



# Assessing Community-Scale Disruption and Restoration of Basic Needs in Post-earthquake Haiti

Natural Hazards Workshop  
July 2010

NSF RAPID CMMI-1034876



THE UNIVERSITY OF  
MEMPHIS

# PROJECT OBJECTIVES

Characterize community-scale disruption and changes in disruption with time.

Explore the damage-disruption relationship

- Strength and nature of relationship
- Changes with time

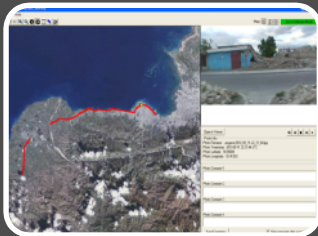
# DATA COLLECTION

## Field deployment in Haiti: May 4-16, 2010



### Interviews

- Community leaders
- Sector representatives



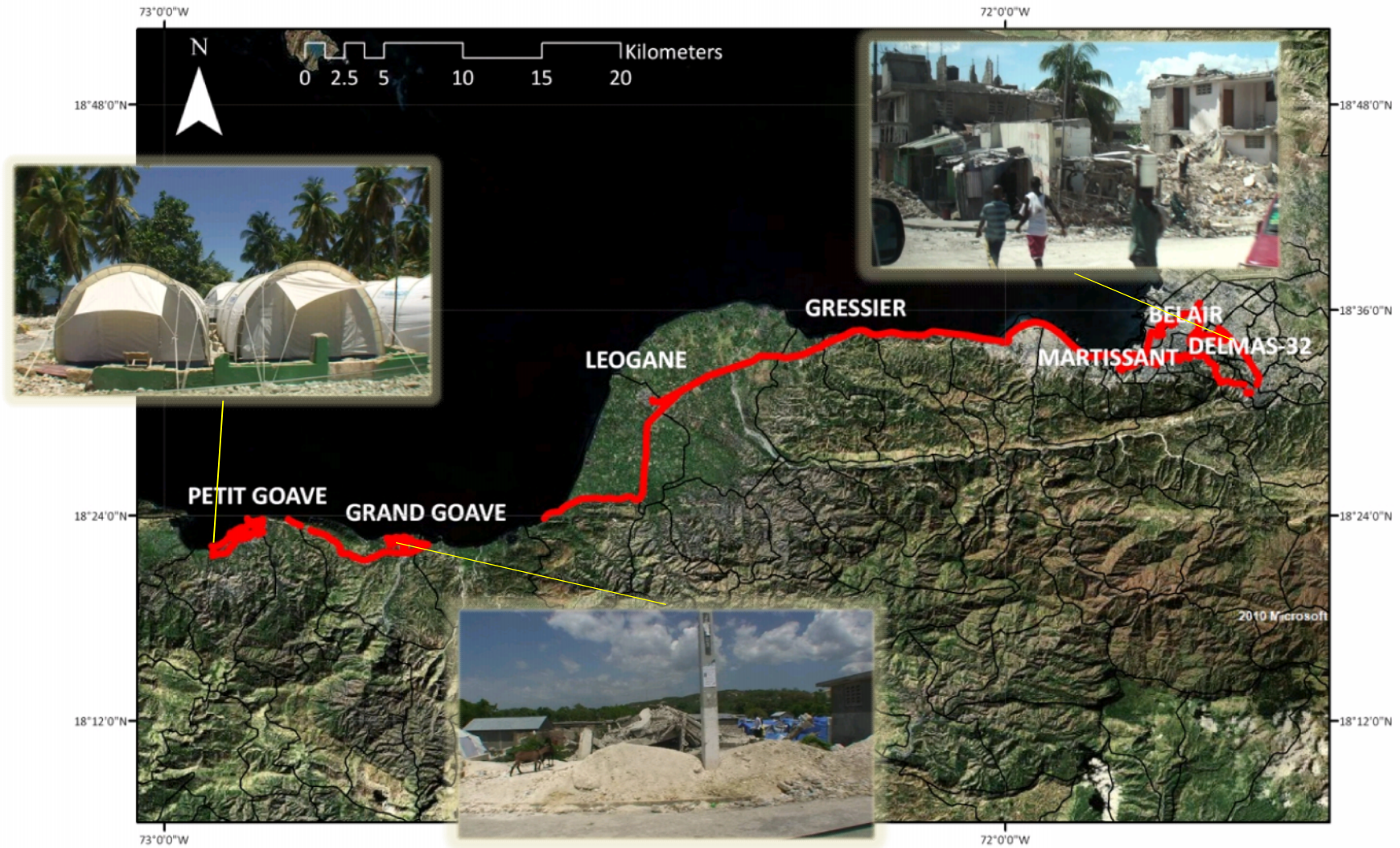
### IEWS™ field damage assessment



### Remote sensing

- GEO-CAN Damage Assessment

# DATA COLLECTION LOCATIONS



# FIELD INTERVIEWS AND OBSERVATIONS

## Communities

- Bel Air
- Delmas 32
- Petit Goave
- Grand Goave
- Gressier
- Leogane
- Martissant

## Service Sectors

- Electric
- Canals
- Solid waste
- GIS

## Clusters/NGOs

- Disabilities
- Early recovery
- Health
- Housing
- Logistics
- Nutrition
- Shelter
- FAO
- OCHA
- Oxfam
- Red Cross
- UNEP
- WFP



# AVAILABILITY OF BASIC NEEDS

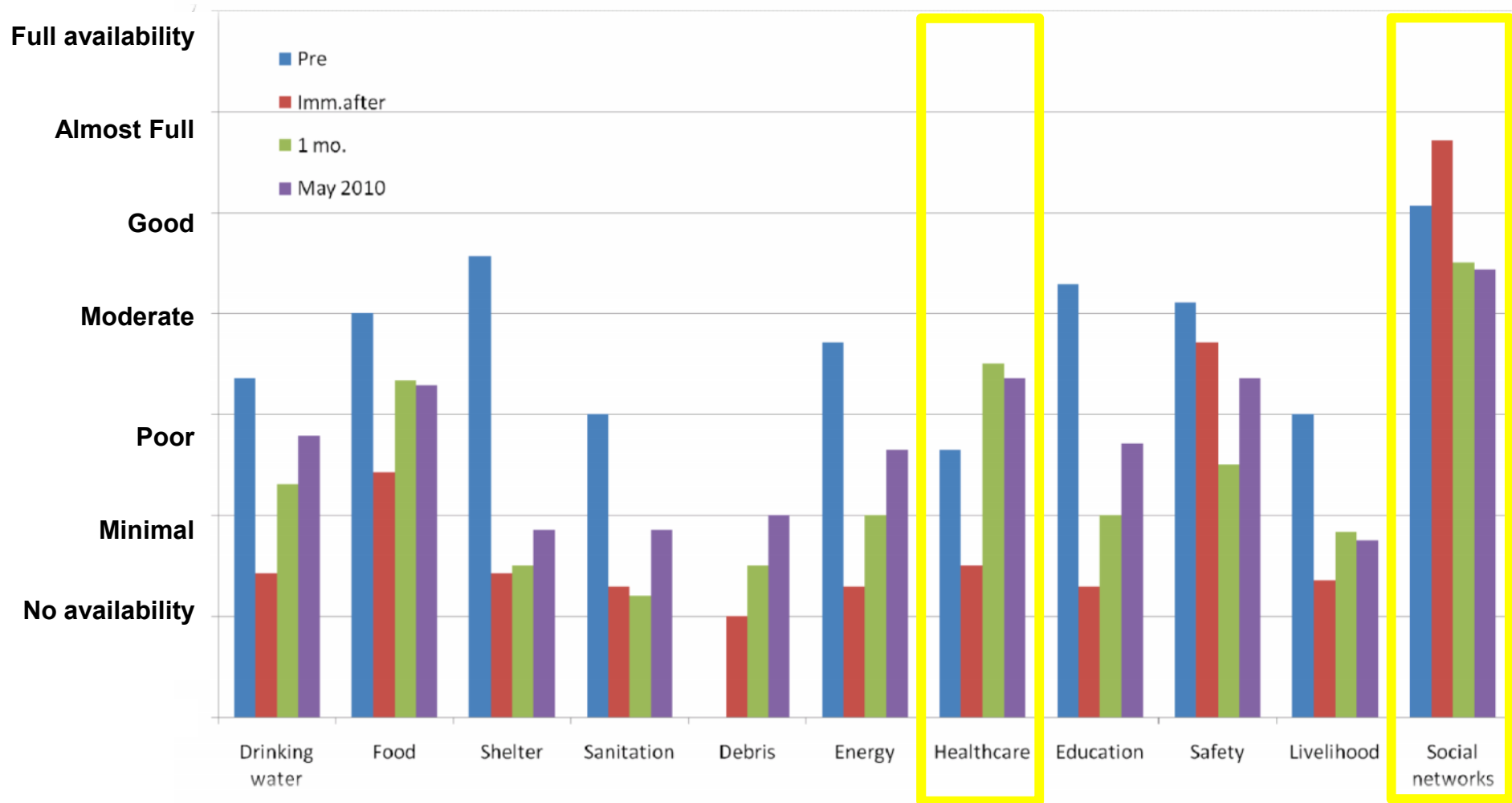
Time Period Relative to  
1/12/10 Earthquake

## SCALE

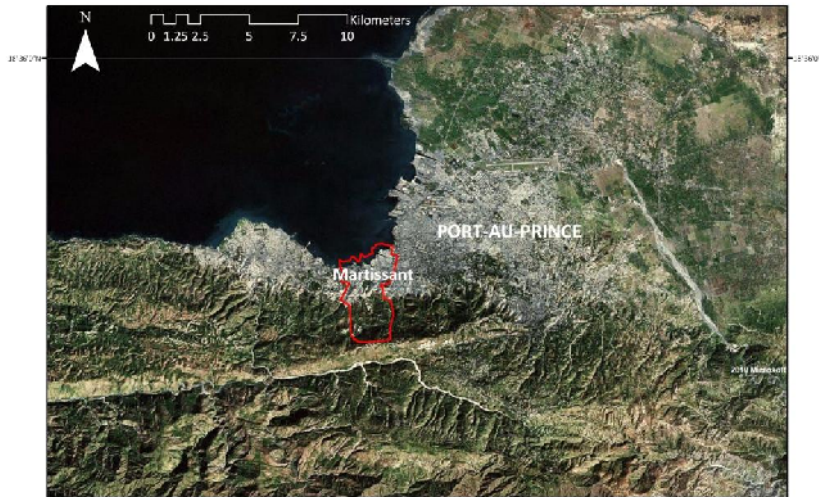
- 1 = **No** availability  
*Not available at even the lowest quality*
- 2 = **Minimal** availability  
*Very unreliable, very poor quality, very insufficient, or inaccessible to most*
- 3 = **Poor** availability
- 4 = **Moderate** availability  
*Available to some people who need it, though it may be inconsistent or of moderate quality*
- 5 = **Good** availability
- 6 = **Almost full** availability
- 7 = **Full** availability  
*Available at consistent, high quality to everyone who needs it*

	Prior to	Immediately following	1 month after	May 2010
Drinking water				
Food – stuffs and prep. equip.				
Shelter				
Sanitation				
Debris removal				
Fuel/energy/utilities				
Health care				
Education/schools				
Safety				
Livelihood				
Social networks				
Other				

# AVERAGE AVAILABILITY OF SERVICES



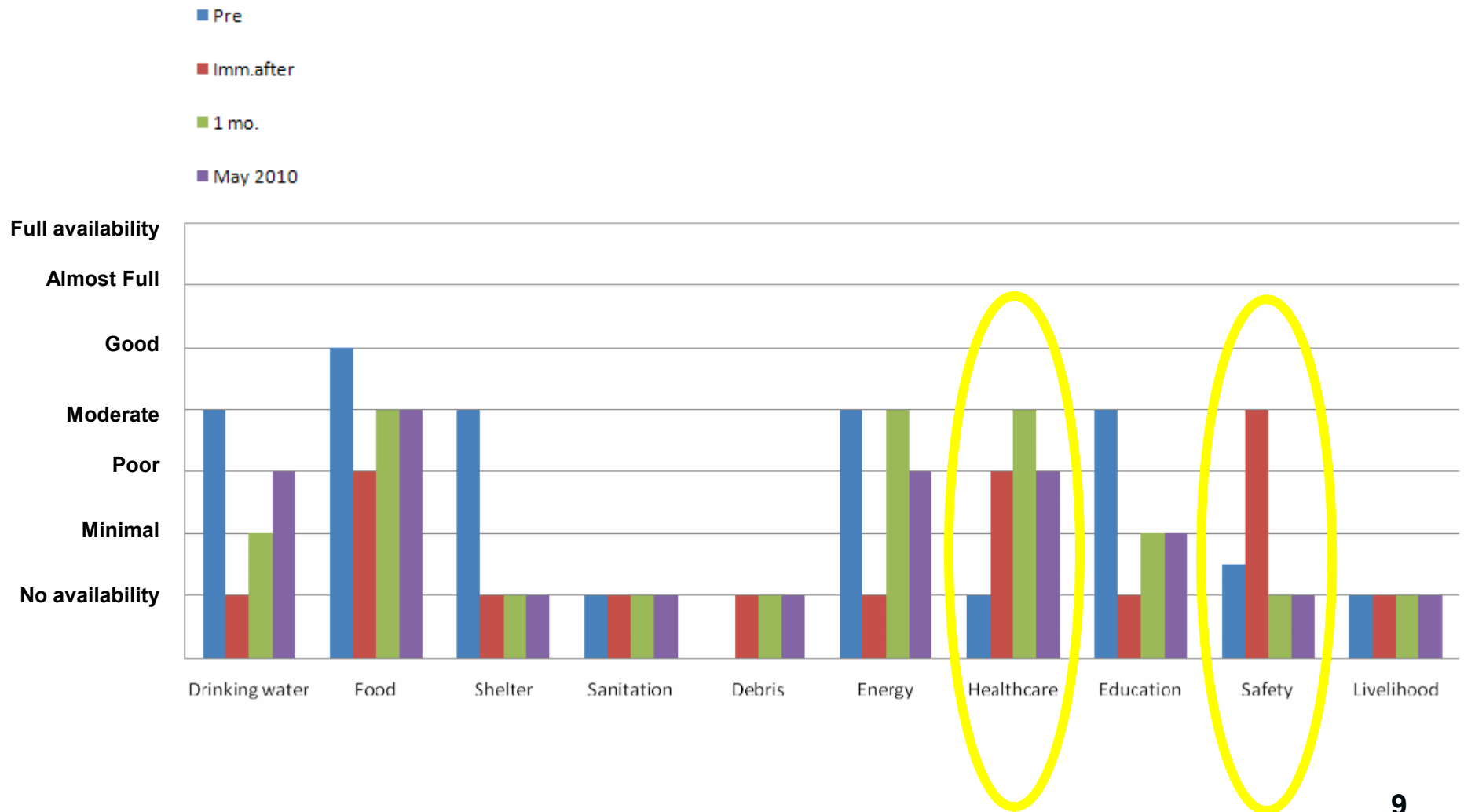
# COMMUNITY VIEWPOINT: MARTISSANT



- ◆ Community Driven Development Council
- ◆ High unemployment rates prior to earthquake.
- ◆ 220,000 residents
- ◆ 828 lives lost  
167 injuries



# COMMUNITY VIEWPOINT: MARTISSANT



## OBSERVATIONS

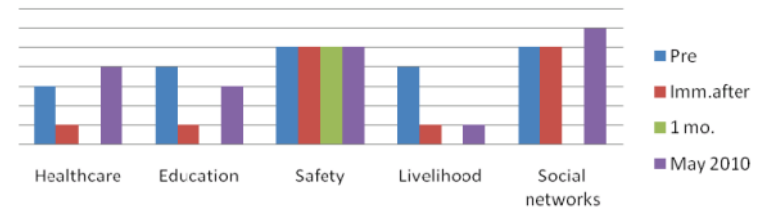
- ◆ Implications of pre-event disruptions in understanding recovery
- ◆ Long-term consequences of “choices”
- ◆ Roles, responsibilities and coordination
- ◆ Importance of land rights/ownership
- ◆ Migration out of Port-au-Prince

# ONGOING EFFORTS

Investigating relationships between physical damage (GEO-CAN data) and community disruption.

Exploring the impact of chronic disruption/series of catastrophes on community.

Comparing experiences of disruption in urban and rural communities.



# ACKNOWLEDGEMENTS AND PROJECT TEAM

Project participants.

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\* *On field deployment*