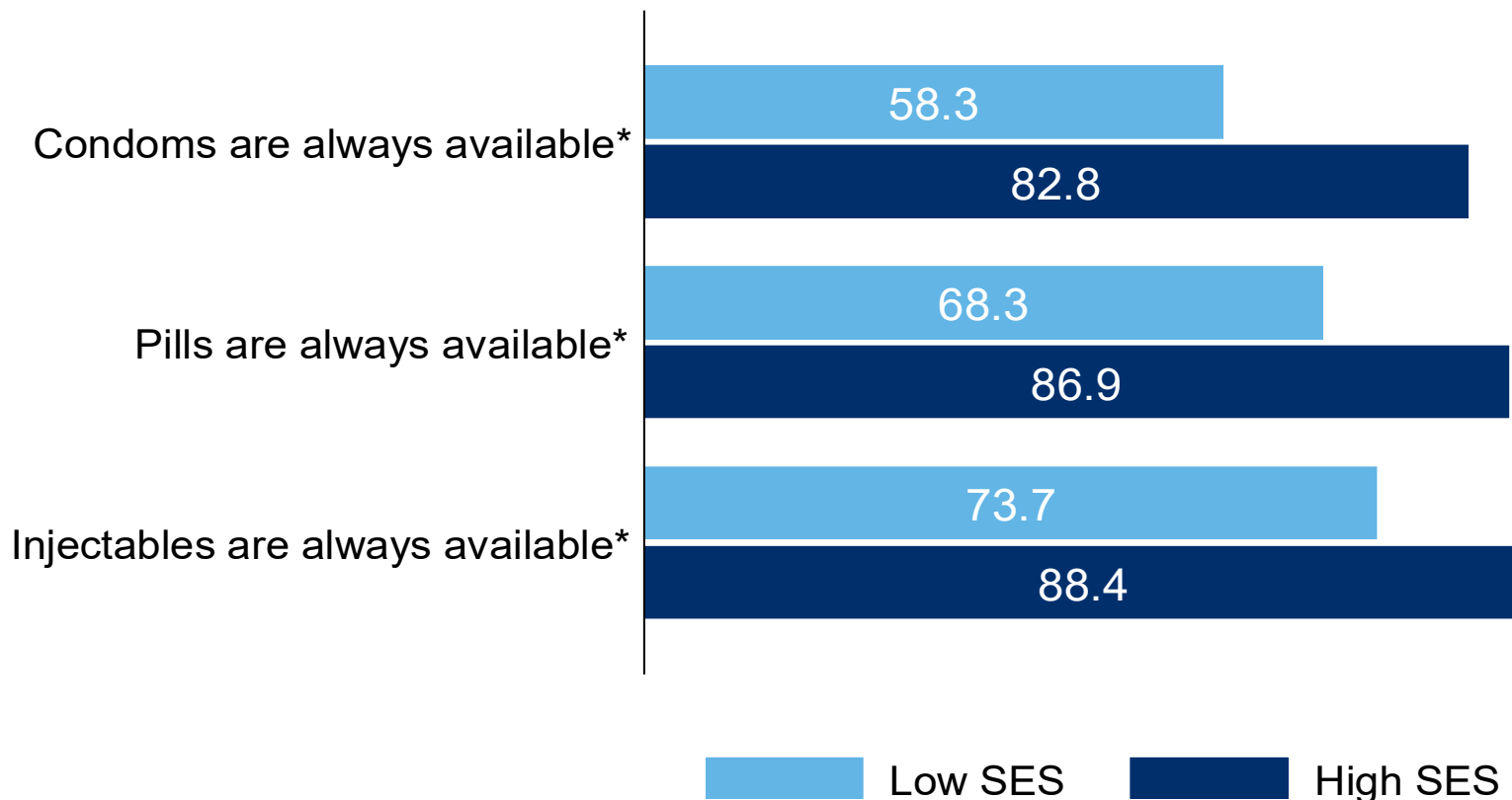


Modern users N=1003; Traditional users N=343; Non-users N=1947

\* Difference is statistically significant ( $p < 0.05$ ). See notes for which differences are significant.

# GGMS KAP: Perceived availability of contraceptives is lower among poorer women

FP Availability: Percent who agree with each statement by SES  
(Among low and high SES respondents)



Low SES N=1768; High SES N=923

\* Difference is statistically significant ( $p < 0.0001$ )



# SHOPS Plus proposed solutions

- Rather than counting outlets cumulatively, analyze product access in outlets in defined target areas at specific points in time.
- Set a standard for number of outlets in defined areas and see which areas meet that standard for coverage.
- Use that result to target distribution efforts to areas that are below the standard.
- This approach can be applied for coverage of hot zones as well as for remote areas (hill and mountain districts).

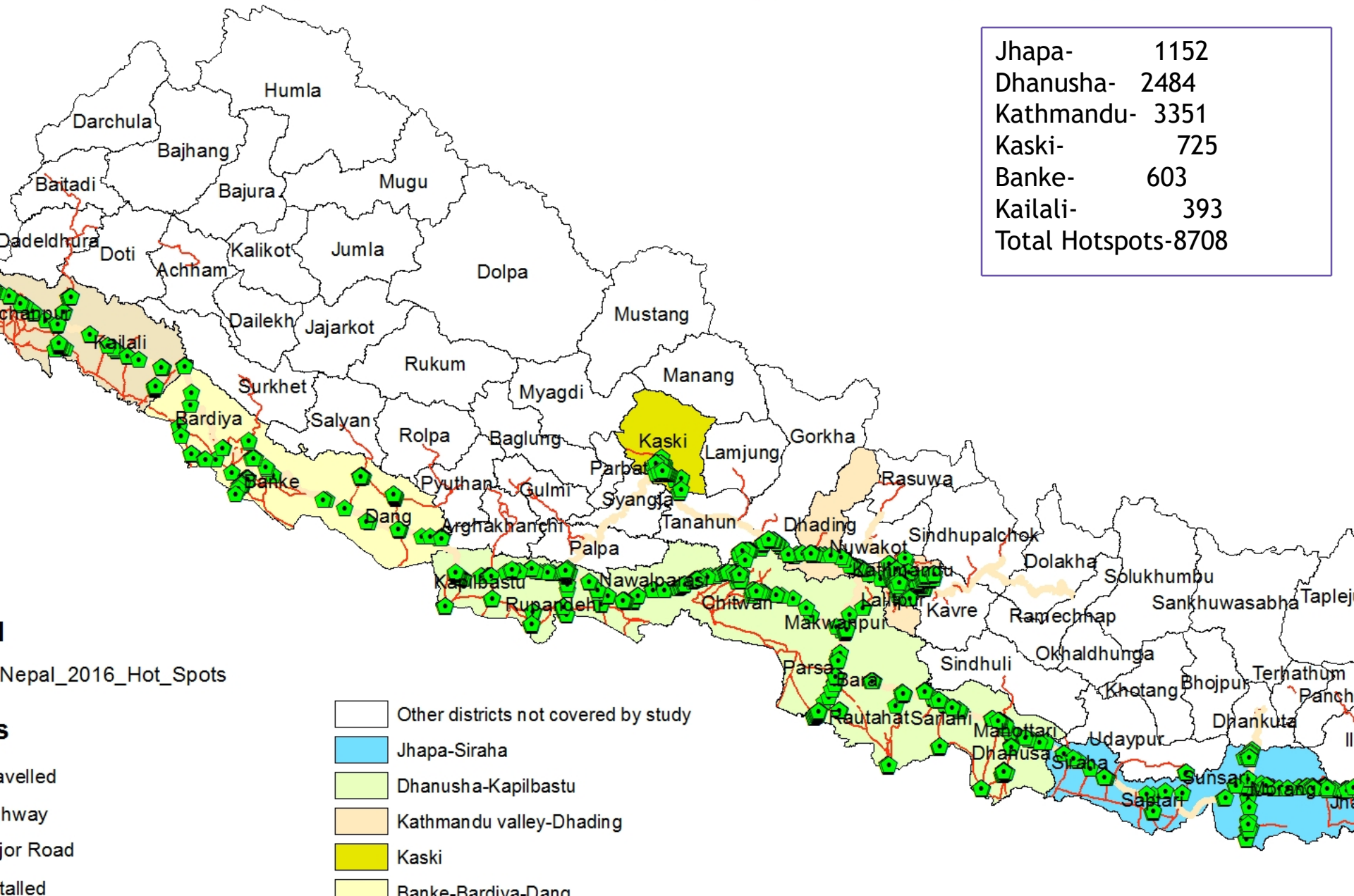
# SHOPS Plus proposed solutions

- Repeat the outlet coverage surveys (DISCOMs) every 12 months to monitor progress in coverage.
- Review and revise the coverage standards periodically with reference to consumer perceptions of availability.
- When coverage standards are met distribution efforts should be reduced to monitoring and basic channel management.
- Use this approach to focus distribution and promotion efforts more selectively in remote/underserved areas.

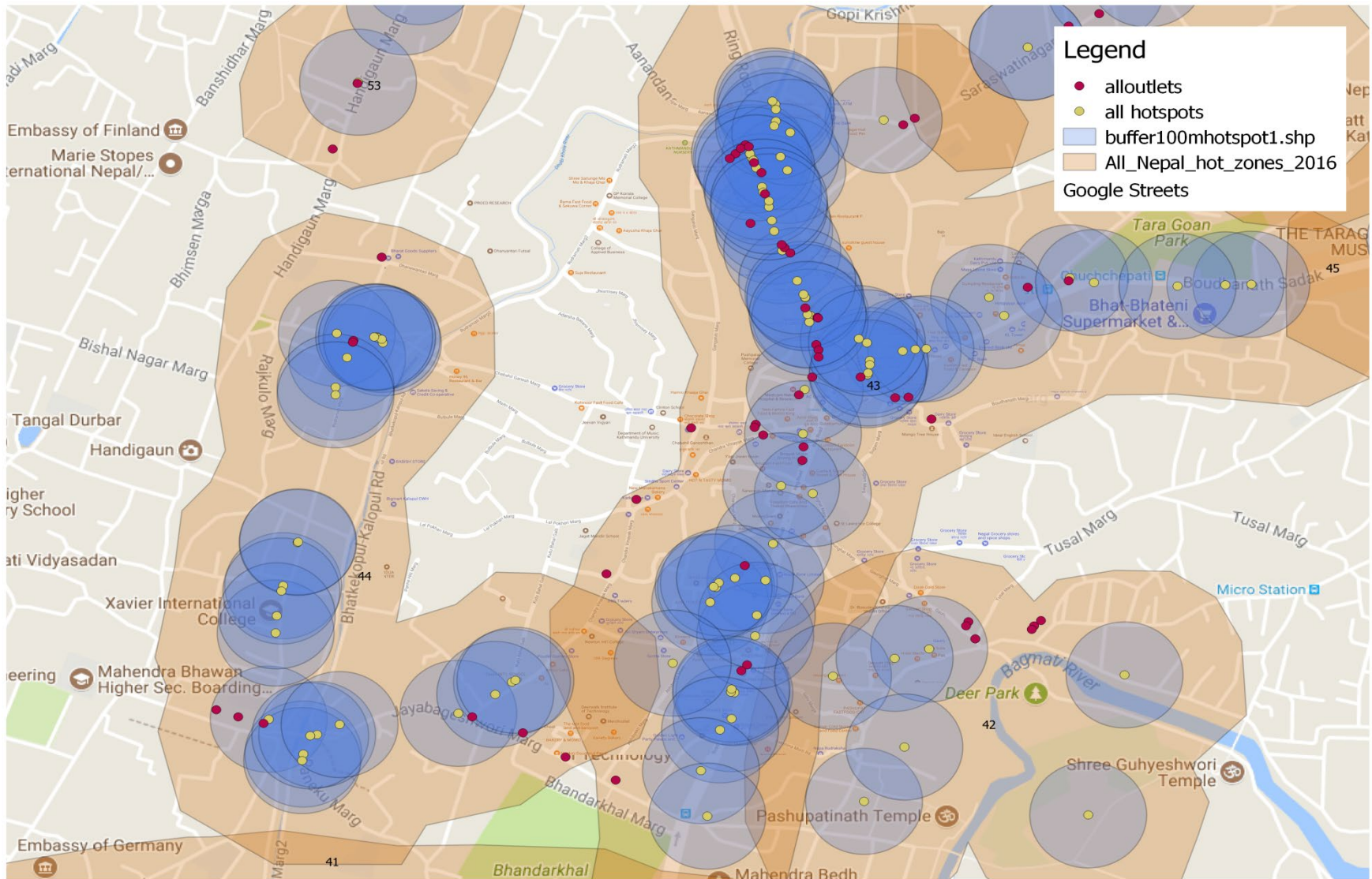
## Progress to date: Hot zone DISCOM

- First retail outlet survey used for hot zones
- Results showed coverage for condoms in hot zones was generally good.
- Availability measured as having at least one outlet within 100 meters of a hot spot.
- CRS used results to reduce outlet targets in covered areas and increase targets in the one area below standards.
- Finding of low visibility of products and POS lead to greater investment in POS.

# Distribution of hotspots in and around East-West Highway and nearby major cities, Nepal, 2016



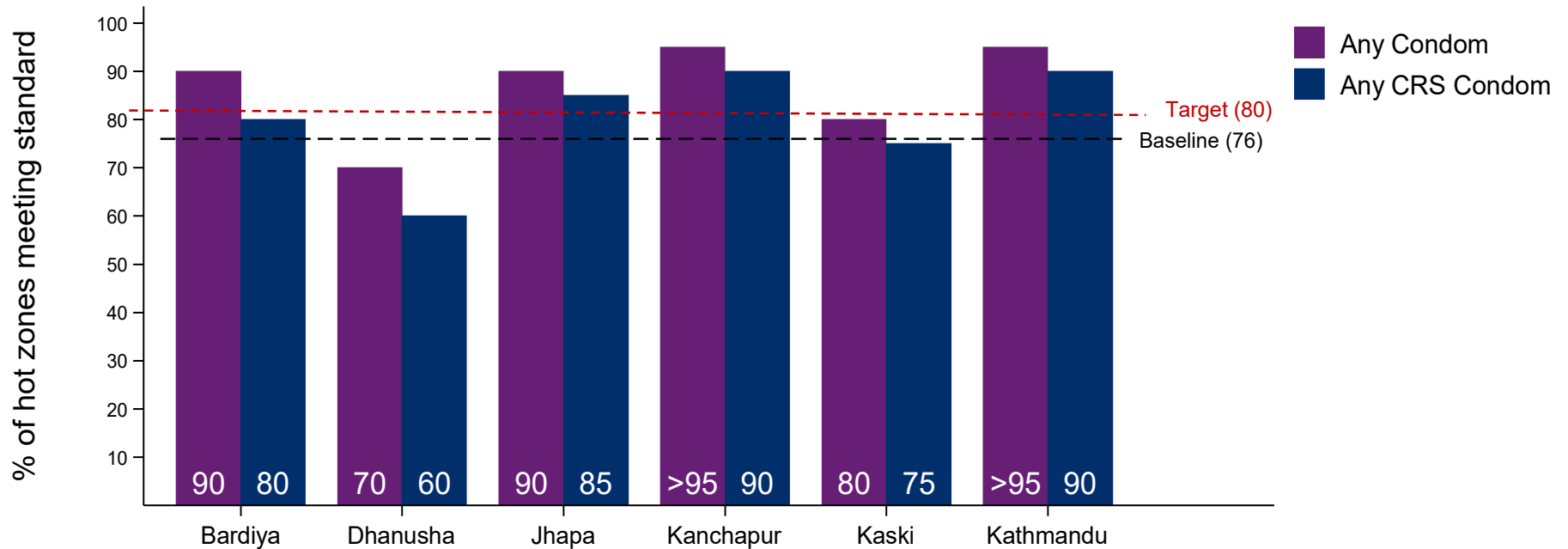
# Hotspots within 100m distance from outlets





# Condom availability in hot zones meets target, except in Dhanusha

Indicator 1. Coverage: % of hot zones where # of outlets selling condoms meets standard

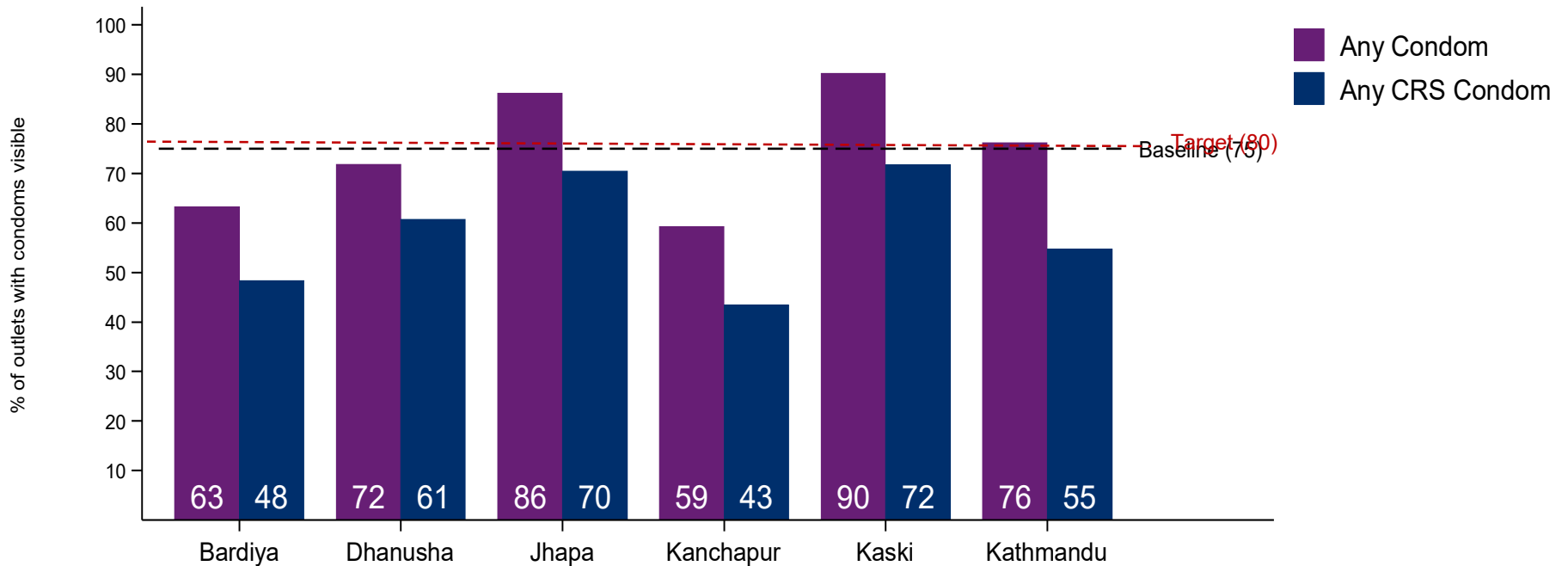


Baseline is % of all hot zones that meet standard

Coverage Standard: 1+ outlet selling any CRS brand/any condom per 5 hotspots

# Condom visibility of CRS brands consistently below target

Indicator 3. Product Visibility: % of outlets with any CRS/any brand condoms visible



Baseline is % of outlets with any condoms visible

# Condom promotional material visibility very low in all areas both for CRS and non-CRS brands

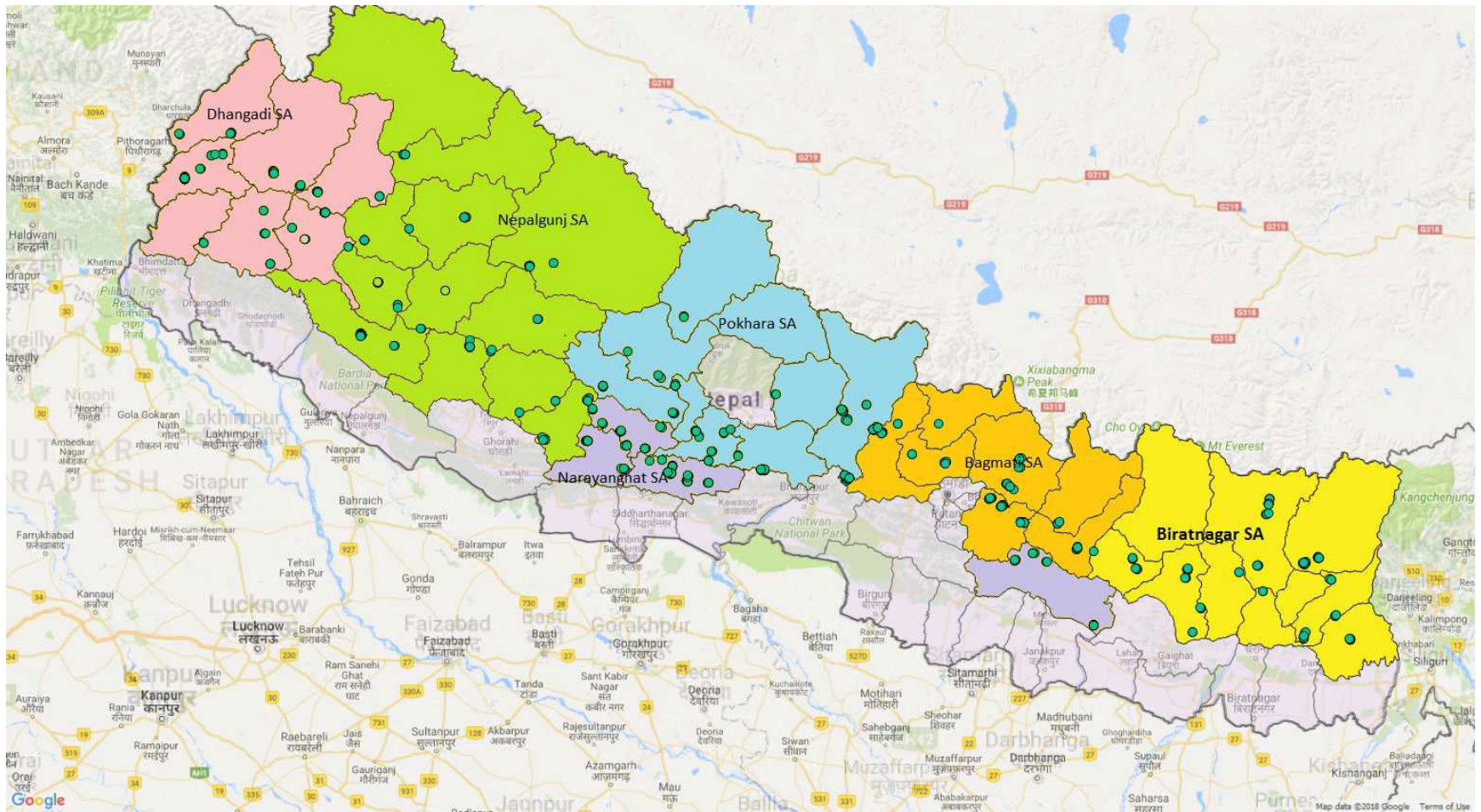
Indicator 4. Promotional Material Visibility: % of outlets with any CRS/any brand condom promotional materials visible



# Progress to date Hill and mountain DISCOM

- Standard used: 1 outlet stocking the CRS product per ward.
- Note: Wards in hill and mountain areas have less than 100 households.
- Travel and logistics for finding and surveying of outlets was much more difficult.

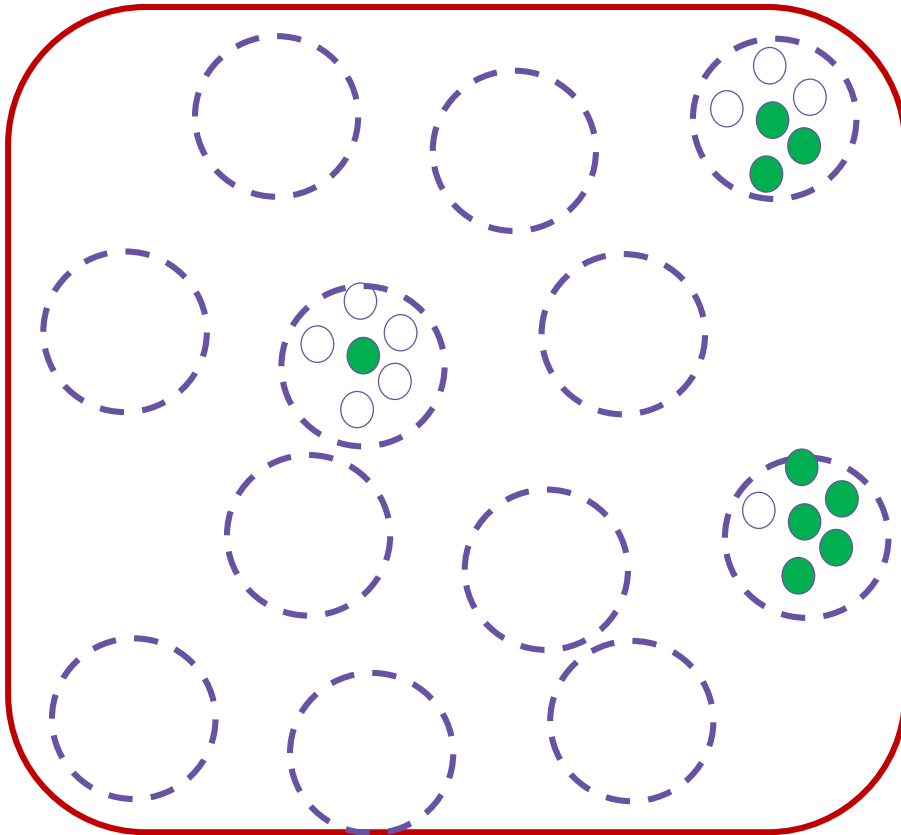
# Map of GGMS Supervision areas and outlets



*Green dots are outlets*



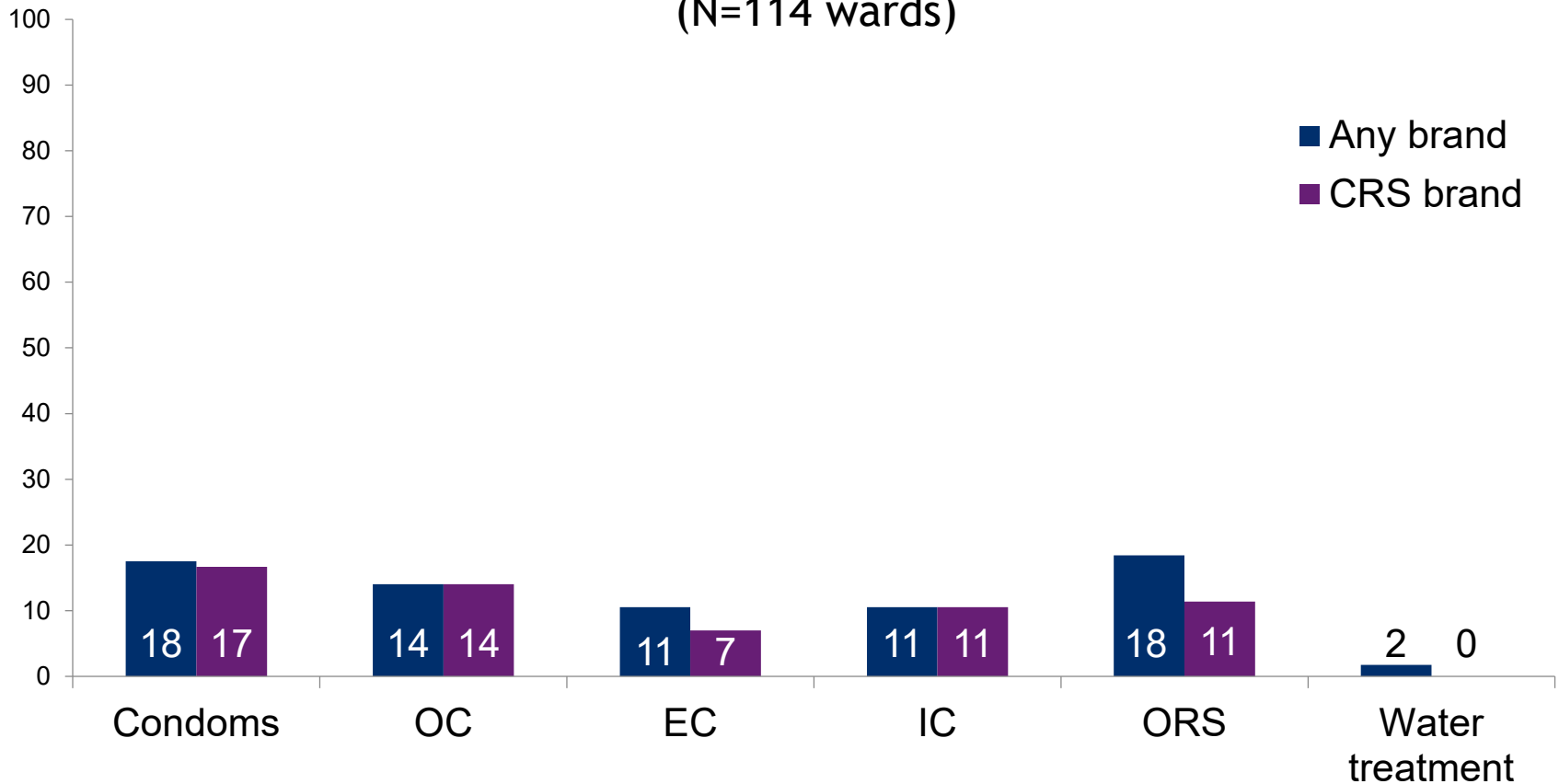
# Study approach



- For this study, all standards are “at least 1 outlet in a ward”
- GGMS areas have few outlets, but reasonable to expect at least 1 outlet per ward to have product

# Current stock low for all products, both CRS and other brands

Indicator 1. Current Stock: % of wards with at least one outlet stocking any brand or CRS brand of product  
(N=114 wards)



# Coverage of hill and mountain areas

- Poor performance is largely due to the lack of pharmacies in the wards that were selected (only 30 pharmacies out of 672 outlets surveyed and 89 wards without pharmacies).
- CRS distribution system is heavily dependent on pharmaceutical distributors and many of CRS products cannot be sold outside pharmacies.
- The opportunity to open new outlets is very limited even with increased selling efforts.

# SHOPS Plus recommendations

- Lower population density and fewer outlets in hill and mountain districts necessitates changing the coverage standard from the one used in the baseline study.
- New standard will be based on the number of outlets in each new ward. All new wards have at least one pharmacy.
- Urban and rural standards should be different for different consumer expectations. Qualitative research planned on this issue.
- CRS distribution strategy must also take account of government distribution through rural clinics and female health volunteers.
- CRS should still try to give more specific guidance to sales staff to balance access with efficiency.

# Conclusions

- Continuous outlet opening and resupply may be the wrong way to think about “the last mile” and serving remote groups.
- Finding outlets in the smallest community at the end of the last (unpaved) road is difficult, inefficient and expensive.
- It is better to think of **covering** areas and how much coverage is needed given the size of the area, the size of the population and their purchasing habits.





*The Long Road to the Last Mile:  
How can we foster the private sector to serve  
rural and underserved populations?*

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The William Davidson Institute at The University of Michigan



## How to foster private sector provision of family planning (FP) products to rural and underserved areas, to prepare countries like Malawi for the future?

- MDAWG seeks to facilitate change that allows for movement ‘up’ the value chain to non-subsidized products and wider commercial activity
- Private sector has historically not served poor and/or rural clients with the method choice and quality available in other segments
- This project proposed to consider how to strengthen commercial distributor channels, a potential market gap which is not currently a focus of other FP funders
- Study Malawi as a representative country, and identify other-country success stories



## Our project had four major goals:

- 1 *Better understand Malawi's wholesaler/distributor channel*
- 2 *Consider what prevents greater development of the FP private sector in a low-income country such as Malawi*
- 3\* *Identify working models from other, formerly-donor dependent countries with successful private sector markets for contraceptives*
- 4 *Engage with in-country Malawi stakeholders to identify and concept-test potential solutions.*

\*This project activity is not included in today's presentation



## Methods

1

### Conduct landscape assessment of private sector distributor sector

- Desk research
- In-country interviews w/ 30 stakeholders
- Analysis of interviews for challenges, successes, and potential solutions

2

### Develop & test solution set for fostering increased involvement of commercial sector

- 15 concepts developed through interviews
- Follow-up interviews via Skype w/ 10 stakeholders
- Likert testing (5-point scale) for feasibility & impact



## 30 stakeholders were interviewed in Lilongwe and Mponela, Malawi between September 18-28, 2018

Stakeholder Type	Sample Organizations	Interviews
Manufacturers	SADM	1
Wholesaler/Distributors	Action Medeor, Artemis, Intermed, PharmaVet, Sunrise Pharma, Worldwide Pharmaceuticals, Pharmachemie, Ritechem	9
Policy & Regulatory; CMST	CMST, MOH Reproductive Health Unit, PMPB	4
Private Sector Providers (Retailers, Clinics; Pharmacists, Nurses, MDs)	Including LifePlus Pharmacy, Mitch Pharmacies, PharmaCare Pharmacies	8
Public / SMO Providers	BLM (Marie Stopes Int'l), CHAM, FPAM, PSI	6
Other Key Actors	Imperial Logistics, Pharmaceutical Society of Malawi	2
<b>Total</b>		<b>30</b>



# Malawi is a highly donor-dependent country with an under-developed private health sector, particularly in FP

Population of 19 million, 83.2% of which are rural and majority are poor

- High percentage of youth, average age is 17 years old
- Low purchasing power due to high poverty rates
- High rate of population growth

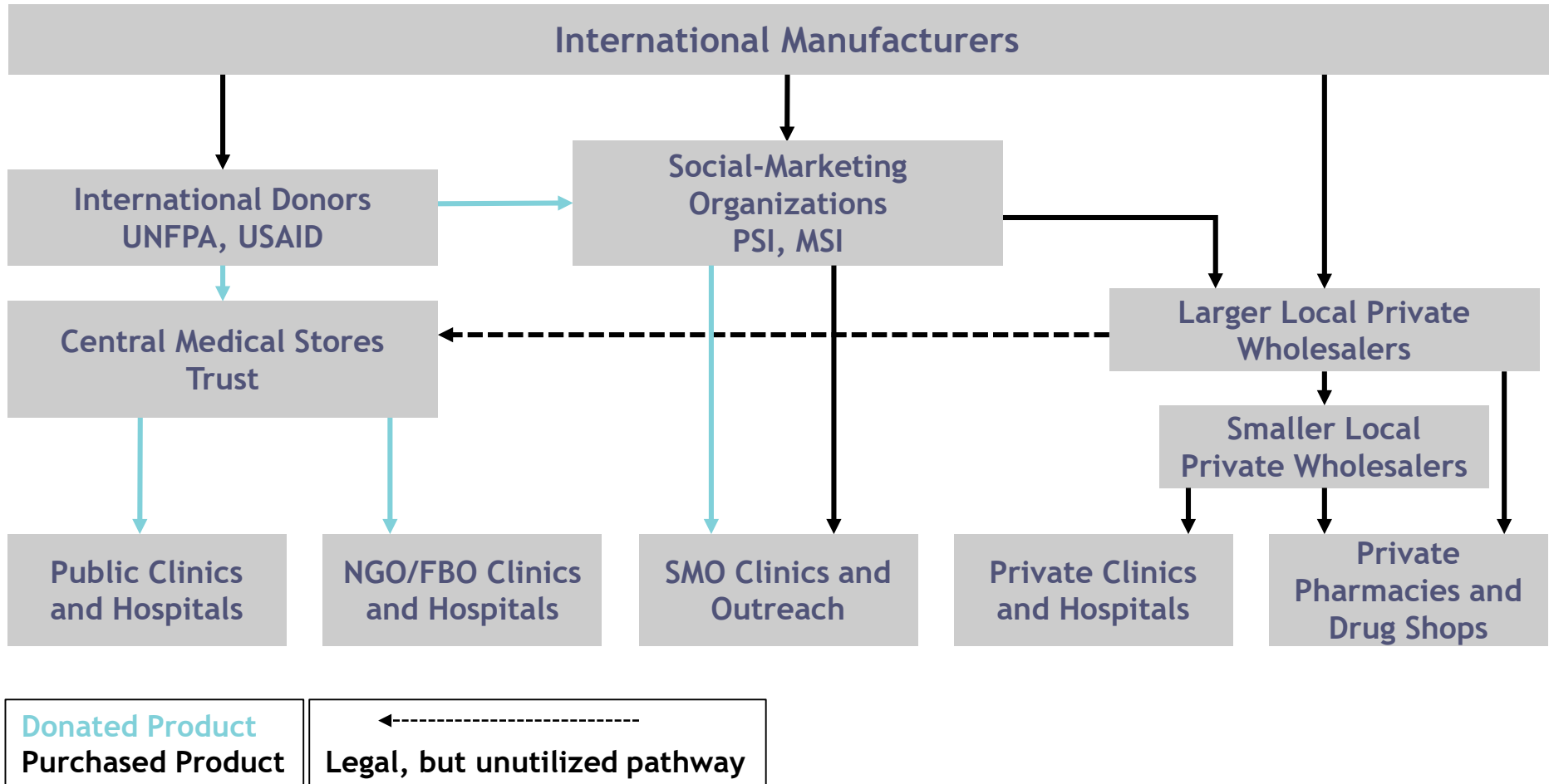
80% of FP provision is through public sector, but increasing use of private sector

- 4% Christian Health Association of Malawi (CHAM)
- 6% Private Facilities
- 8% BLM
- 2% Other

100% of government contraceptive supply sourced through donations

- No in-country manufacturing of contraceptives
- Generally poor infrastructure
- Historically low level of entrepreneurship

# Family Planning Product Pathways in Malawi\*



\*Figure only displays the pathways used for Family Planning products, not other pharmaceuticals or other medicines.



While there are over 60 registered wholesalers in Malawi, a few key players dominate the market



## Despite the small size of the private contraceptive market, a variety of products and brands were found in retail outlets

### Oral Contraceptives:

- Microgynon Fe
- Safeplan (PSI)
- Yasmin
- Diane

### Emergency Contraception:

- Unosure 72
- Today-Pill
- Back Up (MSI)
- Option 2

### Injectable Contraception:

- Safeplan (PSI)



Variety of commercial and socially market condom brands



## Malawi wholesalers currently focus a majority of their business on public sector and FBO tenders

- 6 predominant wholesalers w/ 25 year presence, majority Indian-owned
  - Several serve other SSA and Asian markets
  
- Few wholesalers are consistently reaching rural and remote areas, due to lack of customers not logistics challenges
  
- Their primary source of business for non-contraceptive products is the CMST
  - But, their private sector customer base is rapidly growing, many new pharmacy retailers (urban) and drug stores (peri-urban, rural) are opening
  
- Limited current business in contraceptives, because it is a donor and social marketing dominated sector
  - 5 out of 10 interviewed wholesalers were selling contraceptives
  - **Emergency contraception is a noted exception**, wholesalers expressed a strong interest in this product because it is fast-selling and high volume

## Emergency Contraception (EC) presents an example of private sector expansion to fill a key gap in FP product provision

EC was described by all wholesalers as a **fast-moving** and **high demand** product. Two wholesalers noted they are in process of gaining regulatory approval for this product due to the high market opportunity. Retailers said this product brings in customers everyday.

**Public facilities** are often out of stock of EC or refuse to sell the product to younger women due to stigma. Due to this, the private sector has become the primary source for EC.

But many **women still remain uneducated** about EC, its uses, and its side effects. Because it is often not found in the public sector, there are few informational campaigns. Interviewees said there may be **over-usage** and **improper usage** of the product.



Two emergency contraceptive brands (Unosure 72 & Today Pill)





## A sample of wholesaler viewpoints and challenges:

*“PSI is buying overseas in mass quantities and supplying the same product at a subsidized price, so how do we compete?”*

*“We can get the products, that’s not the issue. It’s that we assume that PSI and BLM will dominate the market.”*

*“The retailers and drug stores are adding 100% margins or more, because there is no price regulation in Malawi”*

*“Malawi is 20 years behind Sri Lanka. There’s lots of misunderstanding about use of contraceptives. Take the misuse of emergency contraception, which is a huge market. We felt that we should not carry EC for this reason.”*

*“Promotion & information is a prime gap, from the manufacturer to the end user. Information relay from doctors to patients is very limited.”*

*“People see pharmacies as first point of health contact, although less so for reproductive health. But there’s a lack of complementary services in the pharmacy.”*



- Subsidized products dominate and discourage wholesaler participation
- Absence of price regulation in Malawi can result in high end-user prices, which further incent use of public sector
- Information needs are high but not currently served by the private sector
- Pharmacists are not licensed to provide the services required for LACs



## Information availability is a major barrier in FP market creation - for consumers, suppliers and policy makers

### Demand Side

- Information distributed to rural women is limited to what is available from donor funds; so does not generate awareness or demand for private sector products
- A history of misinformation about FP and contraceptives
- Unique information needs for Malawi's very young population, as well as for other potential segments

### Supply Side

- No marketing efforts by the private sector due to the market being govt tender/donor dominated
- Multiple outlet types that could serve as information sources
  - Pharmacies, clinics, drug shops
- Wholesalers, retailers and other actors do not have data regarding the market potential in rural areas of the country
  - Willingness to pay, potential volumes

## Commercial health insurance, a key payer in private markets is not creating funded demand for FP

- Limited purchasing in Malawi, but...
- Irony in that those who can pay, are 'incentivized' to use the public sector

**GENERAL EXCLUSIONS**

- Treatment of cosmetic nature e.g. face lifts, breast reductions or implants, keloid removal, Lipodostripy etc.
- Medical examinations for employment, insurance, education, immigration or travel purposes and vacations.
- Treatment for which cost is recoverable in law from any body, paty or an insurance policy.
- Treatment arising from any willful or deliberate self inflicted injury or any attempted threat, negligence, suicide, injuries from domestic violence, abuse of alcohol or drugs.
- Participations in a hazardous sport or any sport for monitory gain.
- Services which are available free or at a nominal charge e.g. family planing services, under-five clinic services, vaccines, e.g. Yellow Fever







## Taking a closer look at the last mile in northern Malawi - we used geo-mapping to look for potential gaps in contraceptive availability

- Geo-mapping exercise\* for Malawi's Northern Region
  - Still in process, sharing preliminary results today
  - Selected due to being most rural, better availability for facility coordinate data
- What's included
  - Static points of access (no outreach & community based efforts, i.e. HSAs)
  - Missing facilities are primarily drug shops, but also some pharmacies, government, and NGO facilities
- 'Contraceptive availability' for purposes of this exercise =
  - The method is legally permitted for sale and/or commonly found at specified facility type
  - Due to issues of stockouts in Malawi (particularly in government facilities) actual contraceptive availability is likely much lower than what is displayed here

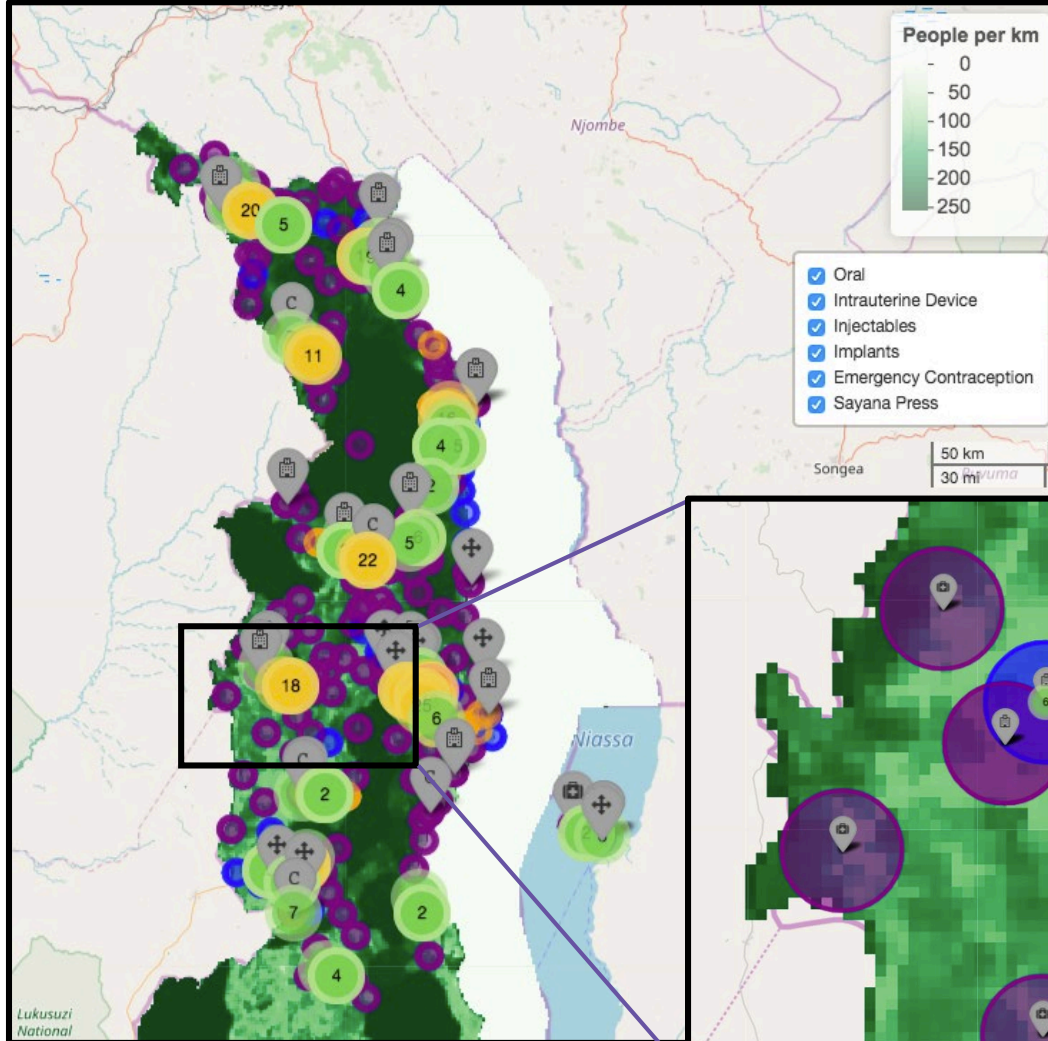
### Total Facilities Mapped by this Activity

	Total Facilities	Facilities w/ Coordinates	% of Facilities Mapped
Private	117	63	54%**
Public	166	160	96%
NGO/FBO	43	38	88%
<b>TOTAL</b>	<b>326</b>	<b>261</b>	<b>80%</b>

\*\* Other 46% not mapped due to lack of location & geographic coordinate data; hypothesized to be predominantly medicine/drug shops

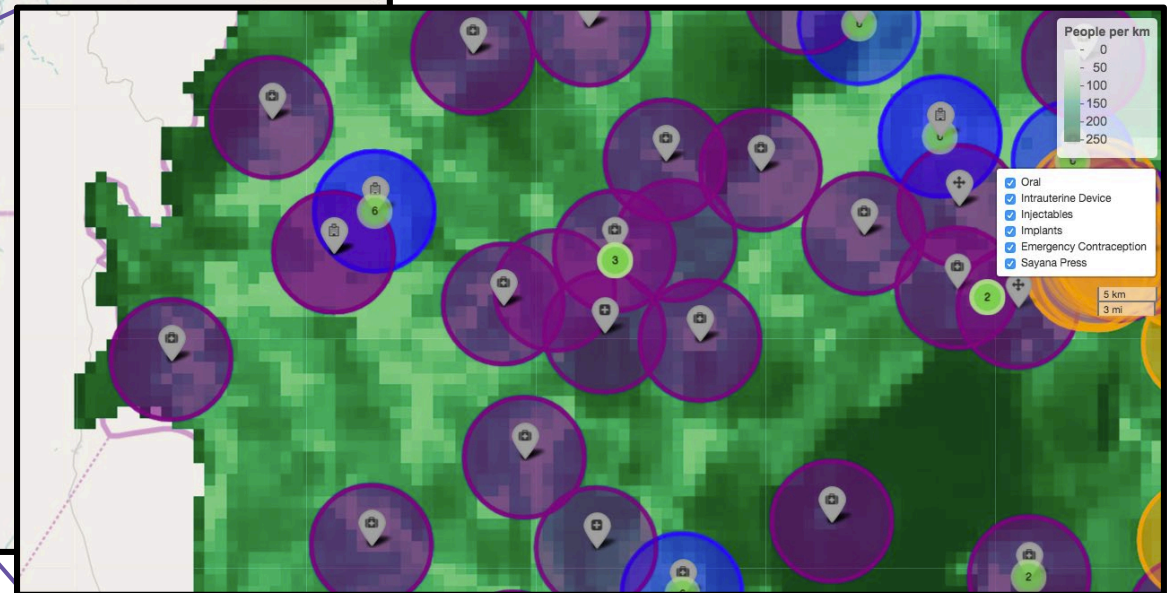
\* Completed with technical consulting from Auriel Fournier, Porzana Solutions

# Malawi's most Northern Region



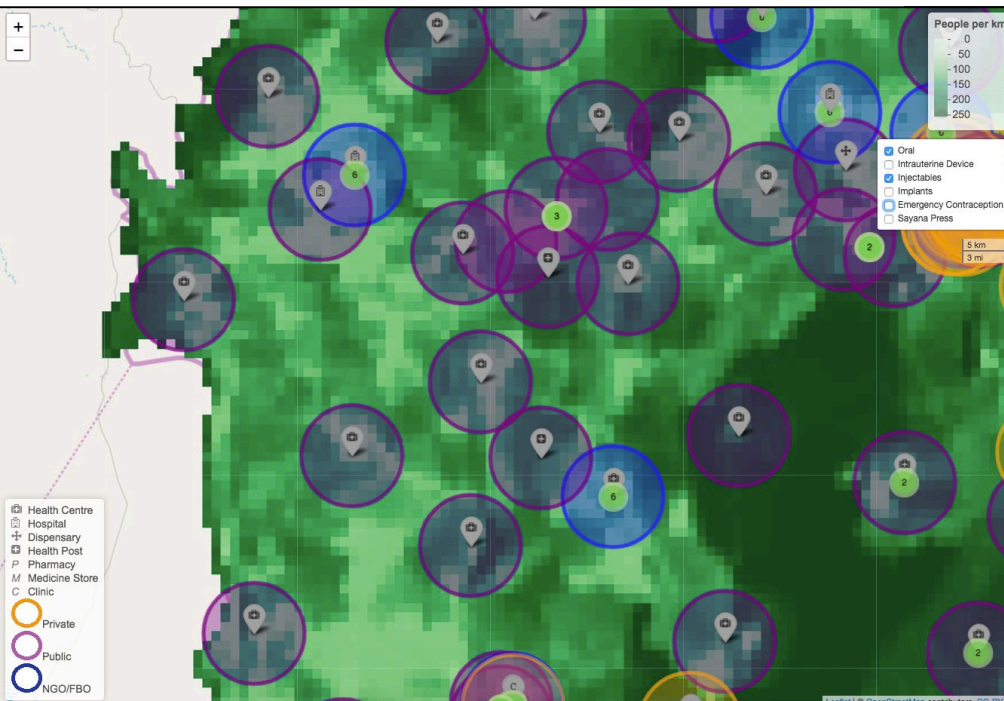
## The mapping shows:

- Private, public, FBO & NGO health facilities
- Each ring displays 5km catchment area
- Facilities overlaid on population density
- Darkest areas designate National Parks & protected land w/ likely no population

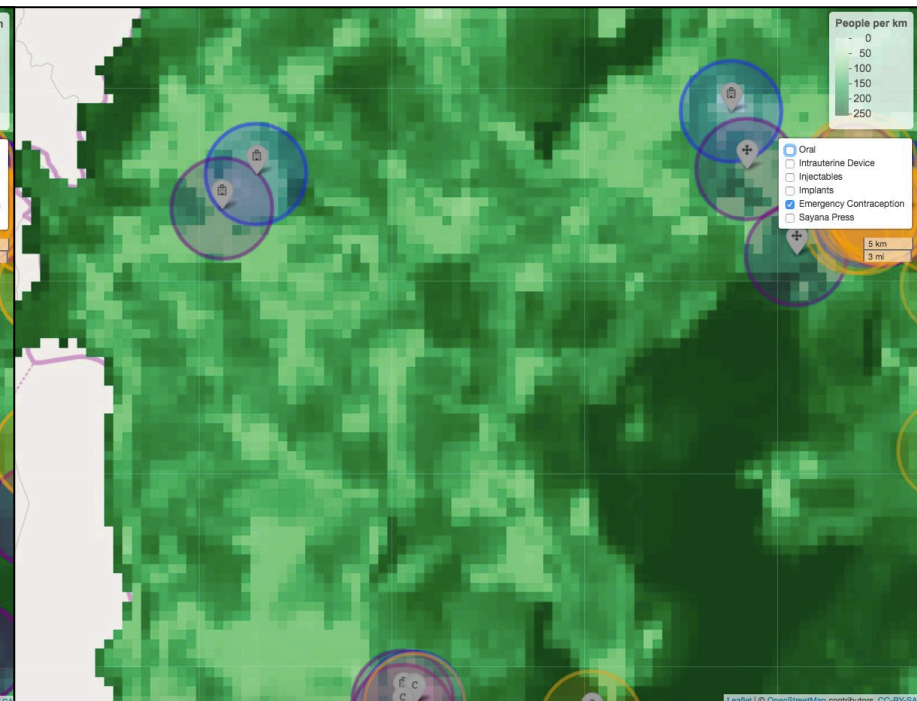


# These two views demonstrate gaps in potential availability of pills & injectables versus EC

## Pills & Injectables



## Emergency Contraception





## Preliminary Takeaways from our Mapping Exercise:

- This mapping shows that a large percentage of facilities offering contraceptive methods are heavily concentrated in a few major areas
  - The area surrounding Mzuzu contains > than 30% of all facilities in the Northern Region
- There are many people who can access some but not all contraceptive methods within 5km of where they live
  - A smaller group who lack access to any contraceptive method within 5km
- Emergency contraception is extremely difficult to access in the Northern Region due to the scarcity of private facilities
- IUDs are extremely hard to access in the Northern Region due to their primary provision in public hospitals, NGO/FBO clinics, & private clinics
- Need to understand the interplay between static facilities & community outreach:
  - How much of the gap in access is covered by outreach?
  - Could a mapping like this help prioritize areas for outreach to target?



# Challenges to the Private Sector FP Market and Solutions Developed from Stakeholder Input and WDI Analysis





## Market Challenges / Opportunities and Potential Interventions

#	Challenge / Opportunity	Potential Intervention
1	Injectables available for purchase in pharmacies, but customers must take to clinic for administration	Pharmacists authorized and trained to administer injections
2	Limited access to providers in rural areas creates need for self-managed contraception, successful rural Mangochi Sayana Press (SP) pilot	Sayana Press approved self-injectable for sale in pharmacies, Prioritize SP for rural women
3	Delayed payments to wholesalers from CMST tenders	Bridge financing
4	Unregulated retailer margins may result in high prices & disincentivize consumers from using the private sector	Conduct nationally representative retail pricing audit
5	The Malawi PMPB has insufficient capacity to appropriately monitor the entire private sector	PPP to extend the PMPB's regulatory capacity
6	Perception of insufficient market volume and consumer willingness to pay	Nationally representative willingness to pay study



## Market Opportunities / Gaps and Potential Interventions

#	Gaps	Potential Intervention
7	Pharmacy is a rapidly growing profession in Malawi with high growth rates of retail pharmacies in urban and peri-urban areas, but not in rural & remote areas	Pilot business model of mobile pharmacy via a wholesaler partnership
8	EC market is growing in the private sector, and may serve as an analogue regarding women's preferences	EC information campaign
9	Govt is receptive to private sector, includes in planning documents, but little formal inclusion in efforts	Include private sector in existing FP working groups
10	Low levels of health care literacy, insufficient access to information and high levels of misinformation regarding FP use, effectiveness	Private sector based contraceptive information campaign
11	Lack of qualified healthcare human resources (HR) in most rural and remote areas of Malawi	Incentivization program for HR in rural areas
12	FP services and contraceptives are not covered by Malawi's existing health insurance systems	Include FP products & services in health insurance





# Stakeholder Solutions Testing Results



## Malawi stakeholders rated the feasibility & impact of each intervention from 1-5 and selected their top three

Intervention	Avg. Feasibility Score	Avg. Impact Score	# of Votes
Pharmacists authorized to provide injections	3.6	3.0	3
Self-injectable Sayana Press approved for sale in pharmacies	4.0	3.8	3
Bridge financing to cover late payments for tenders	2.7	2.7	1
Nationally representative retail pricing audit	3.8	3.2	1
Incentivizing local production of contraceptives w/ Buy Malawi	2.6	3.1	0
PPP to increase PMPB's regulatory capacity	3.6	3.6	4
Nationally representative willingness-to-pay evaluation	4.3	4.1	3
Pilot business model for a mobile pharmacy	3.6	3.8	4
Utilize Sayana Press for rural women favoring self-managed FP	3.9	4.2	1
Emergency contraception information campaign	4.6	4.1	1
Addition of private sector to cross-sector contraceptives WG	4.0	3.8	0
Create a program that parallels the ART service provision work	3.4	4.0	1
Private sector based contraceptive information campaign	4.7	4.0	2
Incentivization programs for human resources in rural areas	3.1	3.7	3
Incorporate FP products/services into insurance	3.2	3.3	0



## Top interventions vary by the rating and ranking provided by stakeholders:

### Top 5 Feasibility Scores

Private sector based contraceptive information campaign - 4.7
Emergency contraception information campaign - 4.6
Nationally representative willingness-to-pay audit - 4.3
Self-injectable Sayana Press for sale in pharmacies - 4.0
Addition of private sector to cross-sector contraceptive stakeholder working group - 4.0

### Top 5 Impact Scores

Utilize Sayana Press for rural women favoring self-managed FP - 4.2
Emergency contraception information campaign - 4.1
Nationally representative willingness-to-pay audit - 4.1
Private sector based contraceptive information campaign - 4.0
Create program that parallels ART service provision work - 4.0

### Top 6 Chosen Interventions

Pilot business model for a mobile pharmacy - 4 votes
PPP to increase the PMPB's regulatory capacity - 4 votes
Pharmacists authorized to provide injections - 3 votes
Self-injectable Sayana Press for sale in pharmacies - 3 votes
Nationally representative willingness-to-pay audit - 3 votes
Incentivization programs for HR in rural areas - 3 votes



## Key Takeaways and Observations:

### Malawi Findings

- Wholesalers (+ others) describe multiple market conditions constraining FP private sector potential in general, as well as some more unique to last mile
- Developing the private sector requires several interventions which can be staged over time
- Potential interventions span policy realm + investments in information collection and dissemination
- Geo-Mapping is a valuable tool that can inform public & private strategy development

### The Process

- In-country colleagues and buy-in were essential to project execution
- Stakeholders were engaged and interested
- Yielded a robust set of initial ideas, plus a few later additions
- 2-stage process was beneficial
- Likert scoring exercise likely to be easier in-person



## Our remaining steps for project completion

- Incorporate examples of private sector development from other countries to document success stories and best practices
- Further conceptualize and build-out 2-3 potential interventions and propose for advancement
- Continue engaging with colleagues in global FP space for feedback and success story examples
- Final report development for RHSC, reporting back to Malawi stakeholders and results dissemination



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