

Planning & Monitoring Social Marketing Interventions:

GIS at Population Services International



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PSI at a Glance

*The mission of PSI is to measurably **improve the health of poor and vulnerable** people in the developing world through **social marketing** of family planning and health products and services, and health communications.*



- **Leading global health organization with programs on malaria, child survival, HIV and reproductive health**
- **+8000 staff in ~65 countries**
- **Funding from US & other governments, UN, private foundations, corporations; revenue of \$450 million (2009)**
- **In 2008, 14 million “years of healthy life” (DALYs) gained**



Social • marketing

(so shel • mar kit ing) **n.** 1. The application of marketing concepts and techniques to influence behavior among a target audience in order to benefit themselves and society.

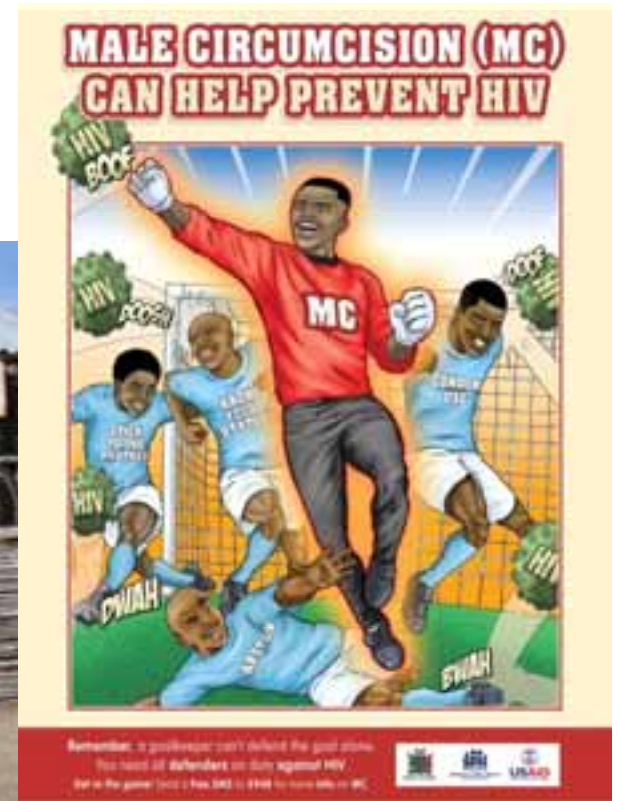
Healthy Lives. Measurable Results.




PSI Products & Services

Main **products**: condoms (m/f) & hormonal contraceptives, mosquito nets, water purification, ORS, malaria treatment, ...

Services: family planning, male circumcision, safe abortion, HIV counseling & testing, ...



Metrics, Monitoring & Mapping

- **Strong focus on research & monitoring: evidence for marketing planning, M&E of projects, reporting to donors and partners.**
- **Identifying target populations, tracking behavioral indicators, qualitative market research, monitoring product and service availability and accessibility.**
- **Mapping & GIS gradually introduced from 2004 onwards: geographic coverage, access to products & services among target groups:**
The logo for MAP (Mapping and Assessment Platform) features a circular icon with a starburst pattern inside, positioned above the word "MAP" in a bold, sans-serif font.
- **Since ~2009, stronger focus on GIS for planning and monitoring.**

Implementing GIS

- Training of local research and MIS staff, initially on WHO HealthMapper
- Use of ArcGIS at central level & increasingly in country offices

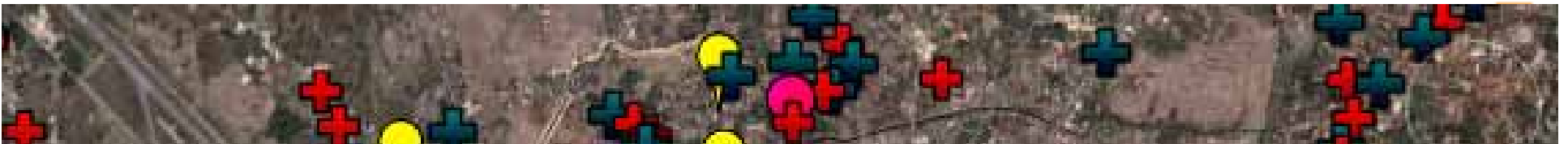


- Piloting Google Earth & Maps project in 2010: improving access to GI among program managers
- Recent integration of ESRI non profit program



GIS Applications

- **Estimate access to products and service among specific target groups – e.g. access to condoms among sex workers.**
- **Identify areas of poor program coverage – e.g. proportion of census areas with at least one condom outlet.**
- **Determine catchment areas of service delivery points – e.g. reach of VCT sites.**
- **Report on sales & other interventions – e.g. number of HIV prevention communication events by area.**
- **Logistics & fleet management, resource allocation.**



Example 1 – Planning

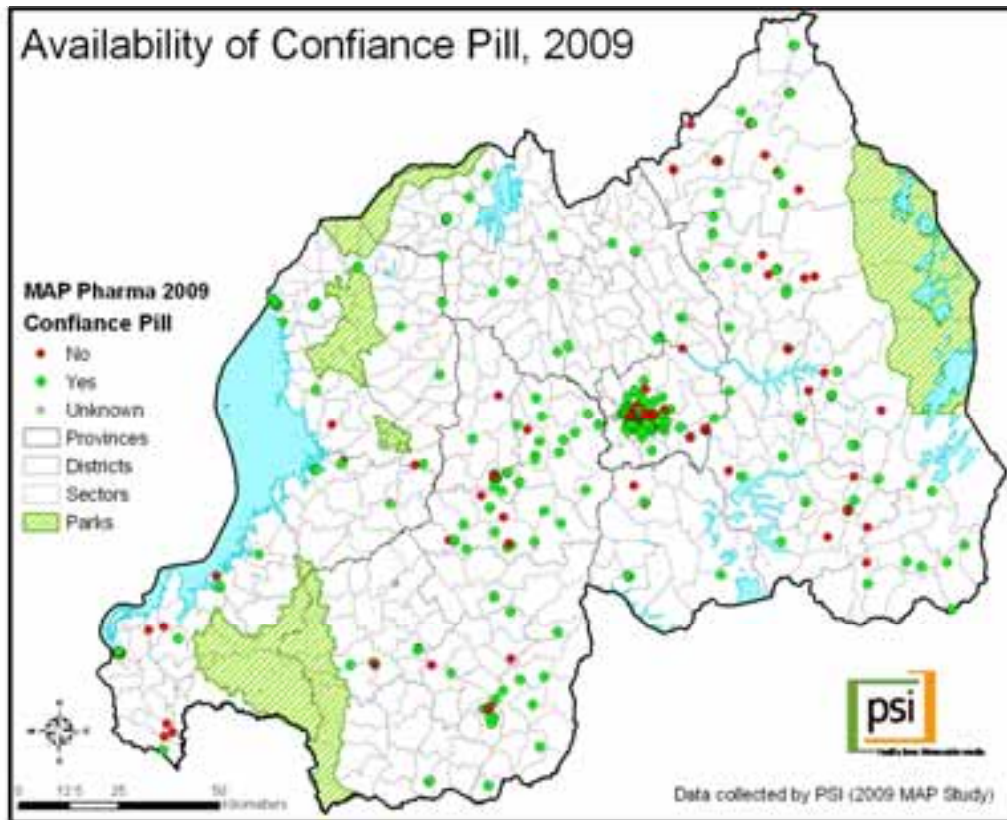
Identifying priority sites for improving the availability of contraceptives, Rwanda

- **Census of all pharmacies and private clinics**
- **Audit on availability of contraceptives and on quality standards**
- **GPS to record coordinates of each site**
- **Extrapolated population data based on latest census, by sector**
- ⇒ **Identify high population density areas without access to Confiance Pill outlets**
 - ⇒ **Prioritize sectors for improving availability**



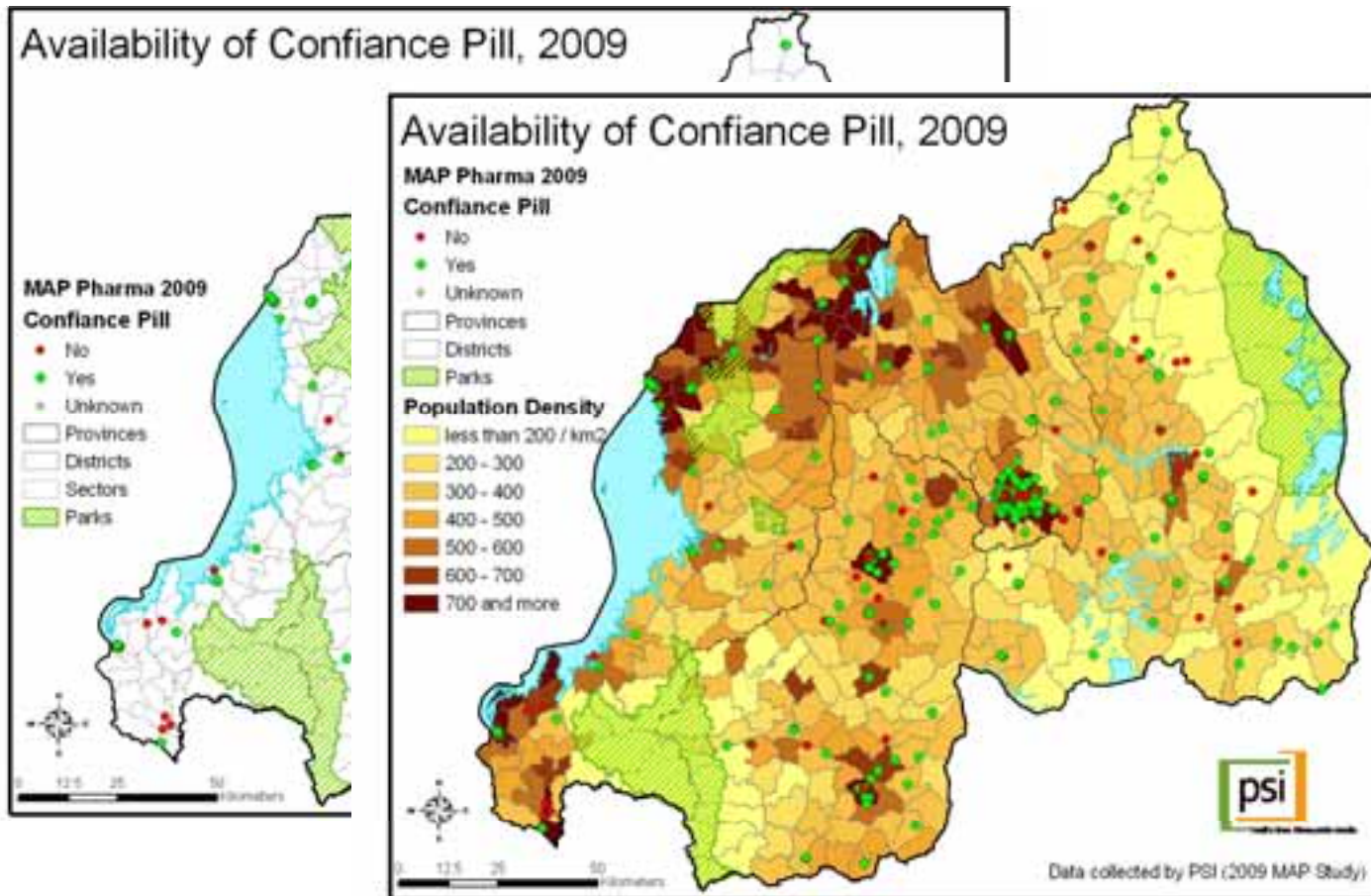
Example 1 – Planning

Identifying priority sites for improving the availability of contraceptives, Rwanda



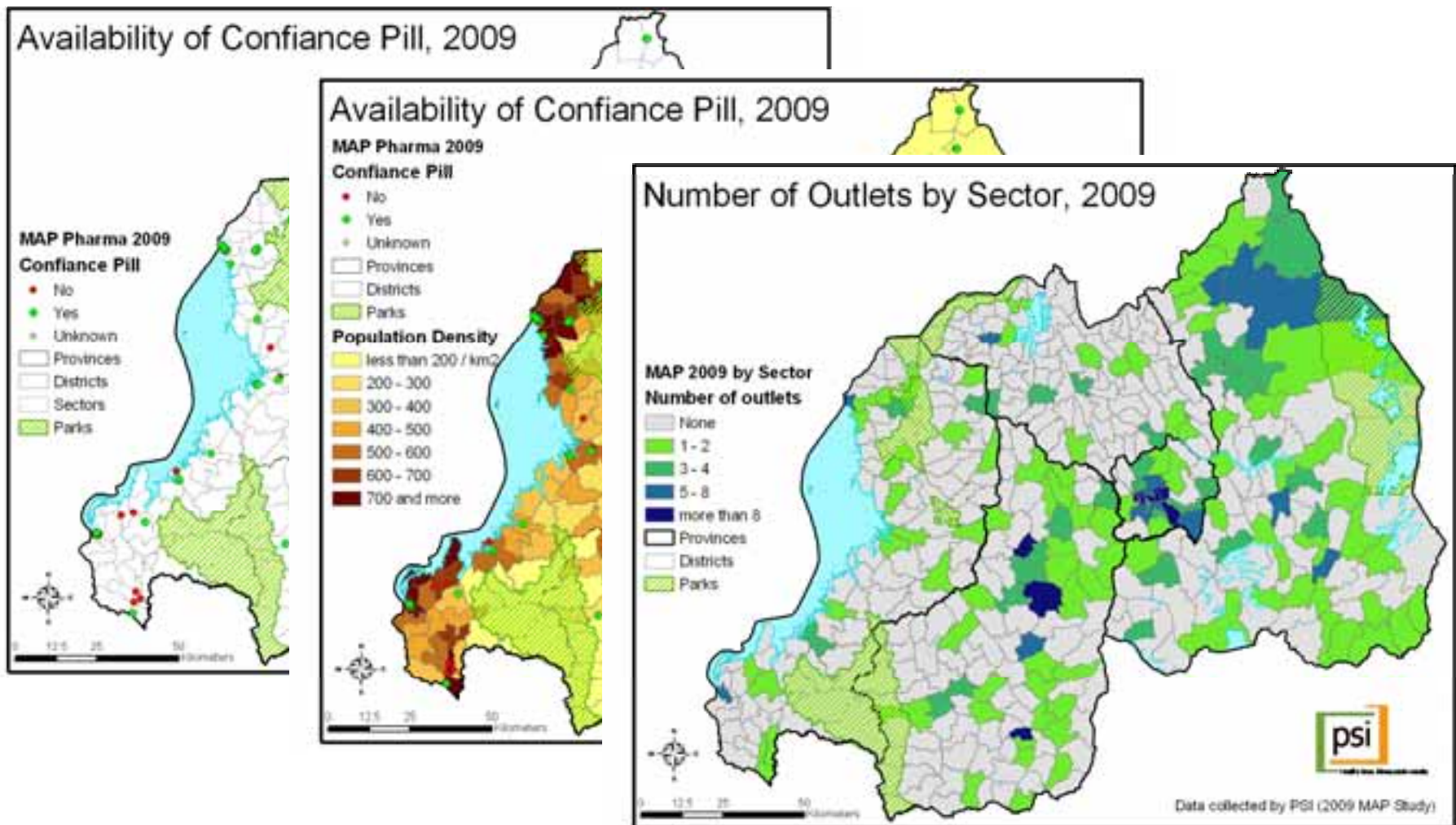
Example 1 – Planning

Identifying priority sites for improving the availability of contraceptives, Rwanda



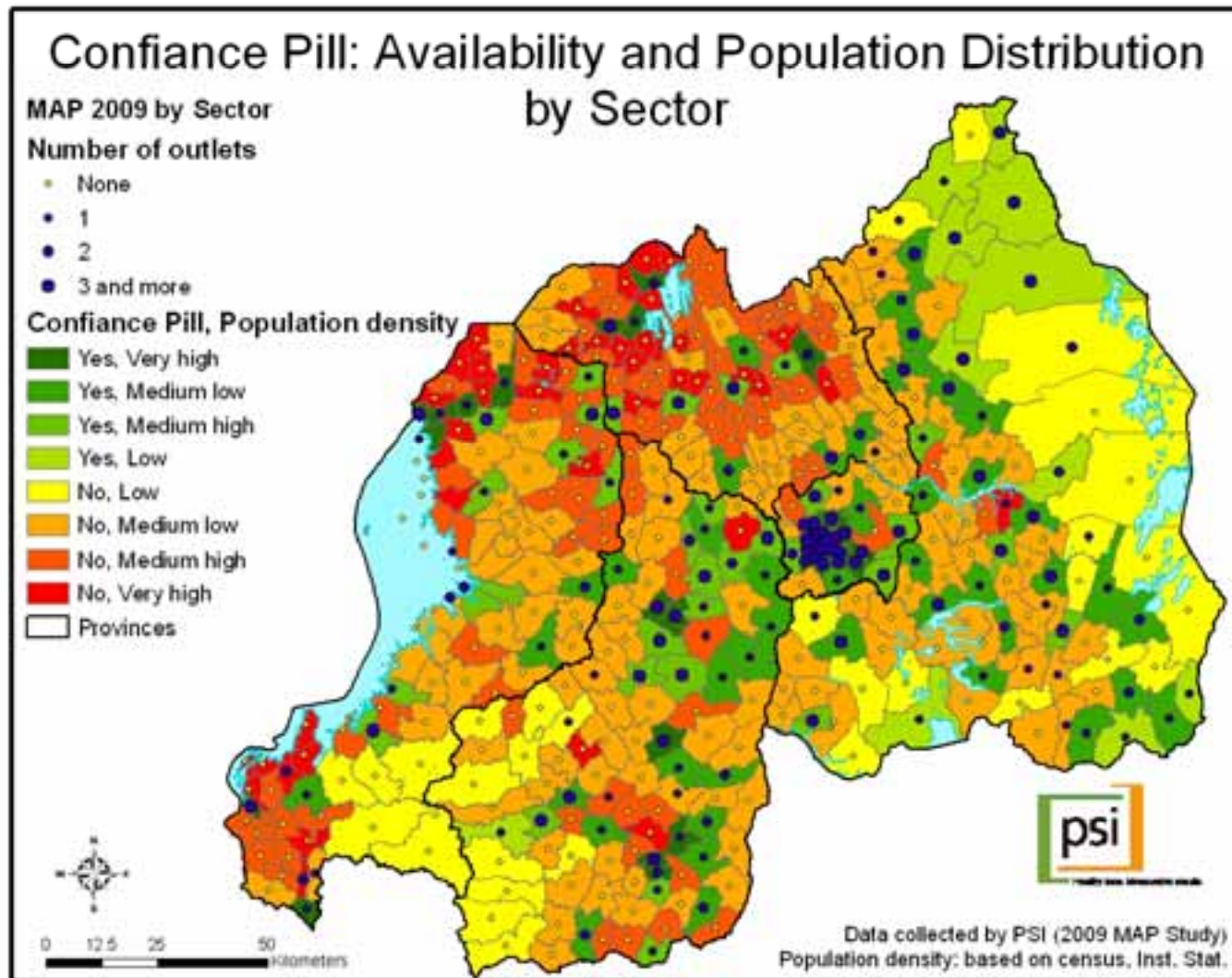
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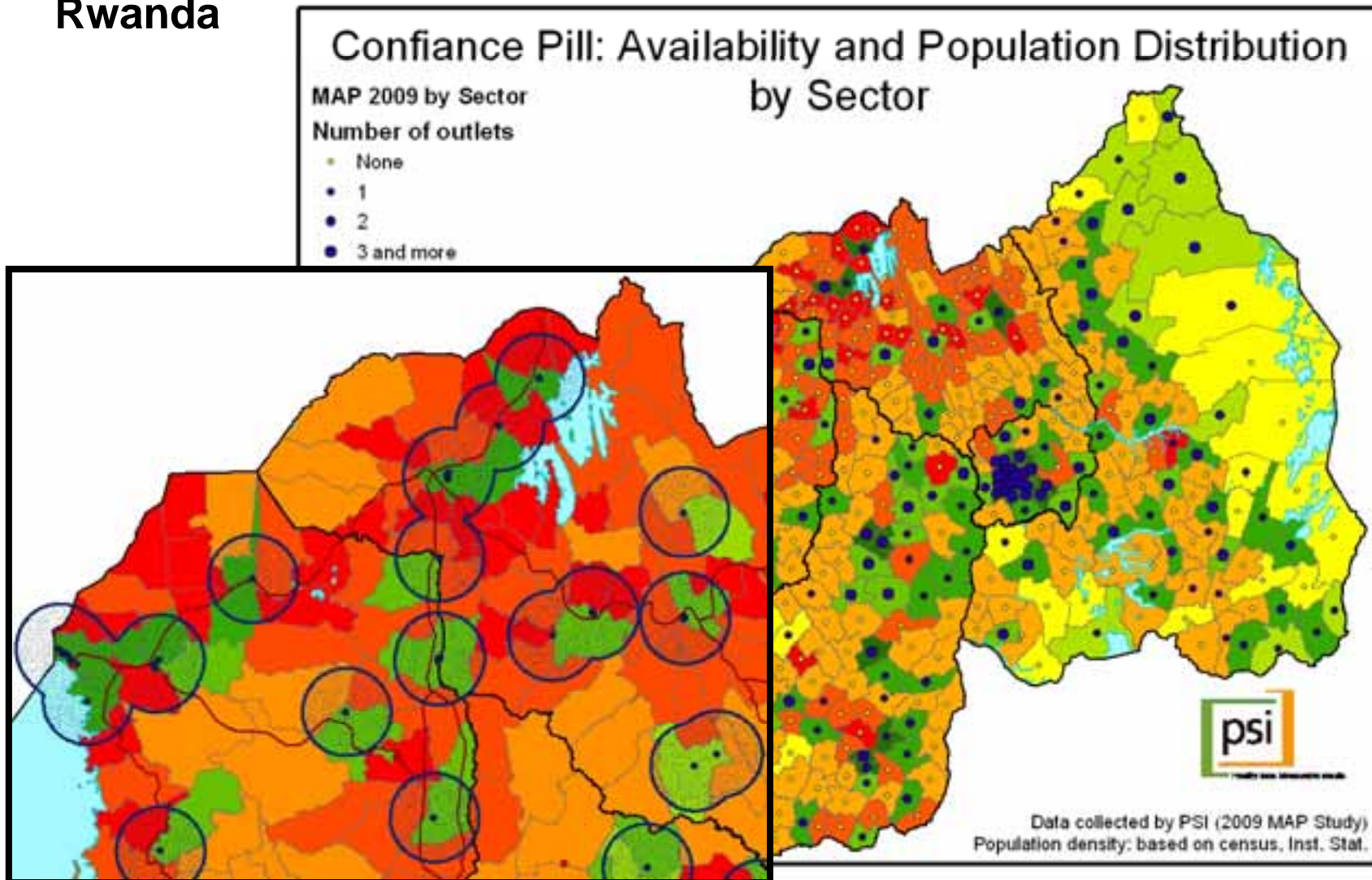
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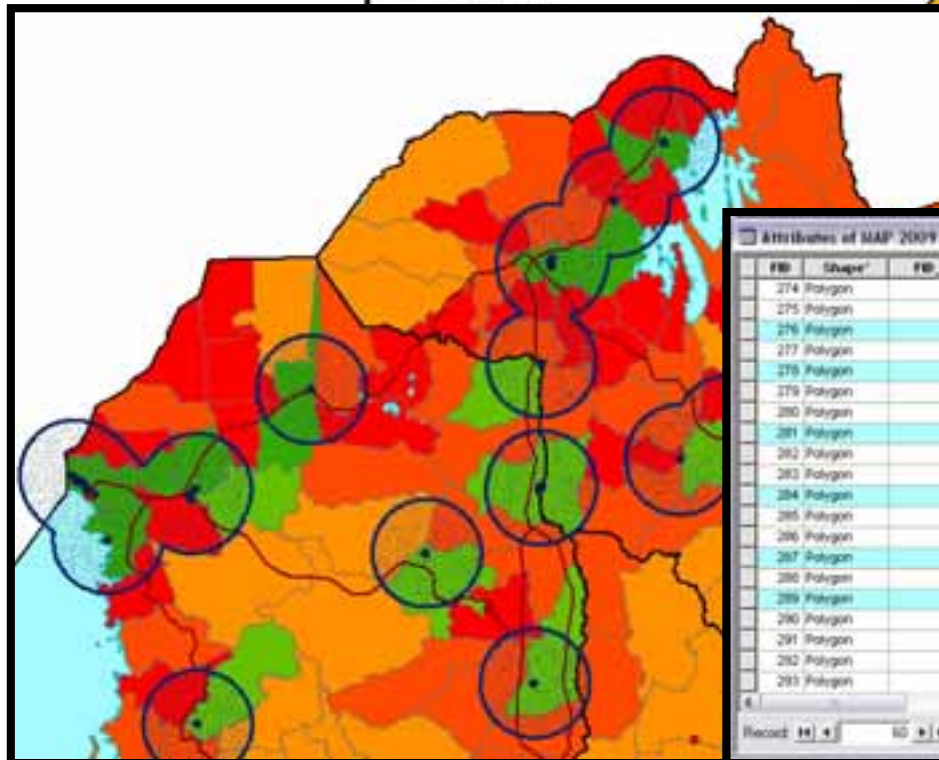
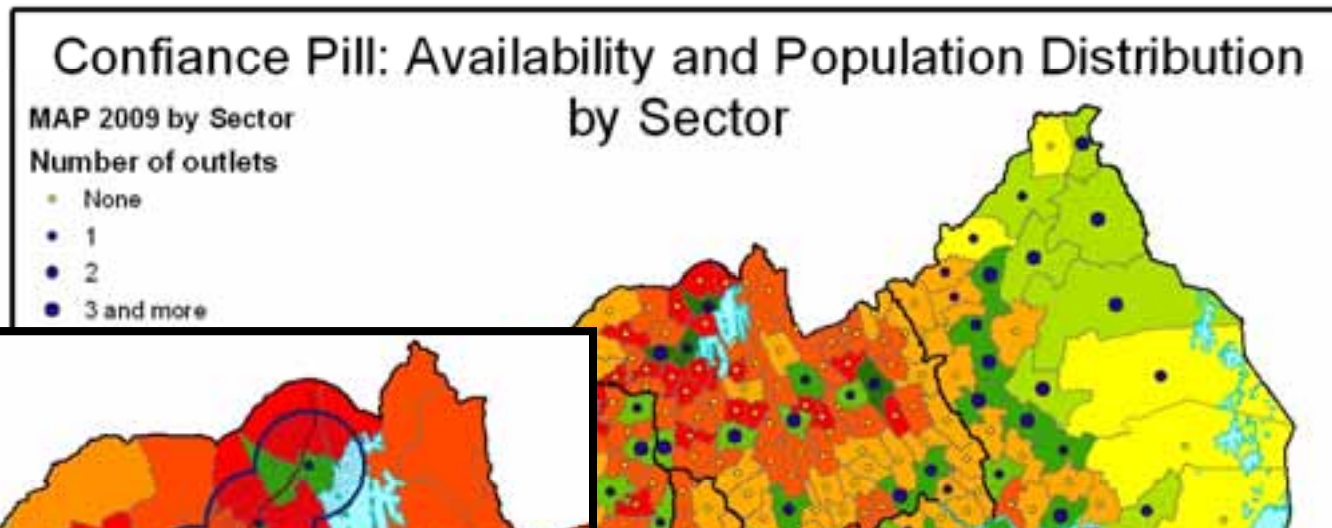
Example 1 – Planning

Identifying priority sites for improving the availability of contraceptives, Rwanda



Example 1 – Planning

Identifying priority sites for improving the availability of contraceptives, Rwanda



Attributes of MAP 2009 by Sector

FID	Shape*	FID_1	NAM	BIO_CTRY	LVLID	DETR	COD_SECTRS	REGION	Pop. densiti
274	Polygon	274	MUKIZA	RW	RWF040030030000000000	MUSANZE	040308	NORD	1676.21
275	Polygon	275	CYANE	RW	RWF040030040000000000	MUSANZE	040302	NORD	436.3
276	Polygon	276	INYAZA	RW	RWF040030050000000000	MUSANZE	040314	NORD	711.12
277	Polygon	277	KIKORYI	RW	RWF040030060000000000	MUSANZE	040306	NORD	590.95
278	Polygon	278	BUSOGO	RW	RWF040030070000000000	MUSANZE	040301	NORD	736.38
279	Polygon	279	MAHO	RW	RWF040030080000000000	MUSANZE	040309	NORD	881.38
280	Polygon	280	SHIRORO	RW	RWF040030090000000000	MUSANZE	040315	NORD	237.7
281	Polygon	281	MUSANZE	RW	RWF040030100000000000	MUSANZE	040310	NORD	730.98
282	Polygon	282	IKOTI	RW	RWF040030110000000000	MUSANZE	040311	NORD	500.78
283	Polygon	283	NYANGE	RW	RWF040030120000000000	MUSANZE	040312	NORD	419.38
284	Polygon	284	RENDA	RW	RWF040030130000000000	MUSANZE	040313	NORD	942.34
285	Polygon	285	KIBI	RW	RWF040030140000000000	MUSANZE	040307	NORD	271.3
286	Polygon	286	GACACA	RW	RWF040030150000000000	MUSANZE	040303	NORD	829.14
287	Polygon	287	CYUNDO	RW	RWF040040010000000000	RULINDO	040106	NORD	626.65
288	Polygon	288	BUSHORI	RW	RWF040040020000000000	RULINDO	040103	NORD	813.37
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290	Polygon	290	TUNDA	RW	RWF040040040000000000	RULINDO	040117	NORD	526.58
291	Polygon	291	RUGGA	RW	RWF040040050000000000	RULINDO	040115	NORD	301.68
292	Polygon	292	KIBIRA	RW	RWF040040060000000000	RULINDO	040107	NORD	520.24
293	Polygon	293	SHYIRONKA	RW	RWF040040070000000000	RULINDO	040116	NORD	298.6

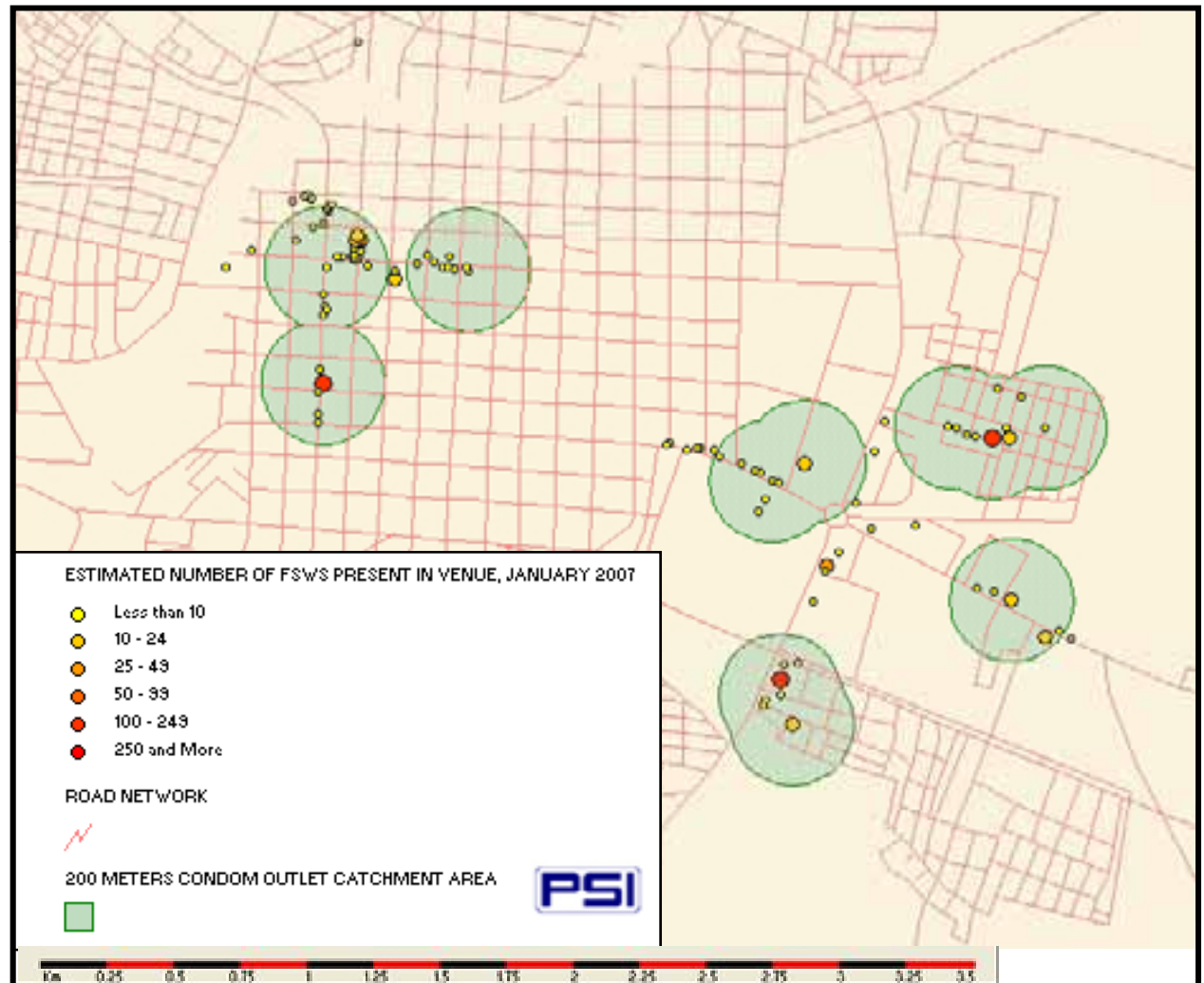
Record: 11 | 10 | Show: All Selected | Records: (21 out of 415 Selected) | Options

Example 2 – Monitoring

Monitoring access to condoms among high risk groups for HIV/Aids, Central America



- Random sample of HIV “hotzones”
- Census of all venues & outlets
- Annual mapping of condom availability

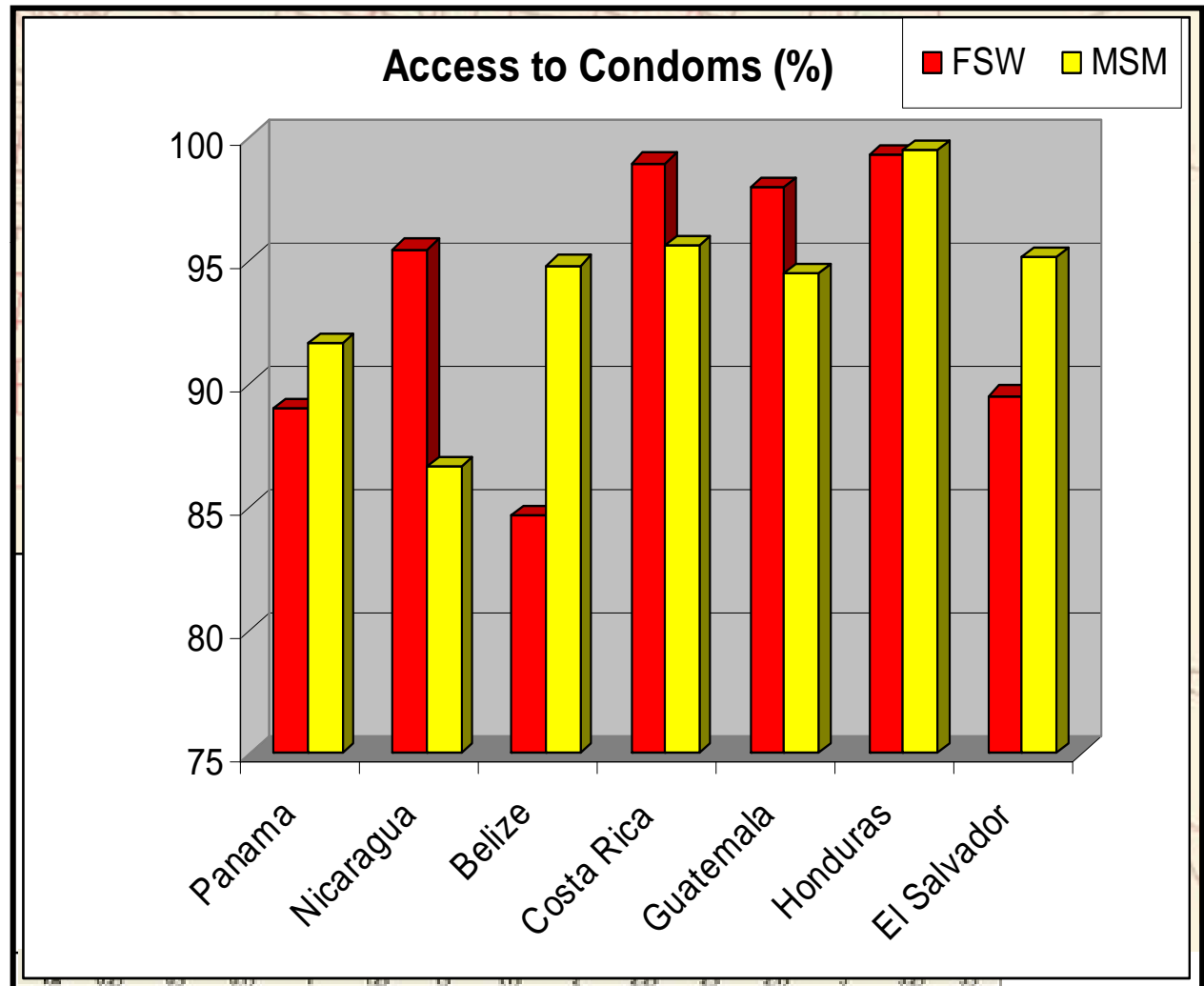


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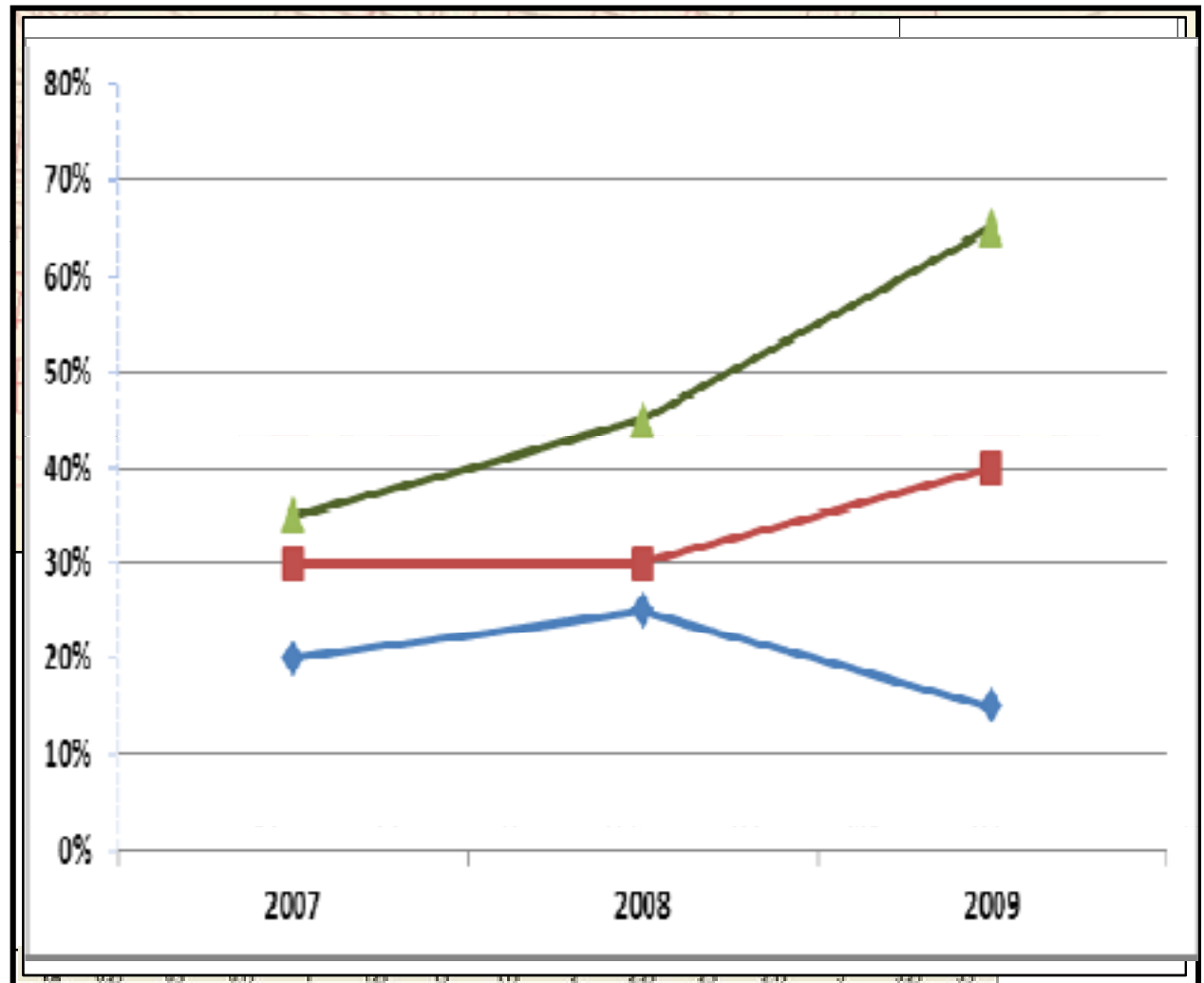


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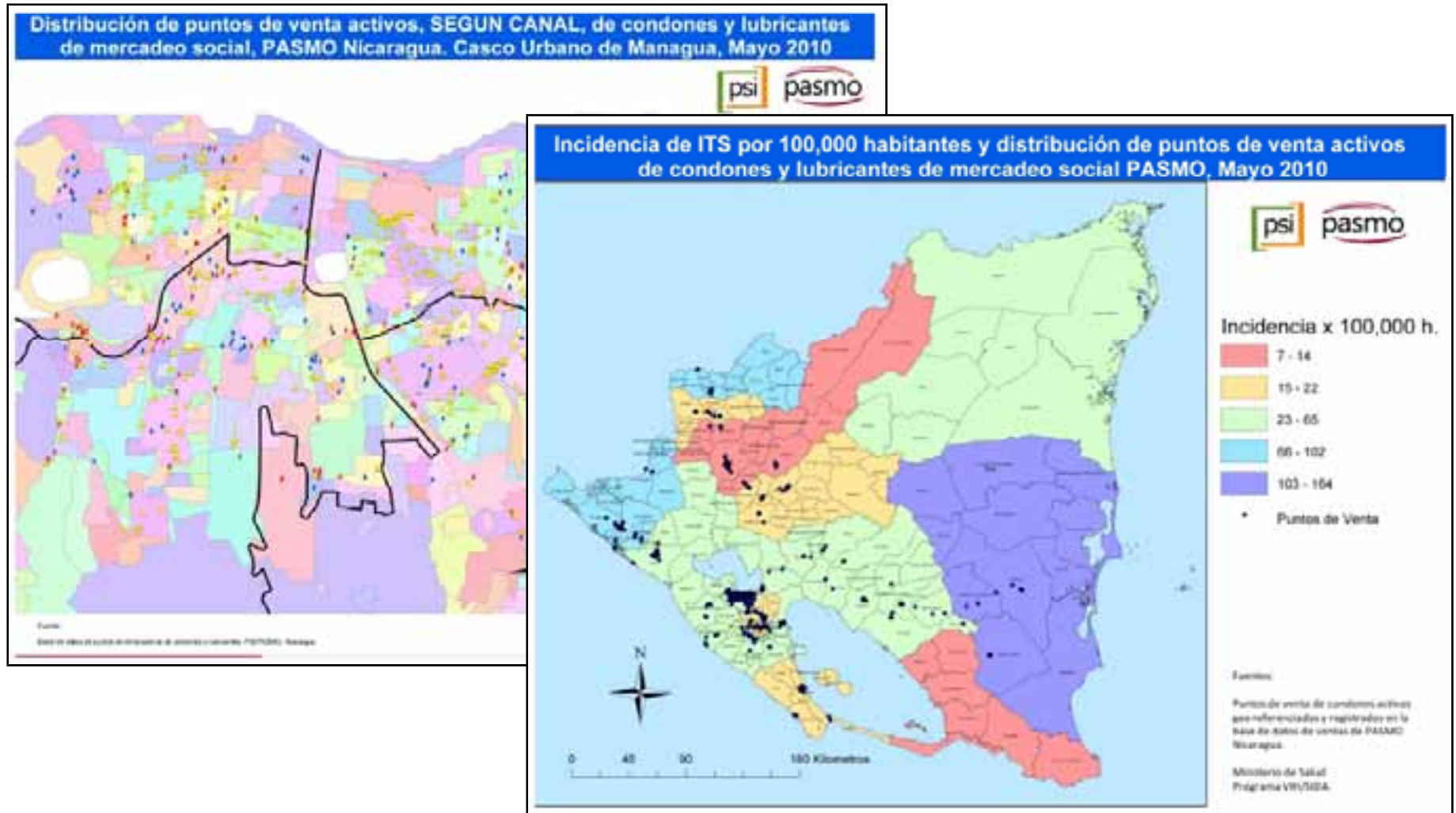


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Example 3 – Reporting

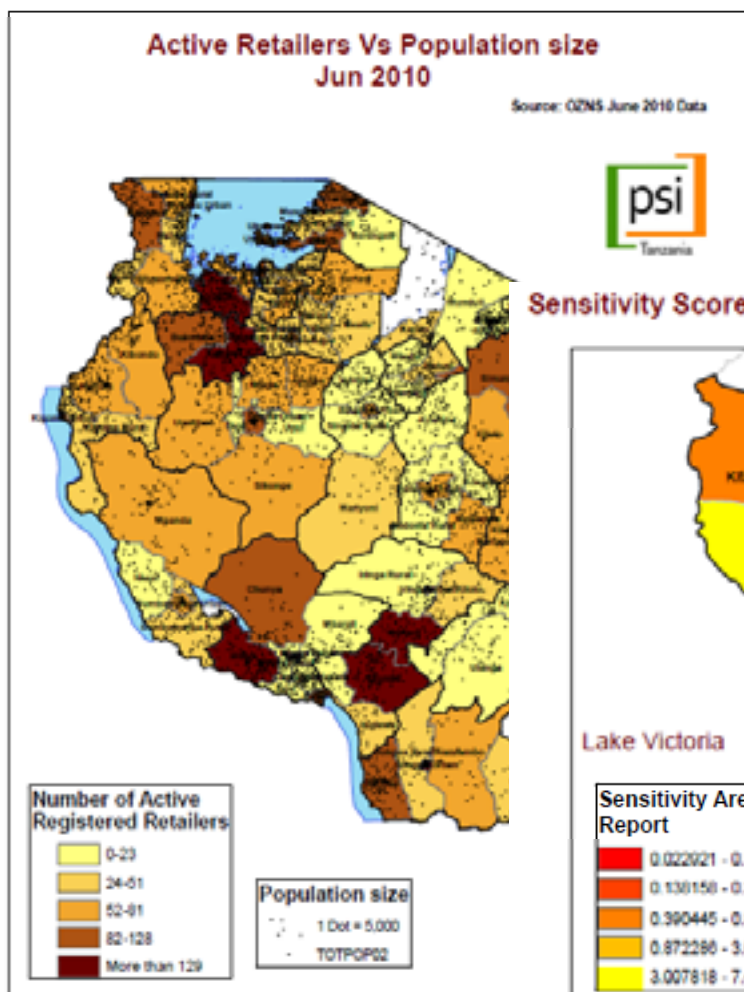
Reporting regional condom sales and health communication events, Tanzania

- **Online reporting system for regional sales and communication teams**
- **New SMS reporting system for condom retailers**
- **Routine mapping of condom sales and various interventions**
- ⇒ **Report on progress on program coverage, targeting of priority prevention areas, reach of health communication efforts**
- ⇒ **Identify underserved areas**

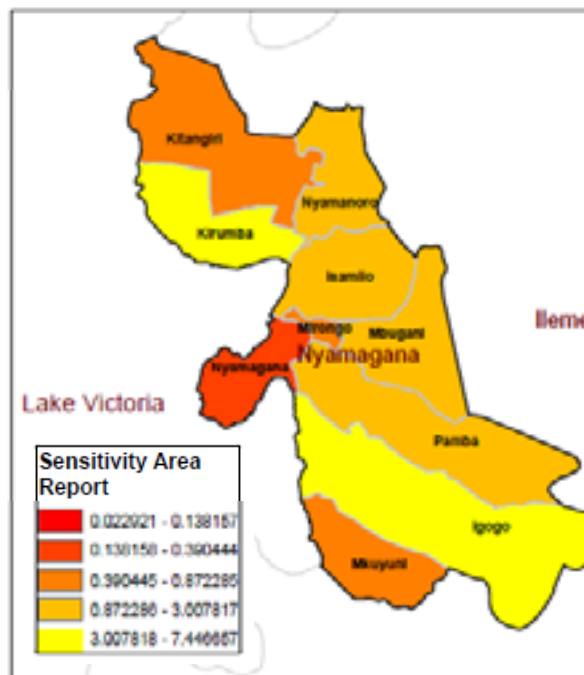


Example 3 – Reporting

Reporting regional condom sales and health communication events, Tanzania



Sensitivity Score Per Ward-Nyamagana District





Challenges & Constraints



- **Training and retraining on tools**
GPS, PDAs, HealthMapper / ArcGIS
- **Poor availability of GIS reference data**
- **Internet connection**
- **Establishing a map culture among program managers and field staff – from maps to decision making**
- **Linking MIS to GIS**

Thank you

More info:

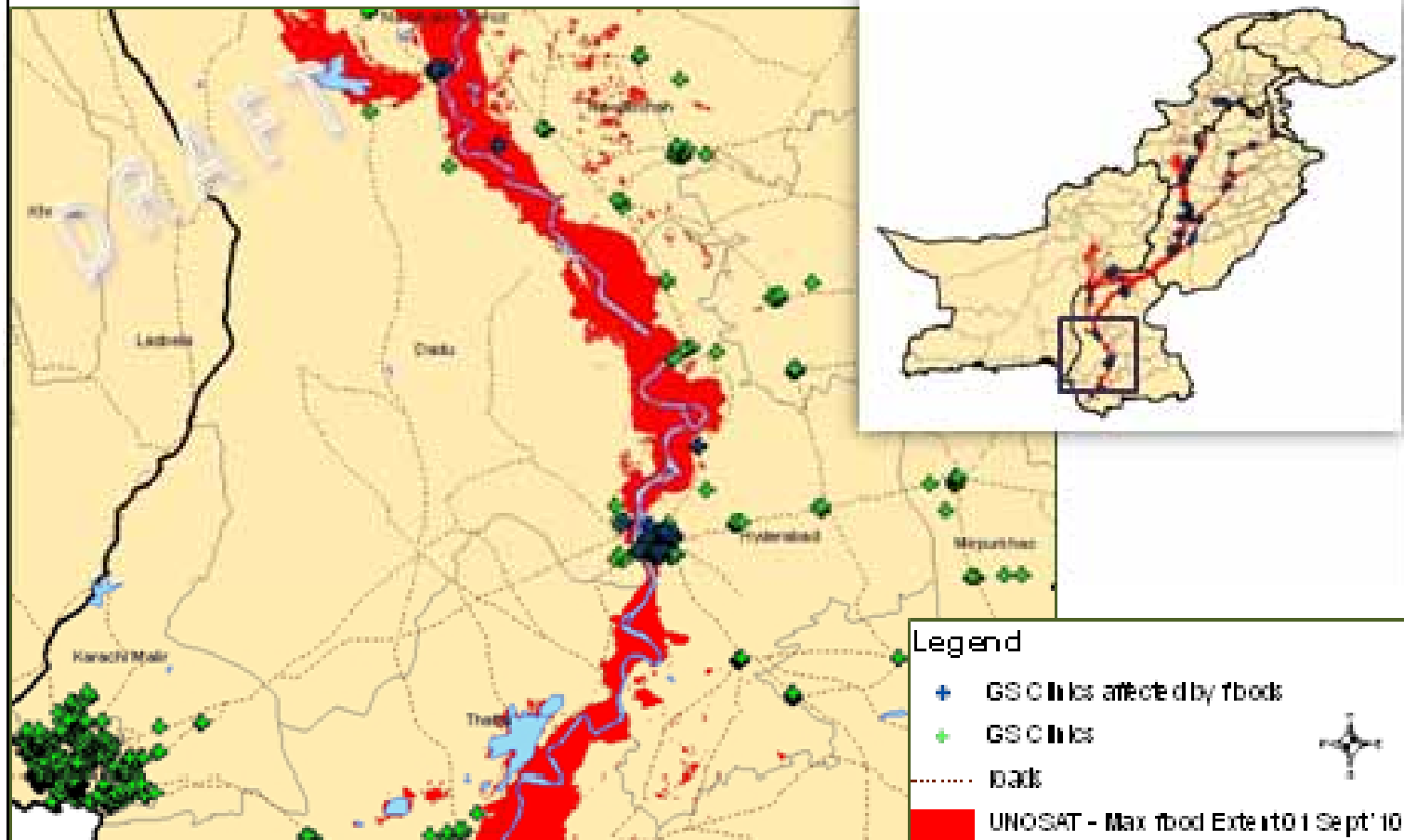
www.psi.org

bram.piot@gmail.com



Additional Maps

2010 Floodings: Location of Greenstar Clinics in Flooded Areas

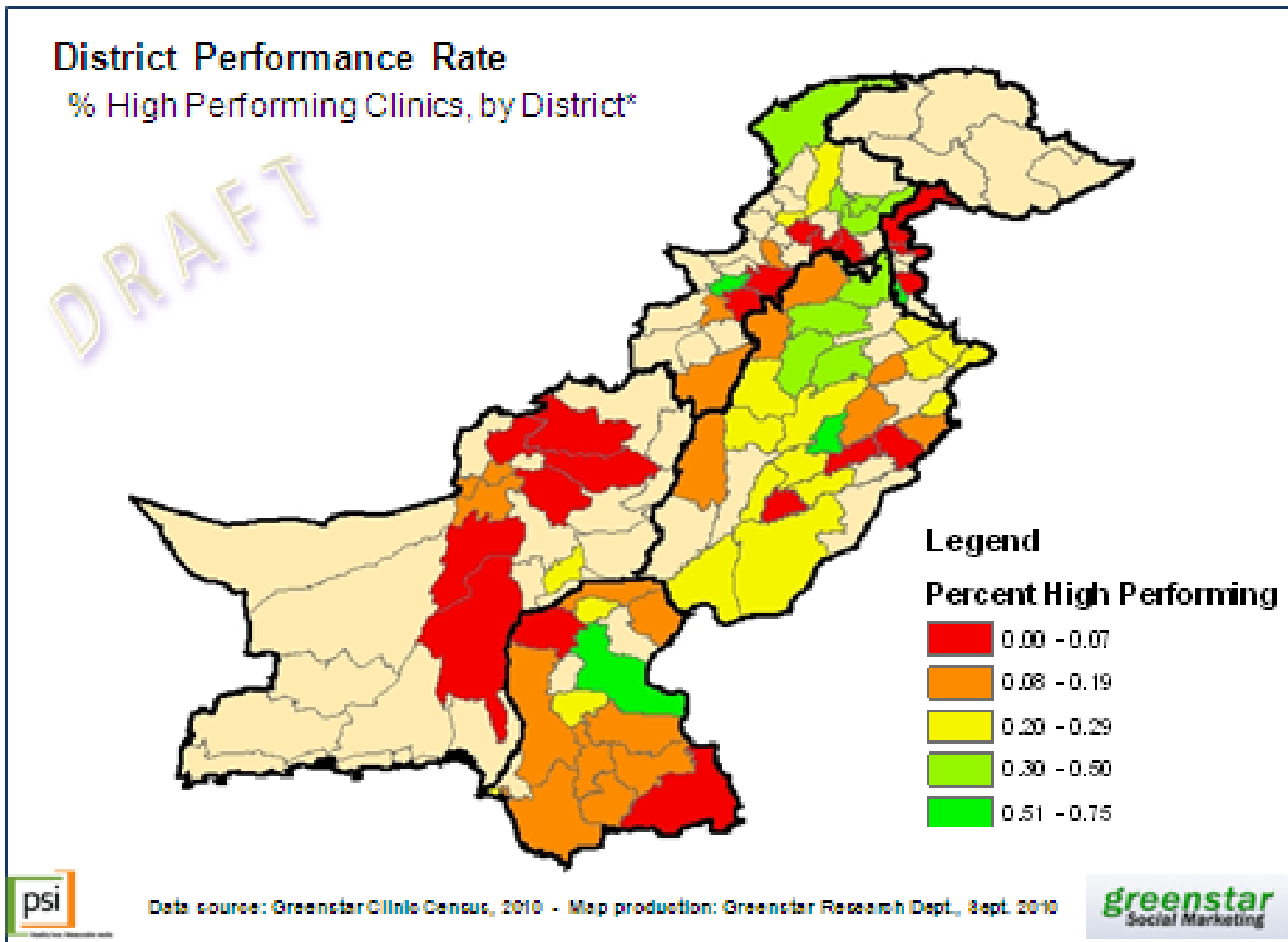


Data source: Greenstar Clinic Census, 2010; UNOSAT - Map production: Greenstar, Sept. 2010

greenstar
Social Marketing



Additional Maps



Additional Maps

