



## Tanzanian WMAs

### Background

- Political legacy/ state control
- 35-40% land area protected
- 1998 Wildlife Policy of Tanzania community participation
- 2005 PRSP: *Mkukuta I*
- 2006-7 pilot WMAs registered

### Status:

- 22 WMAs in operation
  - >500,000 people
- 38 planned in total
- Will cover 13% land area

From WWF-USAID  
WMA status report 2013



## WMA Objectives

WWF-USAID WMA status report 2014 p. 13

“The main objectives of the WMA process are to:

- increase the **participation** of local communities in the management of wildlife resources;
- enable local communities to derive **benefits** from wildlife resources; and
- enhance the **conservation** of wildlife resources.”

## What are the social outcomes of WMAs?

- Changes in **participation**
  - WMA-, Village-level institutions/ governance
- Changes in **benefits**
  - Household livelihoods / resource use
  - Individual wellbeing
- Pre- / post- WMA:
  - What resources could /can you access?
  - What could/can you do with those resources?
  - What did/does that resource use mean to you
    - » as an individual?
    - » as a member of your community?



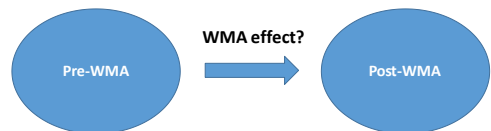
## PIMA Research design

- Causal attribution
  - WMA-related vs.
  - Coincidental not WMA-related
- Mixed methods
  - Qualitative
    - In depth case studies
    - WMA-, Village-, Household-, Individual-level
  - Quantitative/statistical:
    - matched controls + baseline data
    - Before-After, Control-Impact



## Impact Evaluation

Wildlife Management Areas



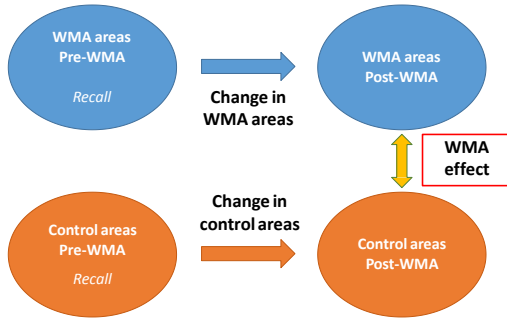
### What has changed?

- Are people richer? Poorer?
- Are there more elephants?
- Are there more tourism jobs?
- Is there more conflict?

...etc.

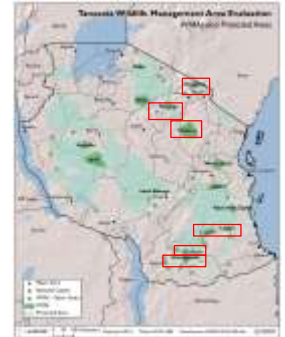
**Counterfactual:**  
*What would have happened with no WMA?*

### Impact Evaluation The BACI approach



### Quantitative BACI/ CI –

- 6 WMAs vs non-WMA environs
- 8 villages / WMA (4 in 4 out)
- wealth ranking:
  - 13573 HH, 2007 (recall) + 2014
- Livelihoods/ wellbeing survey:
  - 40 HH heads/ village
    - » 10 leaders,
    - » 10 poor,
    - » 20 other
  - 20 women non-HH hd/village
- Validation livelihoods data (2004)
  - 220 HH
  - 2004 survey – 2015 resurvey

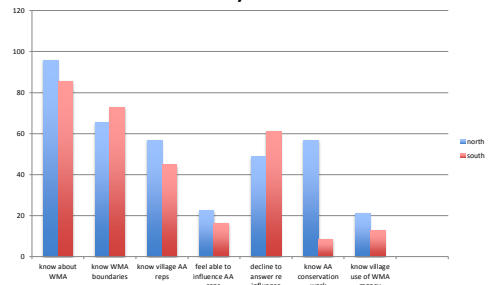


### Results

- Participation
  - » Understanding
  - » Ability to be heard/ to influence
- Benefits
  - Community-level benefits
  - Household level
    - » Wealth
    - » Income
    - » Resource access
    - » Crop damage

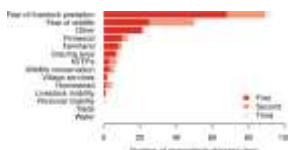


### Institutional/ governance impacts: Women’s participation: “Do you...”

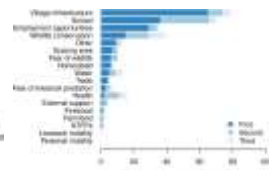


### Main perceived costs and benefits

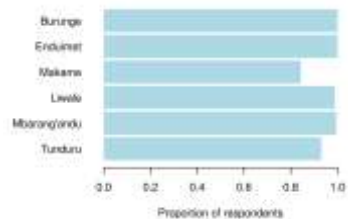
WMA Costs



WMA benefits



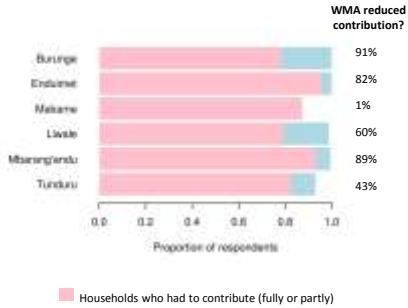
### Community benefits Public development projects



Primary or secondary school built or repaired since 2007?

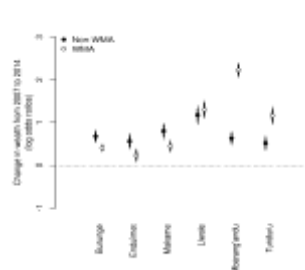


### Community benefits Public development projects

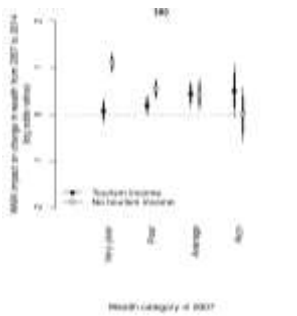


### Wealth change 2007-2014

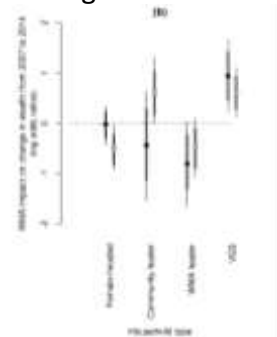
Comparison between WMAs and controls



### WMA effect on wealth change 2007-2014



### WMA effect on wealth change 2007-2014



### WMA effects on wealth changes

#### WMA effects on wealth

- North: controls do better than WMA hhs
- South: WMA hhs do better than controls in 2/ 3 sites

#### WMAs with tourism revenue

- Generally worse-off:
  - State + WMA admin top-slice:
  - CBNRM as rural taxation
  - HWC?
  - opportunity costs?
- WMA VGS households benefit

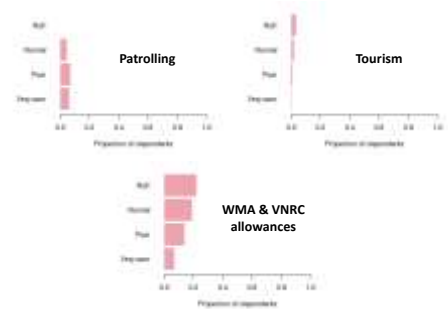
#### WMAs without tourism revenue

- Generally better-off - Why?
  - Noe: Mbarang'andu:
    - Uranium mine
    - "Friends of Mbarang'andu"



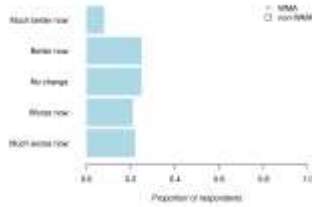
### Direct household income

Frequency and distribution by wealth



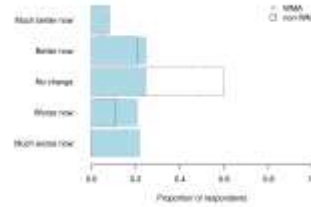
### Costs: Burunge

Change in crop damage



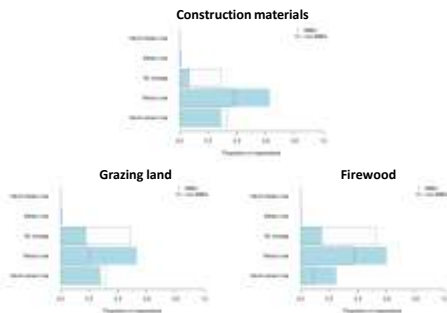
### Costs: Burunge

Change in crop damage



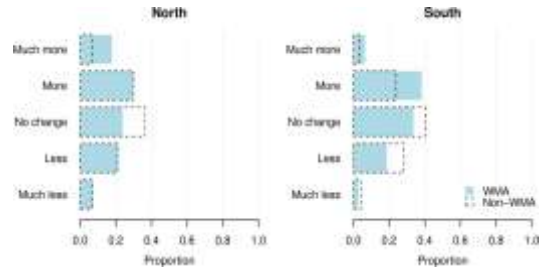
### Costs: Burunge

Change in access to natural resources



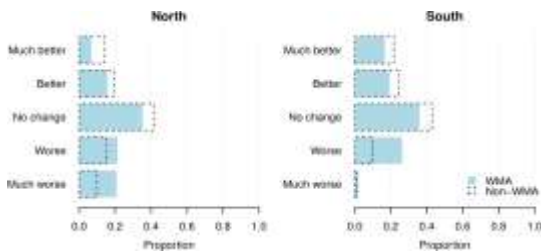
### Married women: crop damage

- More WMA than non-WMA women report damage ↑
- ~50% attribute changes in crop damage to WMA



### Married women: Worry over wildlife hazard

- WMA wives worry >> non-WMA wives.
- Wives perceiving safety as worse attribute to WMA.



### Discussion

#### Participation and benefits?

##### Participation?

- "WMAs foster very limited ownership, participation and collective action at the community level, because WMA governance follows an austere logic of centralized control over key resources" Bluwstein et al 2016. *Conservation and Society*

##### Benefits?

- WMAs + Revenue (~North) : WMAs retard wealth change
  - Rural taxation for state cut/ WMA admin/enforcement
  - Opportunity costs
  - HWC
  - Direct benefits to VGS
- vs. WMAs WITHOUT revenue (~South) WMAs
  - Positive impact – not WMA, but philanthropic initiatives
    - Sustainability?
    - Generalisability?
  - Opportunity costs
  - HWC

## Conclusion: Social impacts of WMAs?

### Benefits of WMAs?

- Community-level projects
- Secures local tenure rights?

### Costs of WMAs

- Lack of meaningful participation: ?really CBNRM/CWMA?
- Restrict access to key resources/ production opportunities
- Heighten HWC
- Despite nominal local land tenure, state retains control over
  - Access to/ use of that land
  - wildlife ON that land
  - minerals UNDER that land

### Room for improvement

- High costs >>> limited benefits
- Favours government and investors over local communities
- USAID 2016 Economic viability review:
  - WMA share insufficient to cover admin costs
  - livelihoods/ opportunity costs not addressed

