

# **GIS for Strategic Planning**

# Coverage, quality of coverage and access to condom in HIV risk zones in Nepal

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# Background

- Building on USAID/Nepal's investment in GIS mapping of areas known for high-risk HIV activity
- Mapping condom coverage in HIV risk zones using GIS is to
  - Assist evidence-based programmatic decisions
  - Monitor product and service performance
  - Measure coverage, quality of coverage and access to condom



# **Operational Definitions**

- Coverage:
  - Presence of at least one outlet per five hot spots in a hot zone
- Quality of coverage:
  - Hot zones with a condom delivery system conforms to minimum quality standards measured by:
    - Condom sold at the recommended price
    - Condom promotional material available at point of purchase
    - Incidence of condom stock outs in last month
    - Condom stocked in the visible location
    - Opening/closing hour of the condom stocking outlet

#### Access:

 Proportion of hot-spots that have a condom delivery point within its catchments area [a radius of 100m]



#### **Operational Definitions**

- Hot spot: Place where sex negotiation or sexual activity takes place
  - eg: Dance, Cabin, Hotel, Lodge, Bhatti, Dohori, Massage parlors, Streets

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- Hot zone: Cluster of hot spots
  - Buffer area covering a minimum distance of 100m



# **Objectives**

- This study measures:
  - Product availability in risk zone:
    - Condom coverage by condom brand in or around HIV risk zone
  - Quality of coverage:
    - Proportion of geographic areas in which minimum product/service meet minimum standards
  - Access:
    - Proportion of population/hotspots in a geographically defined area situated within the catchments area of a product or service delivery point



#### **Methods and Materials**

- Complete enumeration of hot spots (sampling frame)
- Prepare hot-zones from hot-spot information
- Use LQAS method to sample hot-zone
- Complete enumeration of condom selling outlets in sample hot-zones
- Calculate condom coverage, quality of coverage & access
- Produce GIS maps showing condom coverage & access



#### **Methods and Materials**

Enumerate all hot spots within study area (to establish sampling frame) **Prepare hot-zones from hot-spot information** 3 Use LQAS method to sample hot-zone **Enumerate condom-selling outlets in sampled hot-zones** 5 Calculate condom coverage, quality of coverage & access Produce GIS maps showing condom coverage & access 6

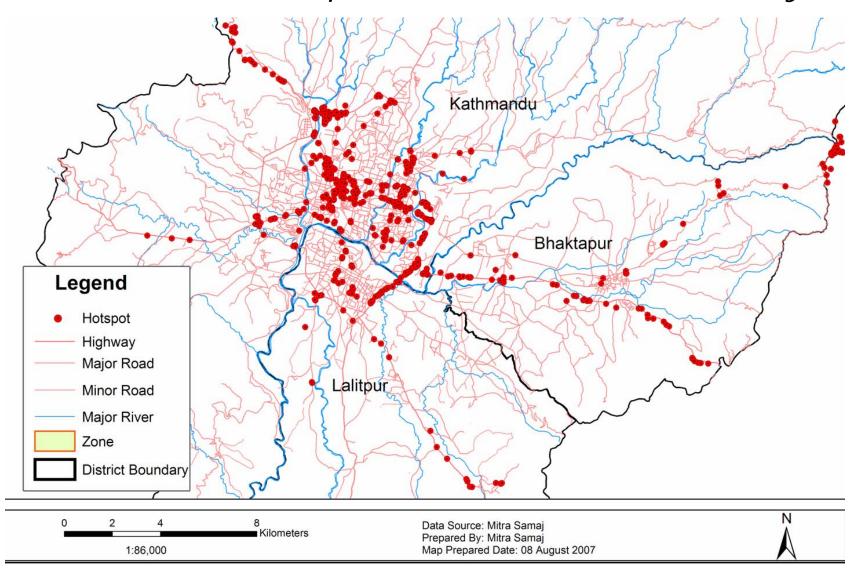


# Kathmandu Valley Study Findings



# Hot Spots in the Kathmandu Valley

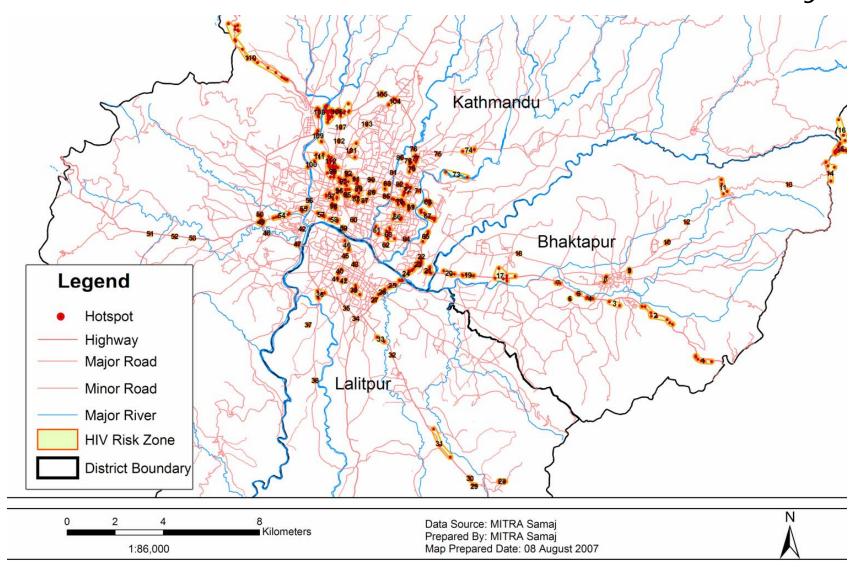
There are ~860 hot spots in the Kathmandu Valley





#### HIV Risk Zones in the Kathmandu Valley

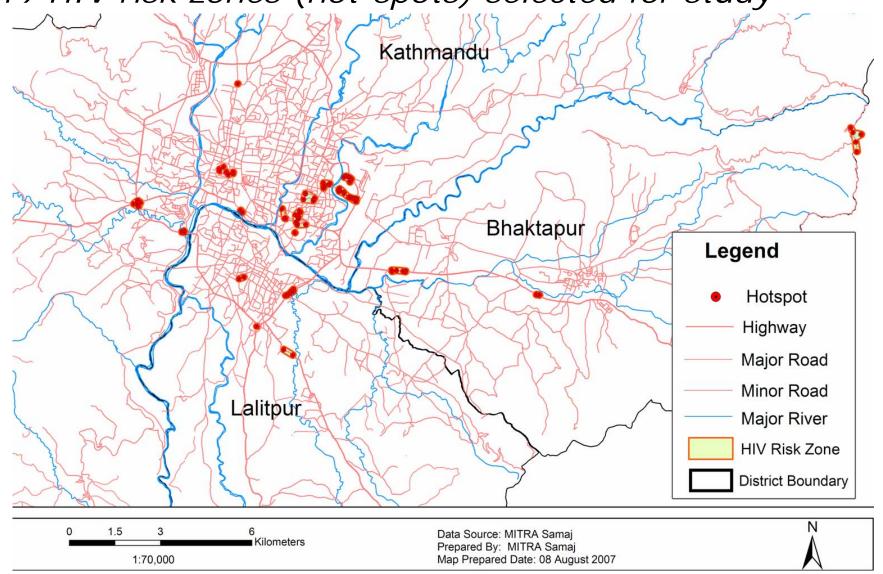
There are ~112 HIV risk zones in Kathmandu valley





#### Selected HIV Risk Zones

19 HIV risk zones (hot-spots) selected for study

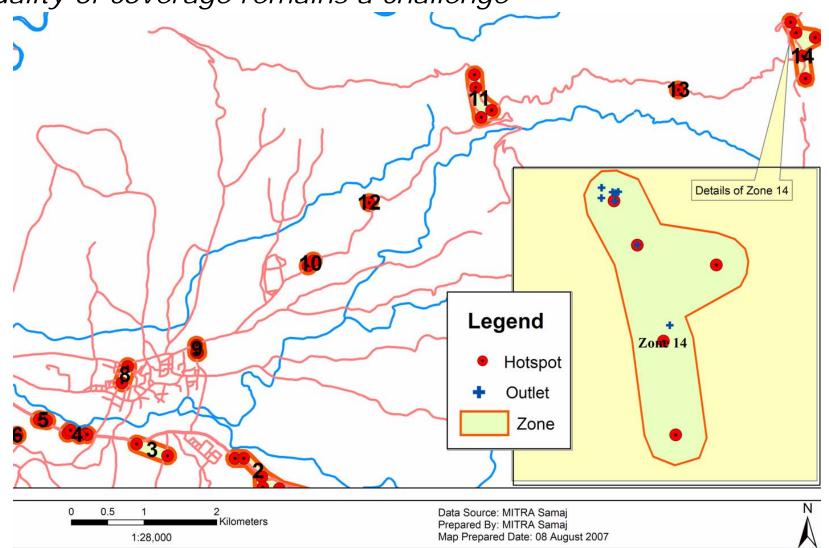




#### **Condom Coverage**

80% of HIV risk zones had adequate condom coverage, though

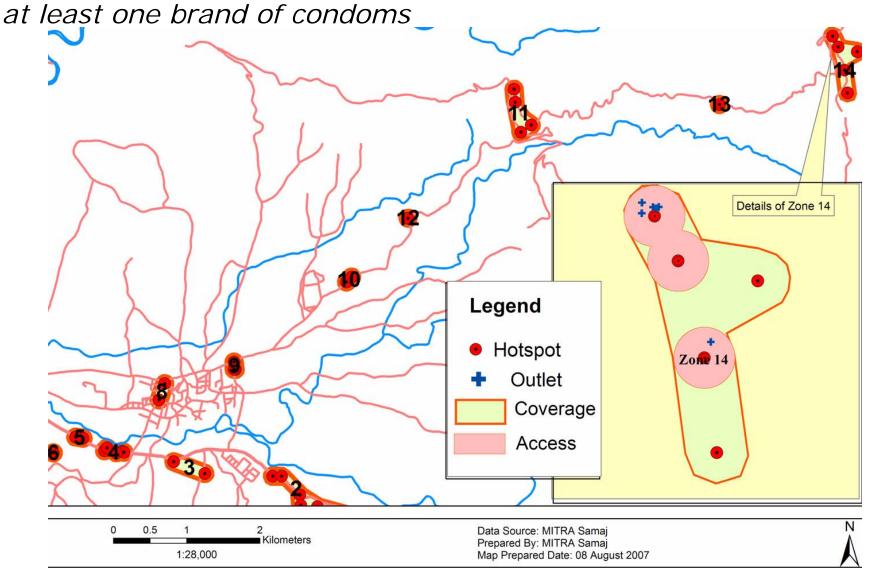
quality of coverage remains a challenge





#### **Access to Condoms**

68 % of women working in hot zone in Kathmandu have access to





# **Summary of Findings**

- Brand specific analysis suggests
  - 75 % coverage of the donor subsidized condoms
  - 65 70 % coverage of non-subsidized, commercial condoms
- Outlets that sell these condom brands have better situation in terms of outlets operating during night time
- Less than 25% of the brands reported to have experienced out of stock last month
- Product visibility and promotional materials indicator were found to be very poor
- Of the total 27 brands covered, coverage, quality of coverage and access indicators were exceptionally poor for 15 brands
- Some of the expensive brands were available in and around hot zones.



# **Program Implications**

#### Improve coverage through:

**Product** 

Initiate efforts to increase condom coverage to 95 %

Place/ Distribution

- Emphasis product distribution in hot-zones that have poor coverage
- Open new outlets/motivate outlets to increase access
- Focus on increasing outlets that sell condoms during night times
- Ensure condom availability round the clock in outlets that reported out-of stock last month

**Promotion** 

- Ensure promotional materials visibility in and around outlets
- Initiate BCC/IPC activities in hot zones to reduce condom stigma

**Price** 

 Focus outlets not selling condom in recommended price to motivate them to sell in recommended price



# **Next Steps**

- Conduct GIS mapping of HIV risk zones outside of the Kathmandu Valley
- Disseminate findings to social marketing and commercial sector condom partners
- Initiate routine annual follow-up study for monitoring product performance



