

Socio-Economic and Physical Development Influences on Water Use in Barbados

Senior Administrator's Workshop
Caribbean Institute for Meteorology & Hydrology

Alicia Suchorski, January 19, 2009



What is the connection?

“When water is not supplied by a piped system, the burden of water collection falls on women and children, who must expend a huge amount of time and energy on this activity”

(Cap-Net, GWA, 2006)



What is the connection?

- Water collection = a woman's world
 - Prevents women from working
 - Prevents children from attending school
- Health burden of water collection
 - Caloric
 - Ergonomics
- Lack of participation in management



How does the developed world get its water?



(TopNews Health, 2008)

(Nu Flow, 2007)

(Courier-journal.com, 2007)

...and in the developing world



(About.com: Africa Travel, 2008)
(OXFAM, 2008)



Outline

- Why this project?
- Introduction to Barbados
- Methodology
- Results – development
- Results – gender
- Conclusions



Why this project?

- Gender as part of IWRM
(under the realm of CARIWIN)



Barbados



(Natural Resources Canada, 2003)



Barbados

- Demographics
- Socio-economics
- Water resources
 - Water availability vs. withdrawal per capita
 - Antigua and Barbuda
 - Jamaica
 - Sources
 - Institutional environment



Methodology

- Development analysis
- Gender analysis
- Instrument used: Survey
 - Pre-testing
 - Data in survey
 - Statistical analysis



Methodology – Study Area



Methodology: Study Area



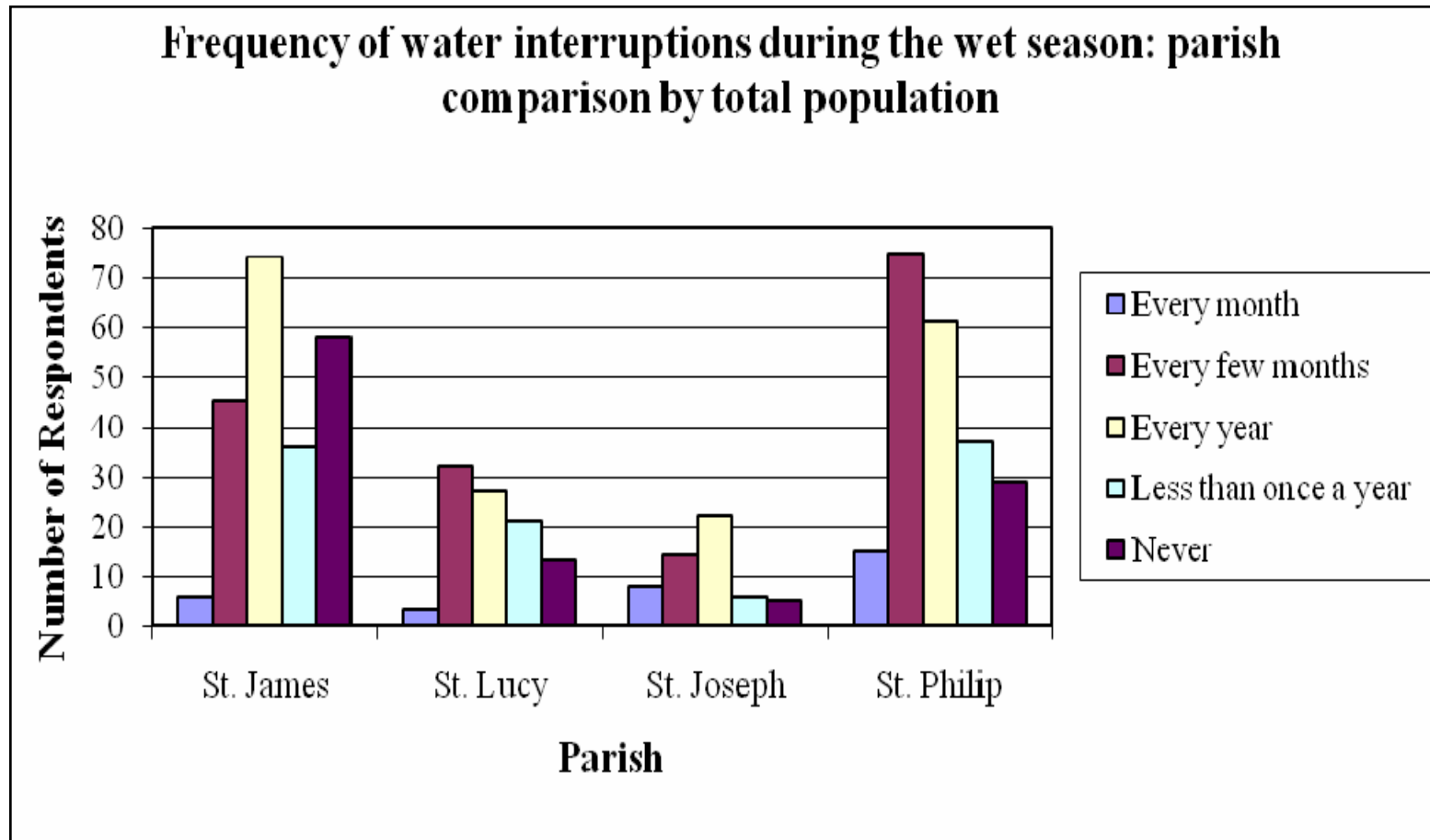
Water Issues Explored

- Scale of water availability as perceived by respondents
- Frequency of water interruptions
 - Wet season
 - Dry season
- Affects lifestyle
- Water quality
- Satisfaction with water situation
- Problems with water management



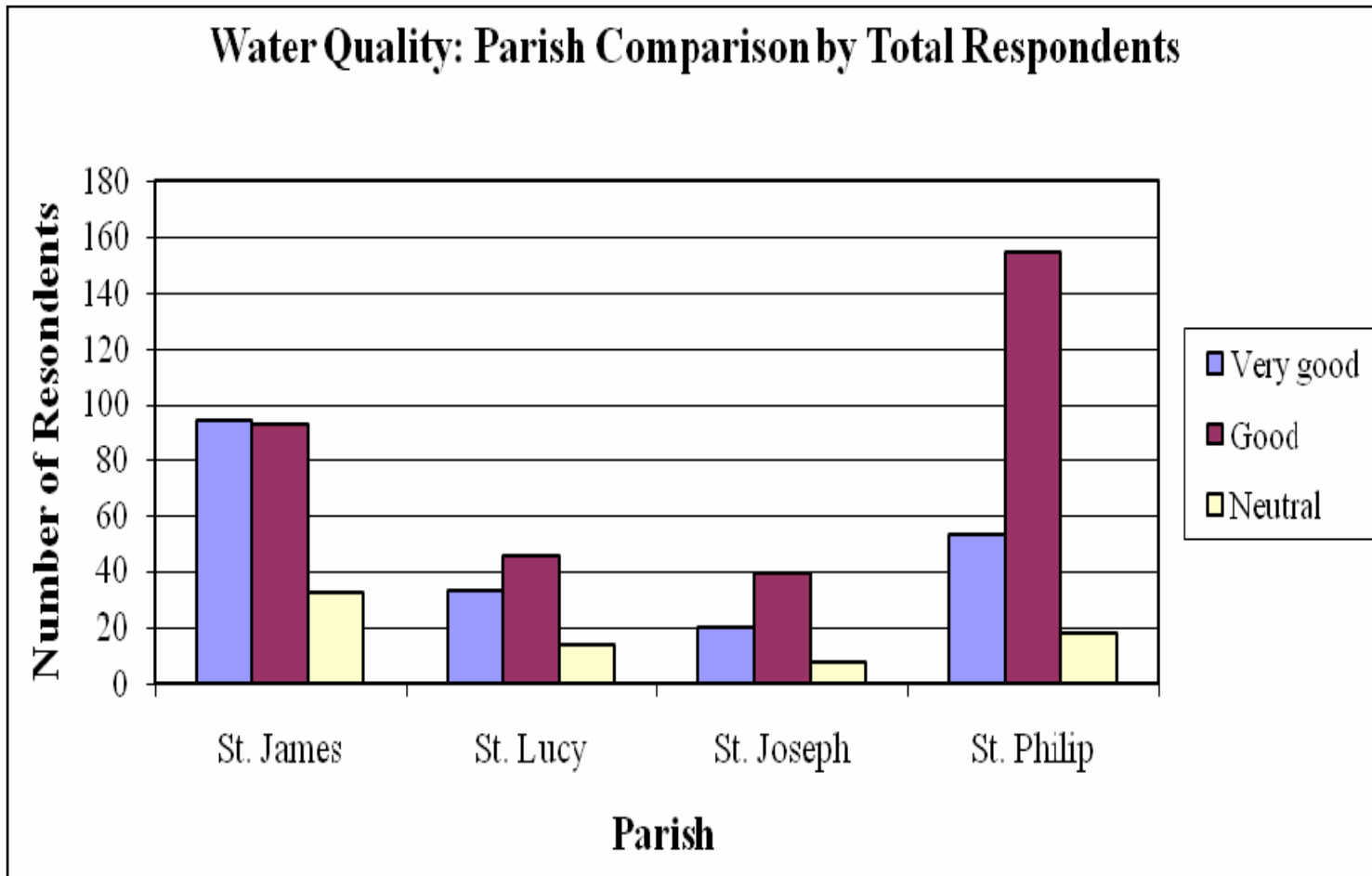
Results: Development

Frequency of water interruptions: wet season



Results: Development

Water quality

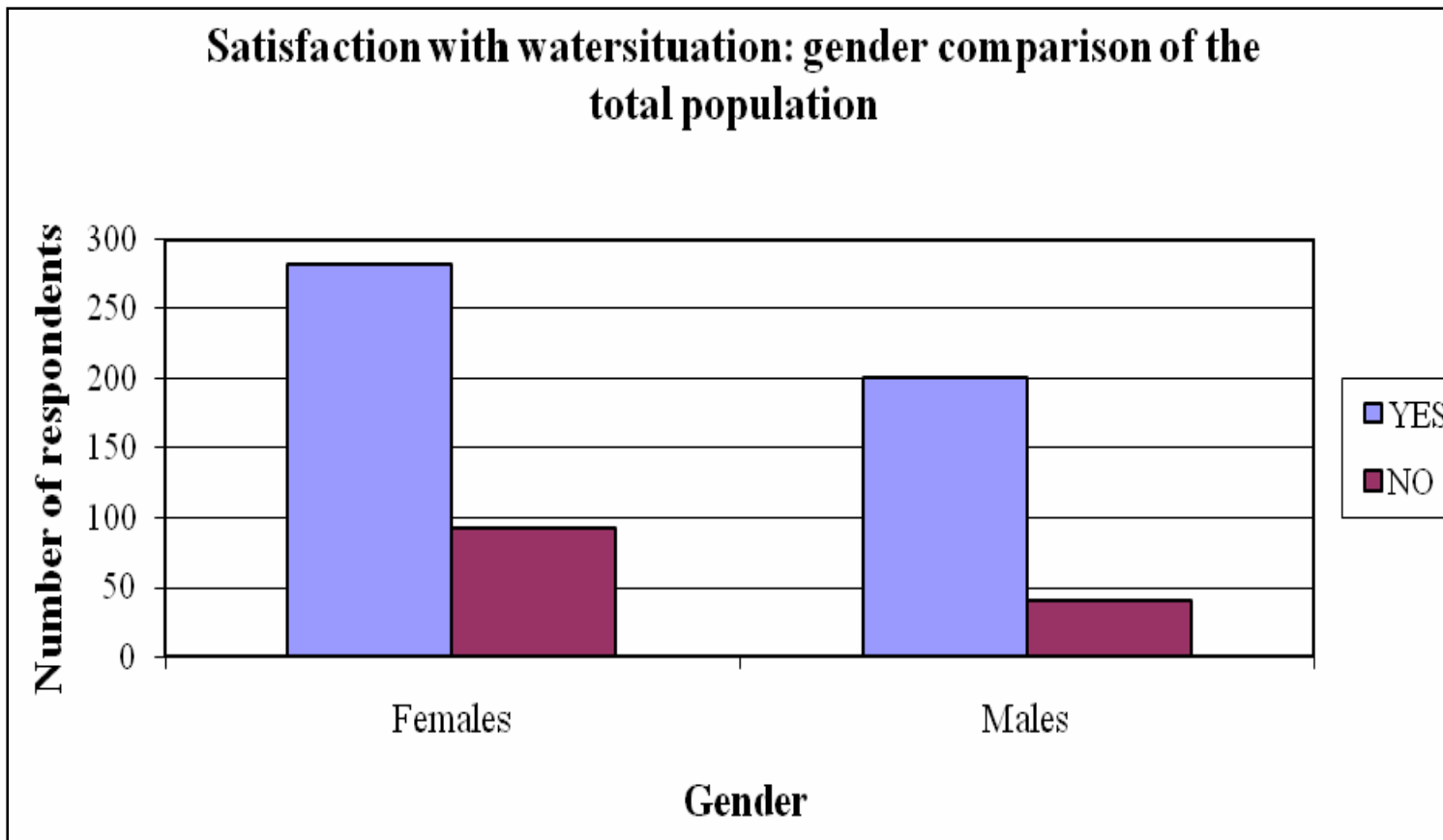


Water usage and household economics

- Most water use: St. Philip
 - Role of agriculture
- Least water use but highest standard error: St. Joseph
- As income rises, so does water consumption – economics play a substantial role in determining water use patterns
 - i.e. water collection and storage
 - i.e. washing vehicles

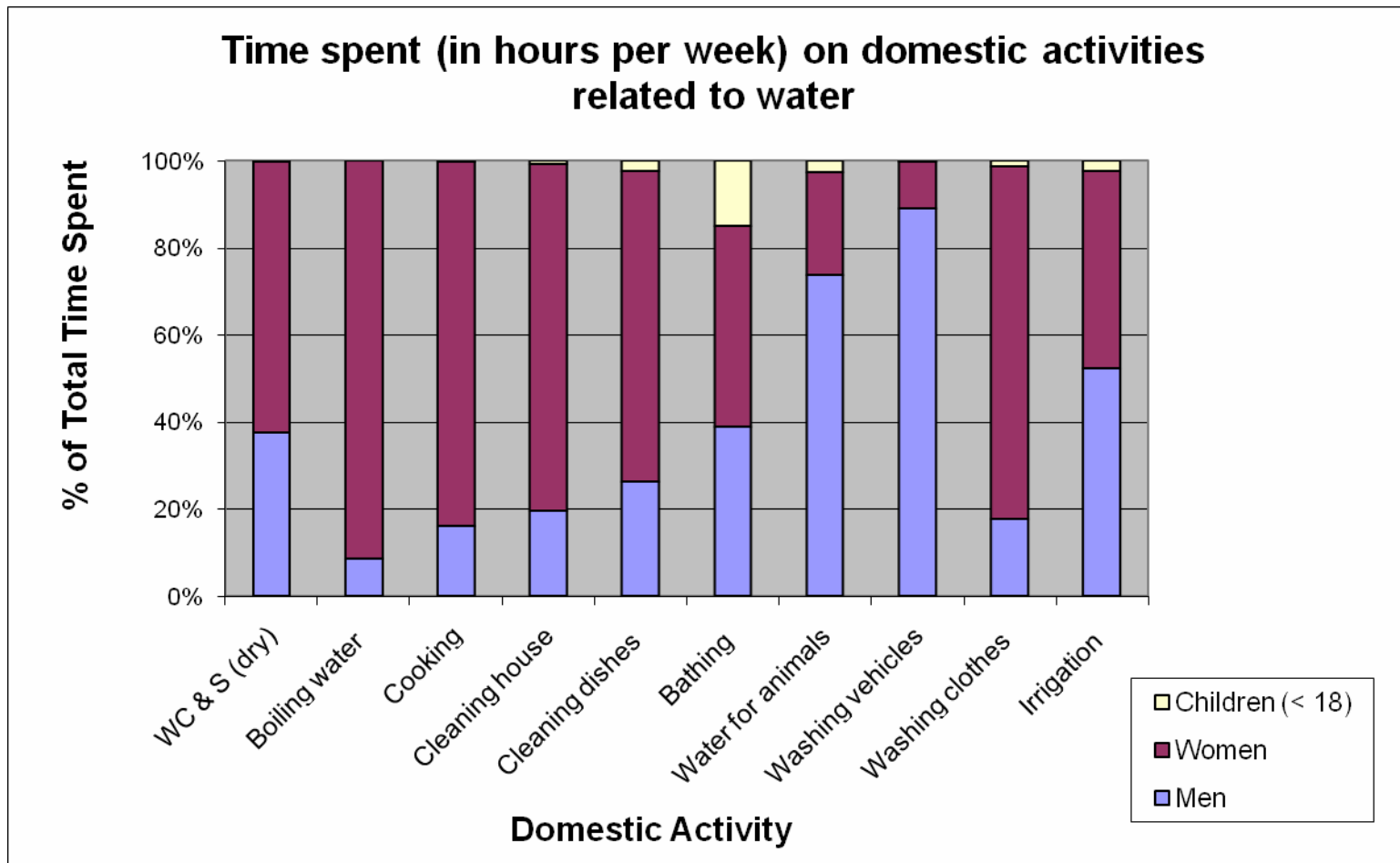


Results: Gender Satisfaction with water situation



Results: Gender

Distribution of domestic tasks related to water



Conclusions

- Development as a factor in water use and accessibility
- Gender, as it relates to perceptions of water
- Prevalence of women in domestic tasks



Take home message

- Although Barbados does not exhibit large gender discrepancies related to water, **IT DOES NOT UNDERMINE THE IMPORTANCE OF GENDER AND WATER ISSUES GLOBALLY**
- Implications for engineers and decision makers



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Thank you!
Questions??

