



human settlements

Department:
Human Settlements
REPUBLIC OF SOUTH AFRICA

Measuring Success in Human Settlements Development

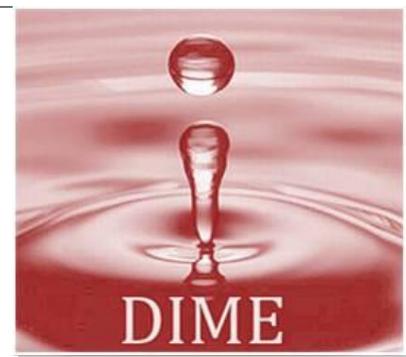
Phillip Chauke, NDOHS
Mulalo Muthige, NDOHS
Aidan Coville, DIME, World Bank

Researchers: Arianna Legovini, Nandini Krishnan and Sebastian Martinez

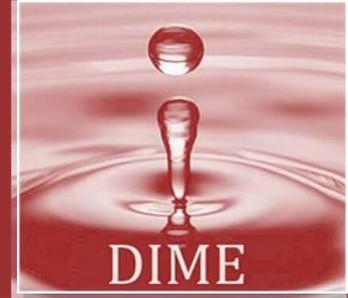
Generous support from SIEF is gratefully acknowledged



**DIME SEMINAR
WASHINGTON, DC, 7 JULY 2011**

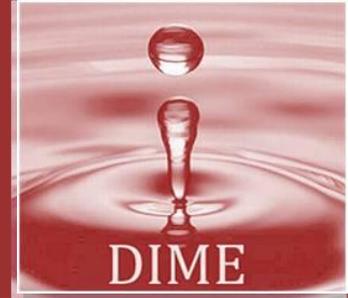


Collaboration



- Department of Human Settlements has been working on impact evaluation program with World Bank since 2006
- Monitoring and Evaluation has increasingly become an integral component of the Human Settlements program of work
- As a middle income country, focus of collaboration with WB has been on providing technical support rather than lending

UISP in Brief



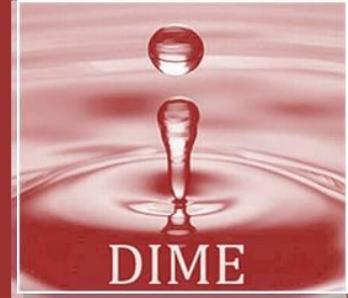
- Current Government has changed from Department of Housing to Human Settlements and is targeting 400 000 household upgrades by 2014
- Provides a holistic view to upgrading (not just houses)
- Aims to provide incremental upgrading of informal settlements to promote sustainability and economic and social integration
- Will relocate informal settlement dwellers to well-located land as a last resort



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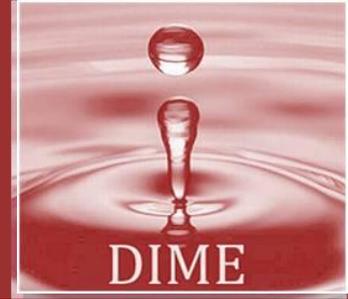
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Motivation for Study



- To develop sustainable human settlements we need to measure what is working, what is not and why in order to improve service delivery
- Difficult to isolate the impact of a human settlements program when multiple other projects and programs are regularly implemented
- We use an Impact Evaluation (IE) framework to measure the causal link between human settlements interventions and the improved lives of beneficiaries

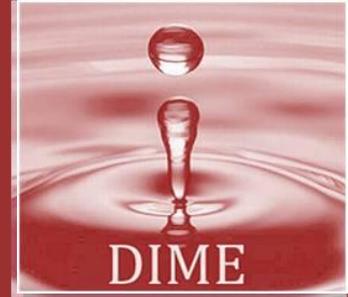
Incremental Upgrading



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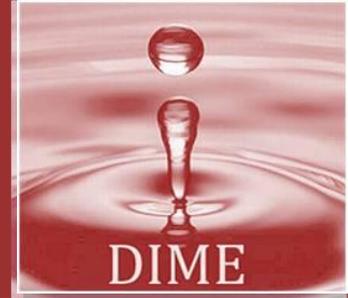
Interventions



Project Area	Intervention:	Intervention
Limpopo	Effect of relocation	Control: Informal settlement dwellers Treatment: HHs relocated 1 mile away to new, fully serviced houses
Free State	<i>In situ</i> upgrading	Treatment 1: Serviced stand Treatment 2: House on stand without sanitation

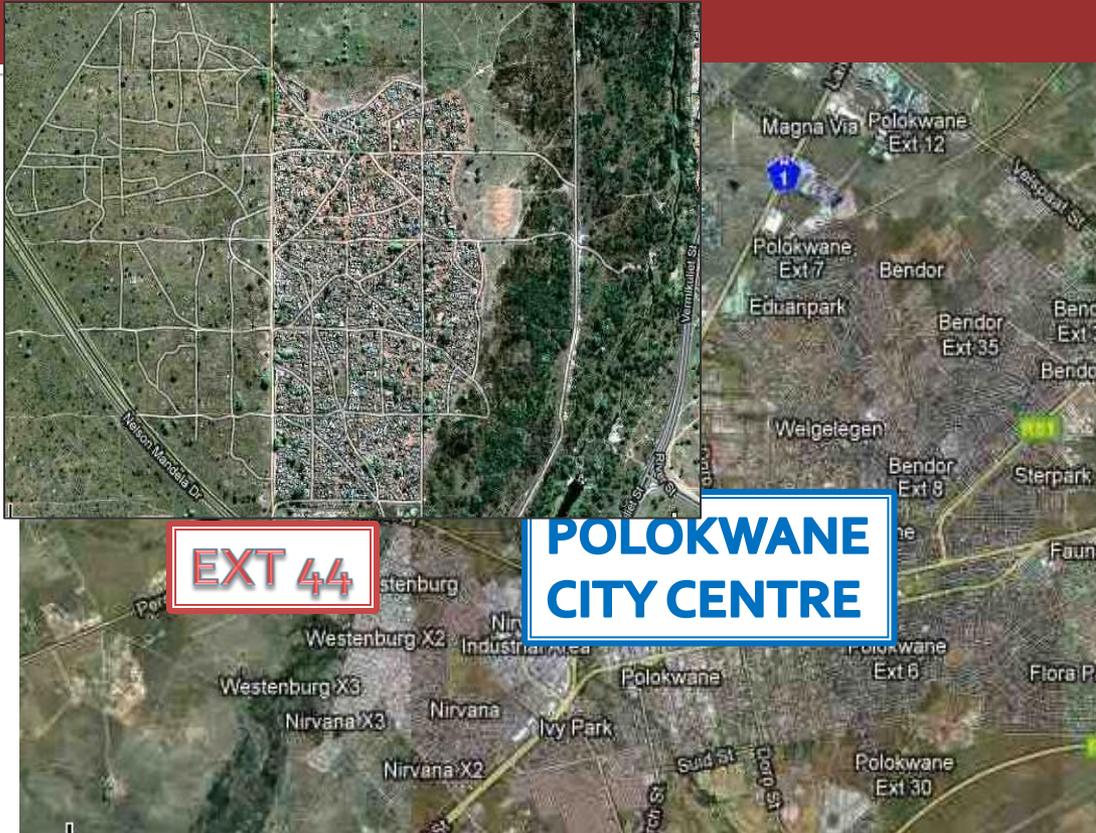
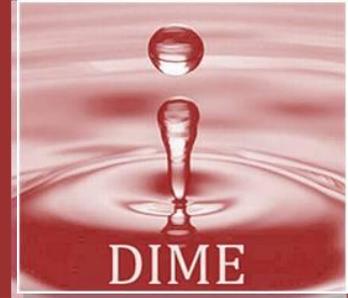


Indicators



- What impact has upgrading or relocation had on:
 - Health
 - Security
 - Education
 - Household Composition
 - Income and Expenditure Patterns
 - Employment
 - Child Development
 - Tenure Security and housing upgrades
 - Social Cohesion...
- ...for the recipients of the upgrading program?

Identification Strategy

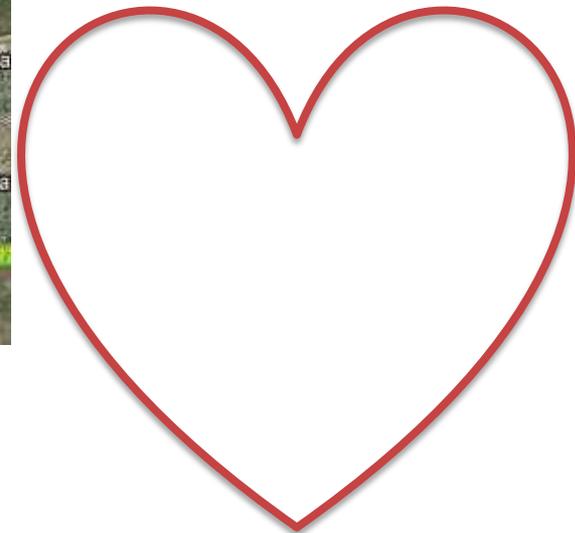


SAMPLE SIZES

Ext 44/76: 444

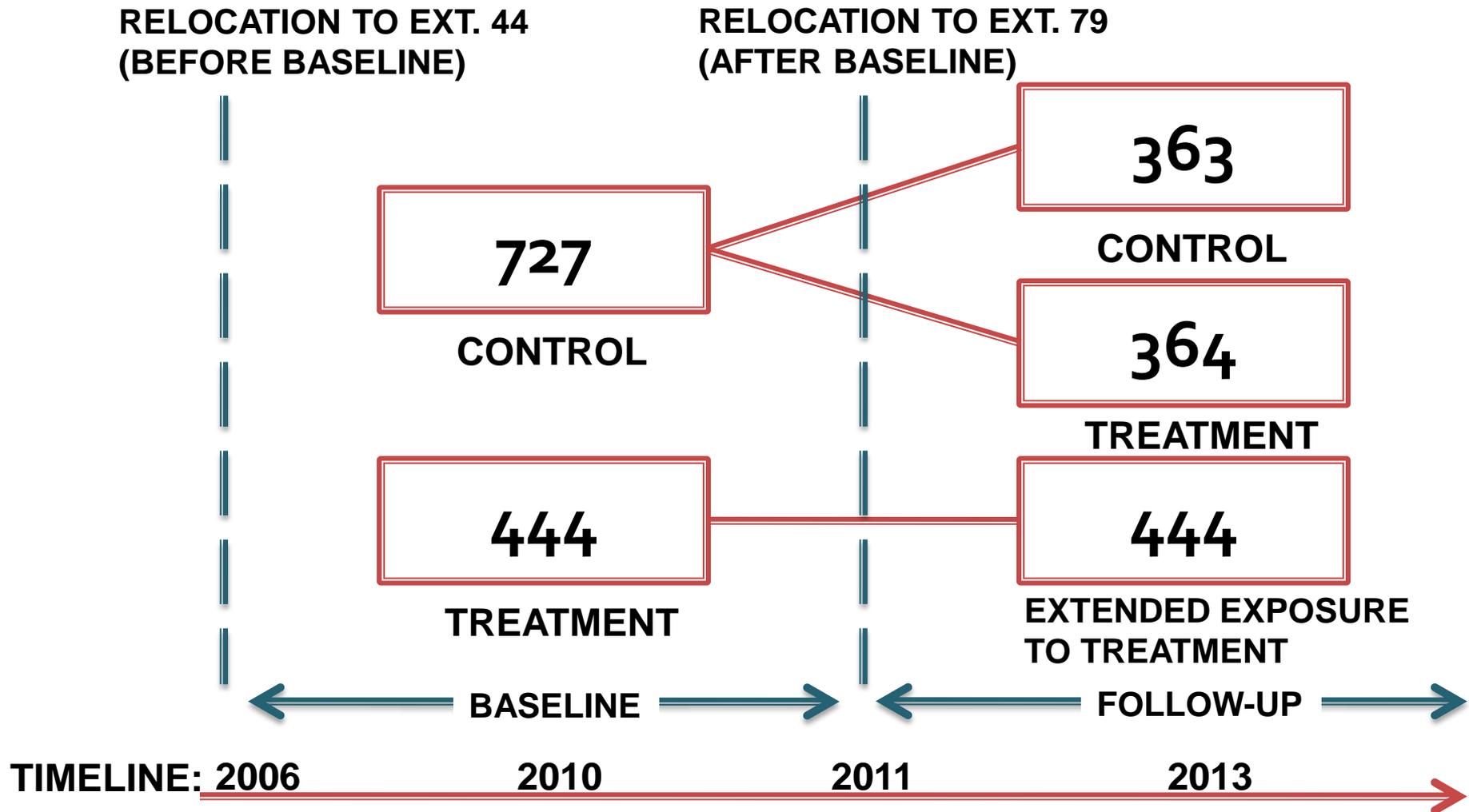
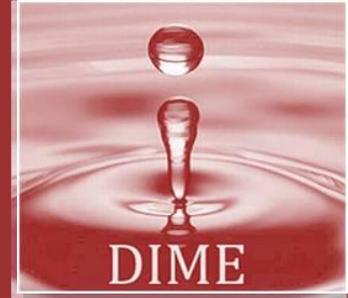
Disteneng: 727

TOTAL: 1171

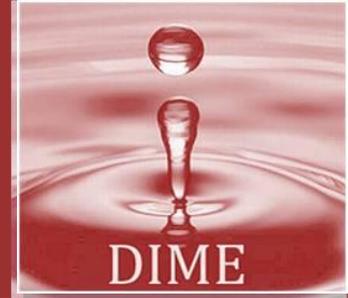


RELOCATED NOT
RELOCATED

Limpopo: Prospective Sampling Design



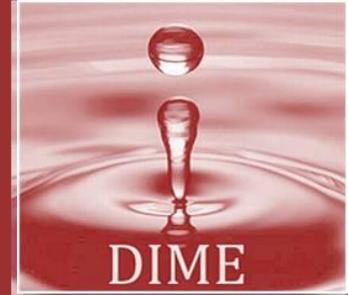
Caveats



- Difficulties with data collection in politically volatile areas (non response rates up to 15%)
- Identification strategy not foolproof
- Attrition rates and “household transfers” are common but very hard to measure
- Measures overall impact (ie. including the ring-fencing effects in Limpopo)
- Experimental prospective studies should be conducted to confirm results
- These results are NOT nationally, or provincially representative, but rather indicative

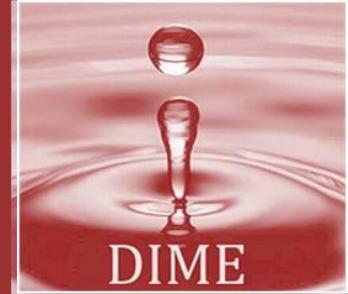


Structural Changes (relocation)



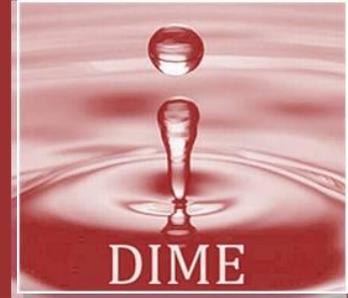
Indicator	Control	Treatment
Dwelling made from brick or concrete	2%	100%
Concrete floor	21%	94%
Iron roof	85%	98%
Number of sleeping rooms	1.08	2.07
Flush toilet	0%	90%
Electricity	0%	100%
Running water in property	3%	100%

Structural Changes (in situ)



Indicator	Treatment 1: Services	Treatment 2: Houses without sanitation
Dwelling made from brick or concrete	24%	100%
Concrete floor	9%	57%
Iron roof	90%	90%
Number of sleeping rooms	1.14	2.07
Flush toilet	95%	0%
Electricity	96%	97%
Running water in property	93%	42%

Overview of Results (1)



1. Child Health

Under 5 child health improves, but overall health for all HH members is unaffected (relocation)

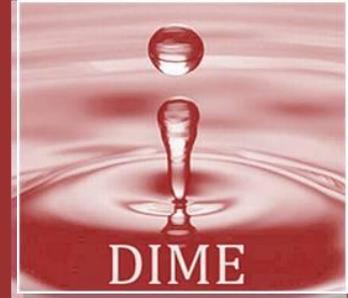
Serviced stand improves health more than unserviced GSH

2. Effects of Improved Tenure Security

Personal expenditure on house upgrading improves dramatically for formalized houses. Serviced stands in Free State exhibit mild levels of upgrading.

A major source of income for households in formalized settlements comes from “backyard rentals”

Overview of Results (2)



3. Asset Accumulation

New services (e.g. electricity) increase asset accumulation which increases over the long term, but asset accumulation is sustained through loans or credit

4. Crime Perceptions and Reality

Perceptions of improved security in the house and settlement improve significantly but household burglaries remain constant (relocation)

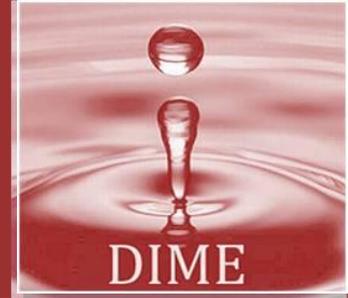
Initial evidence suggests an adverse affect to asset accumulation (from electrification) increases likelihood house will be robbed

5. Household Size

Household sizes increase as a result of the upgrading process and this household shift also changes community engagement patterns



Main Results



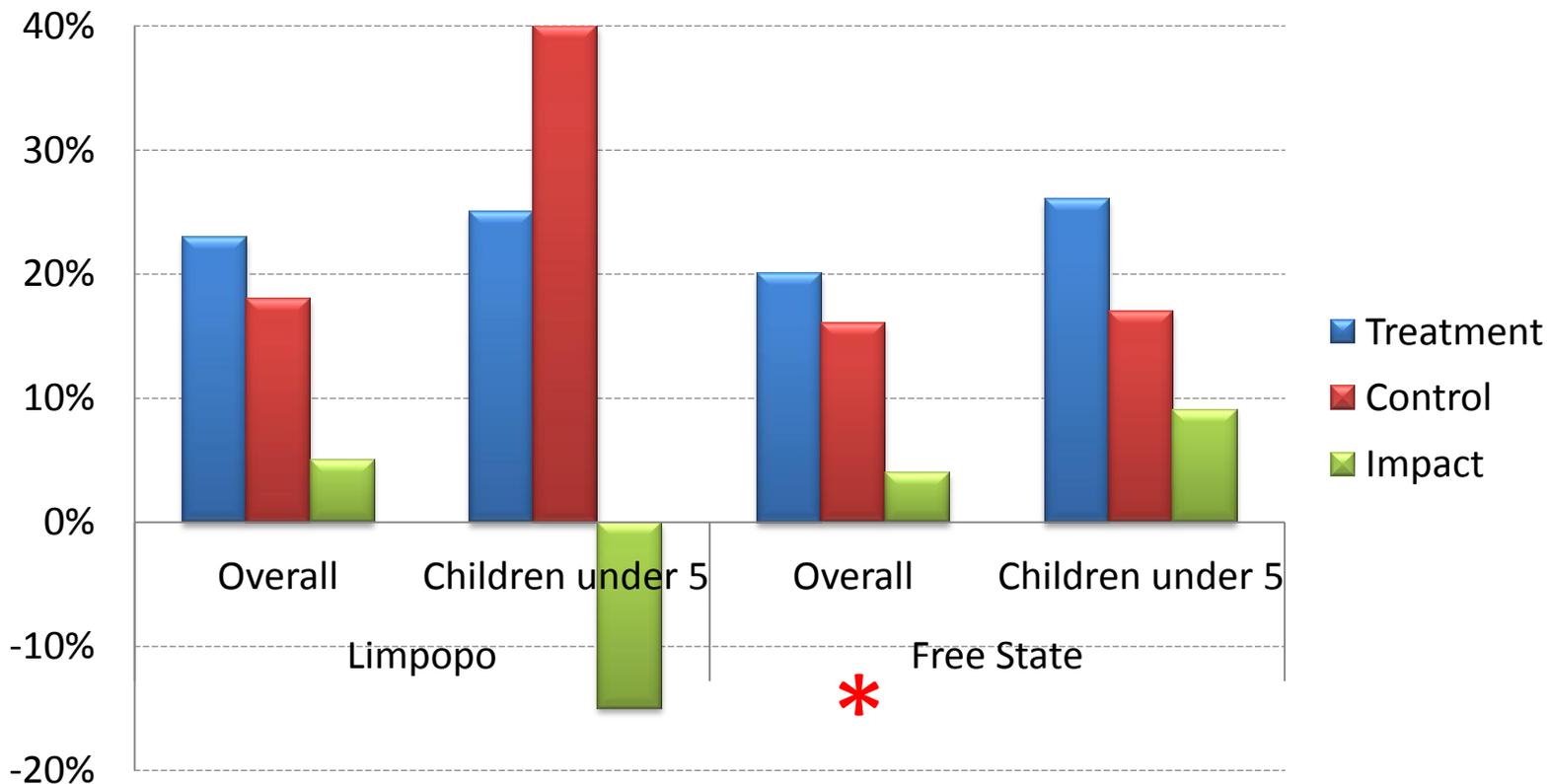
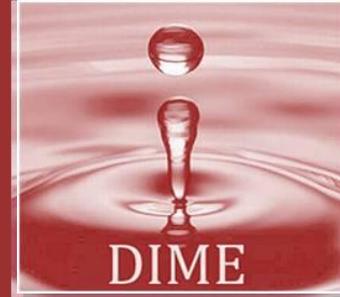
1. Child Health
2. Effects of Improved Tenure Security
3. Asset Accumulation
4. Crime
5. Household Sizes



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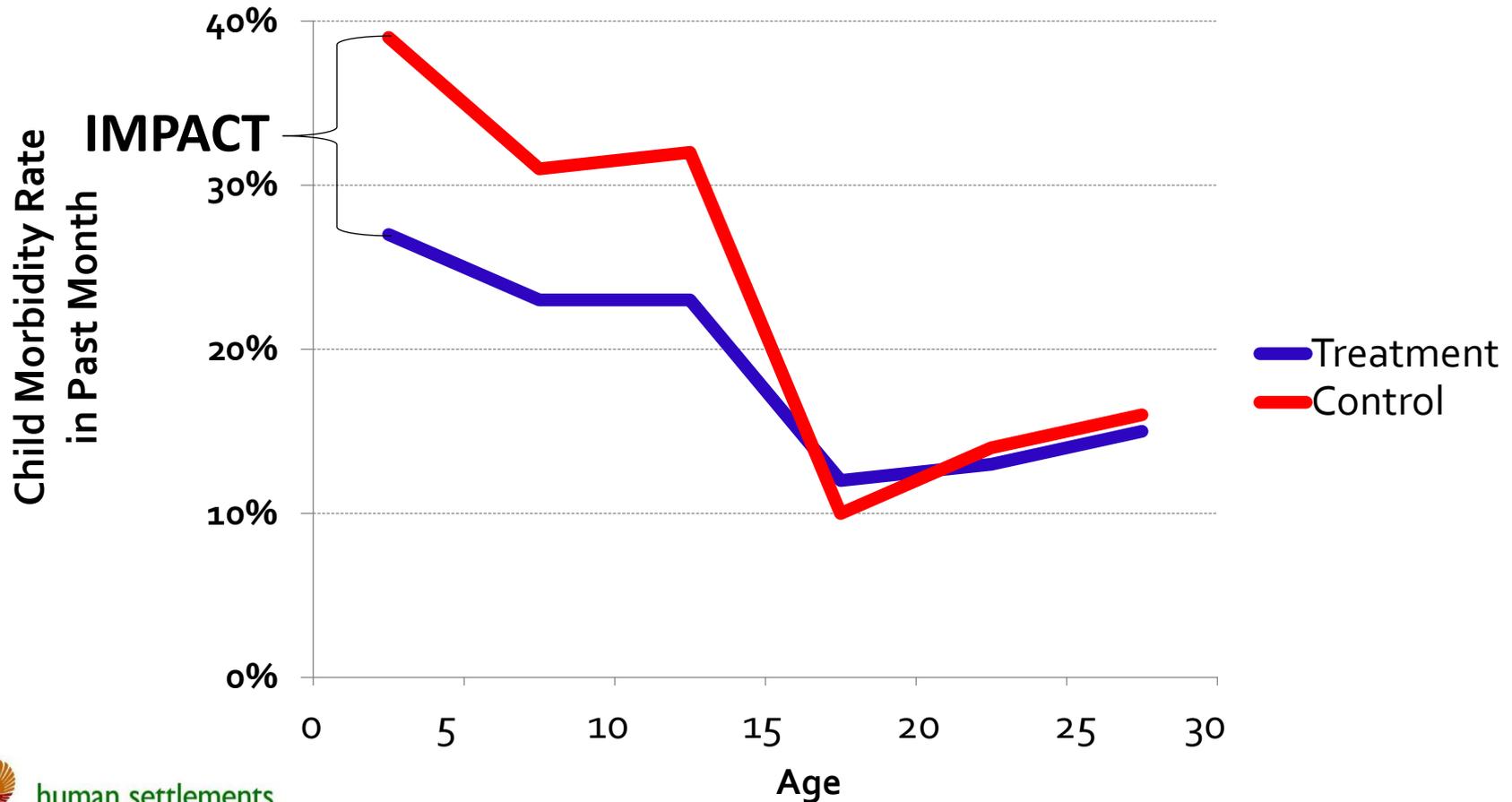
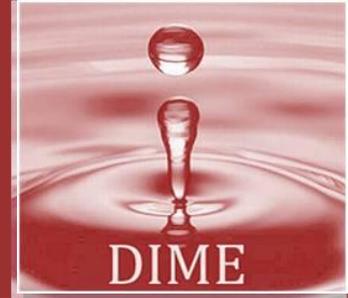
Morbidity Rates (LP, FS)



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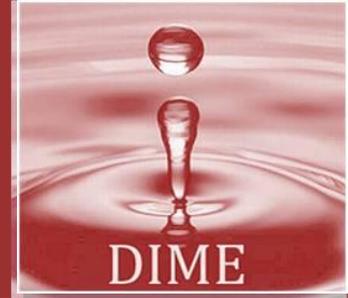
Limpopo Morbidity by Age



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Main Results



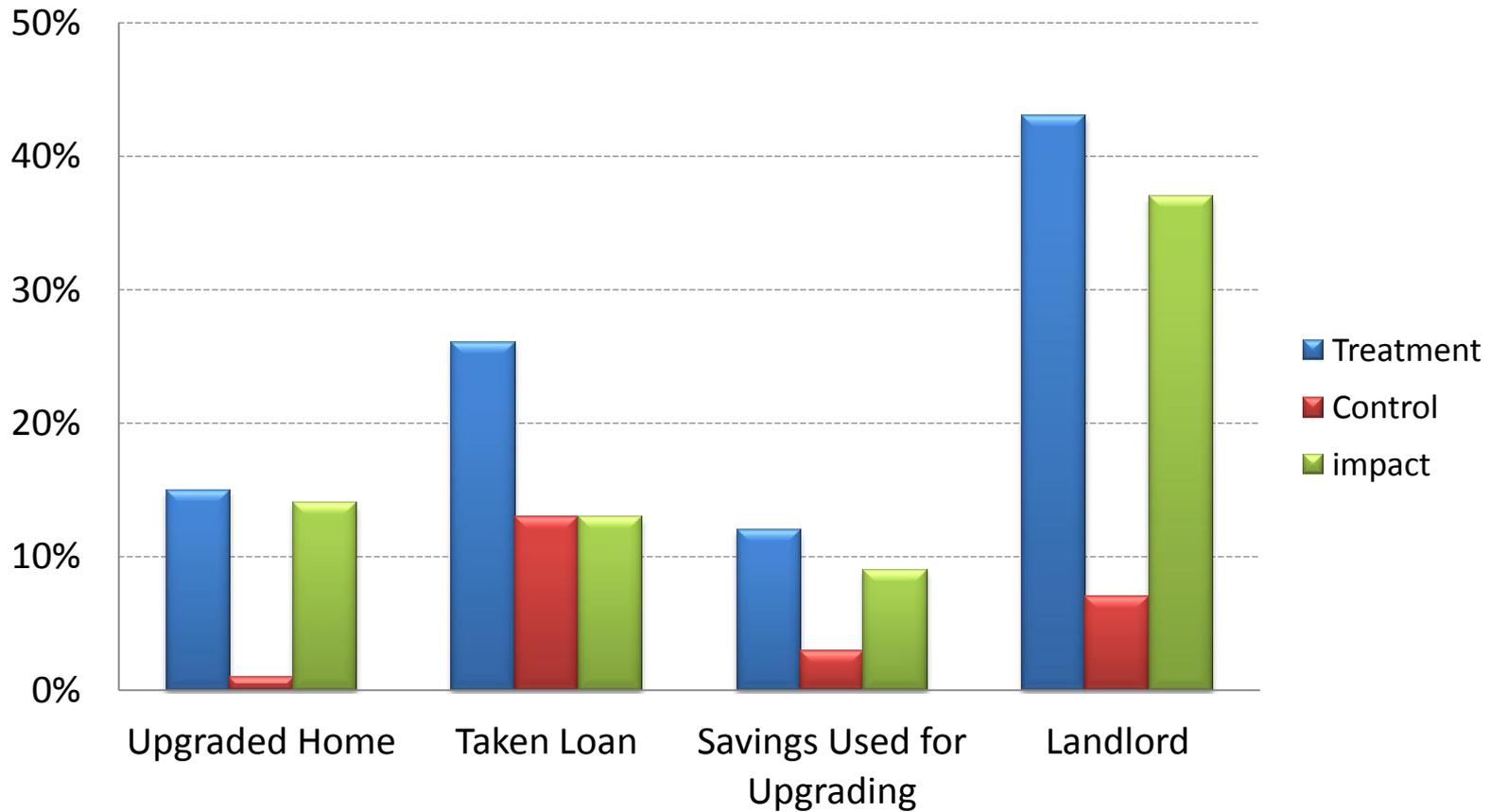
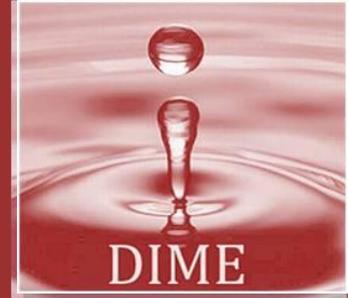
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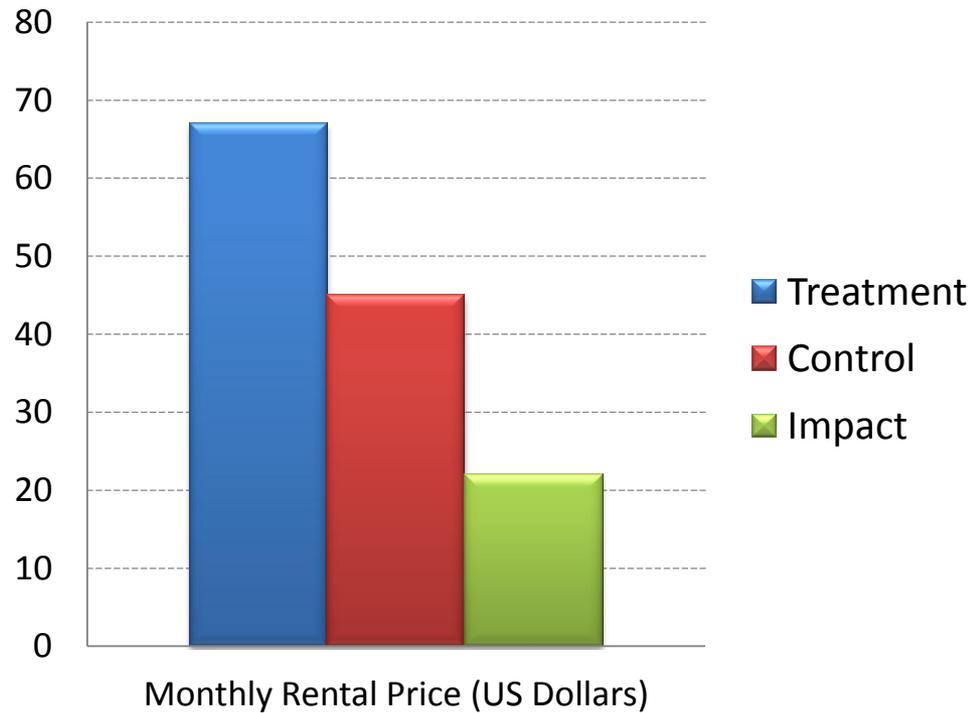
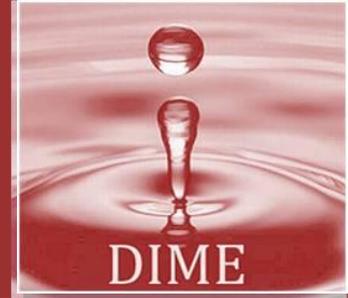
Effects of Improved Tenure Security (Relocation)



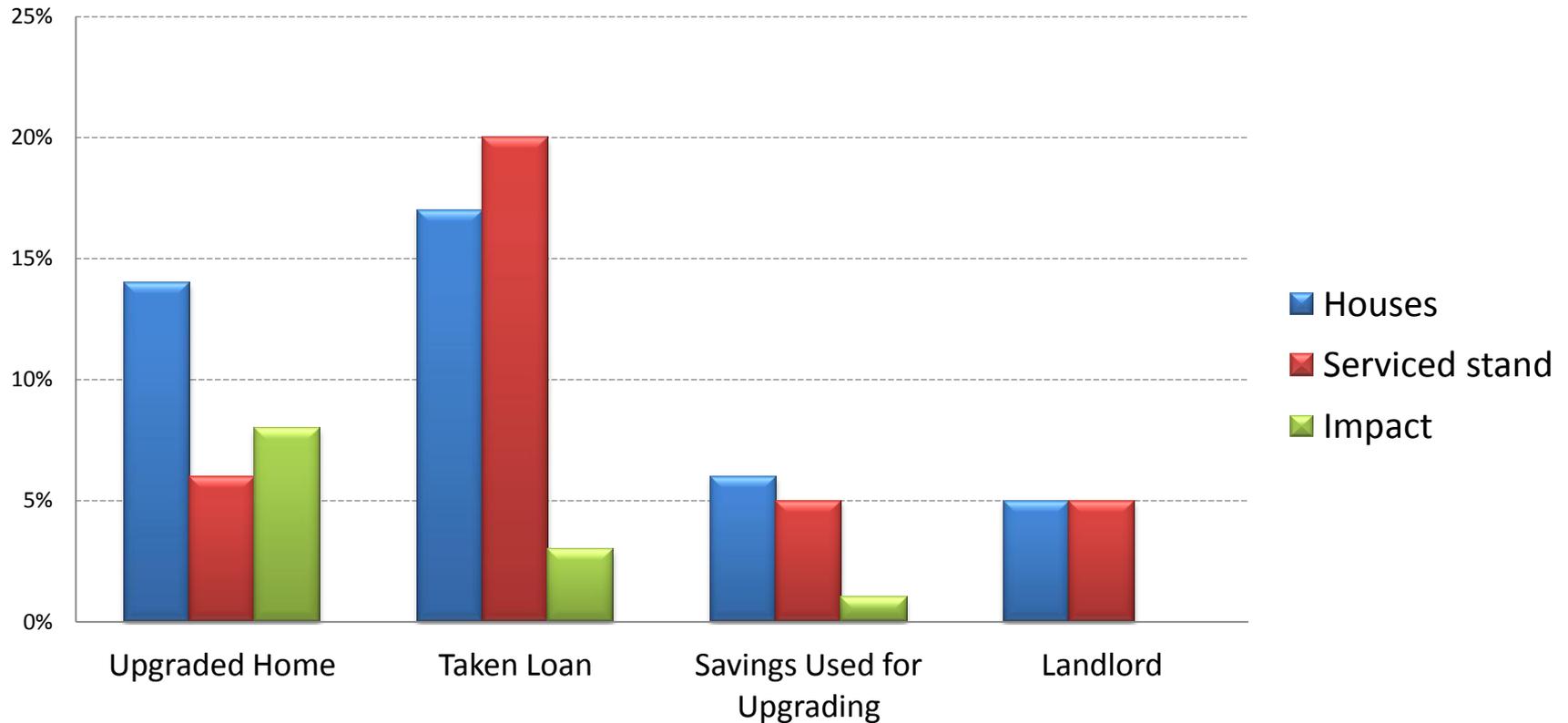
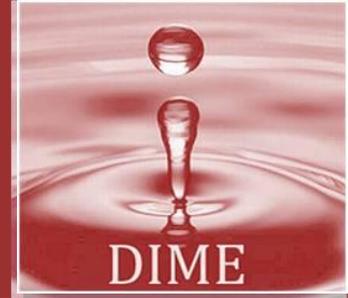
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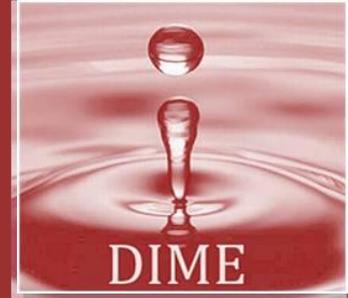
Rental Price



Effects of Improved Tenure Security (*In Situ*)

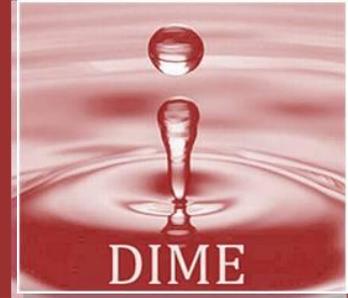


Recommendation 1:



Given the potential source of income, regulation and possible formalization rather than eradication of backyard rentals could be considered.

Recommendation 2:



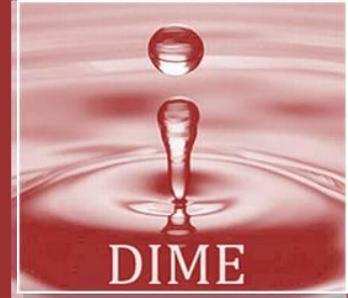
The final consolidation phase of the UISP (providing houses) can consider how best to complement, under certain circumstances, the upgrading that households already conduct on their serviced stands.



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Main Results



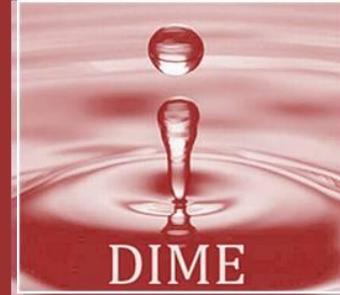
1. Child Health
2. Effects of Improved Tenure Security
3. **Asset Accumulation**
4. Crime
5. Household Sizes



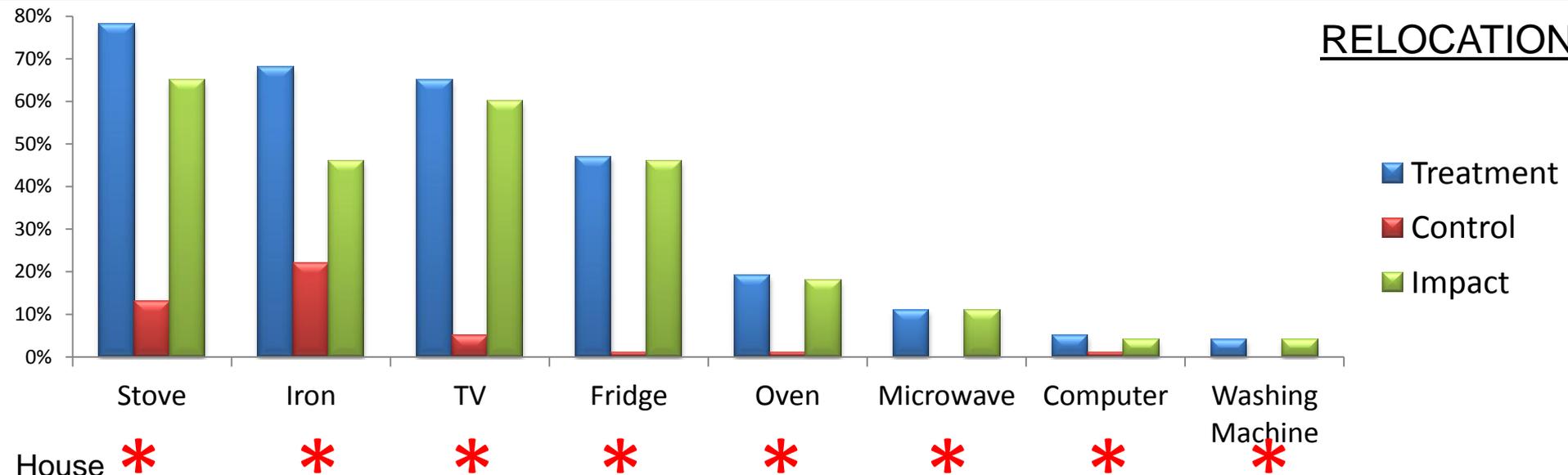
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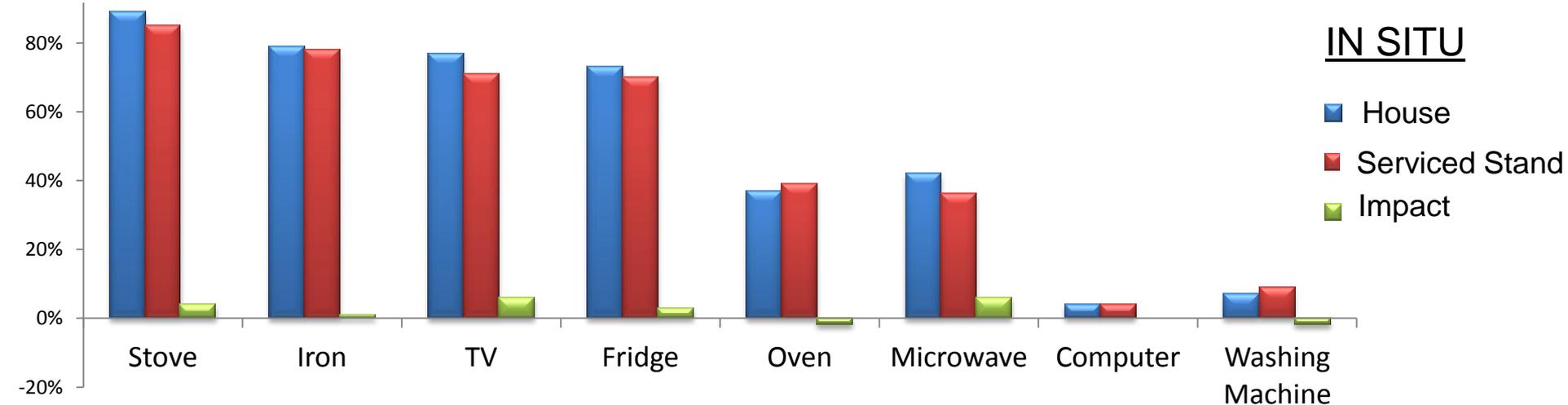
Asset Accumulation



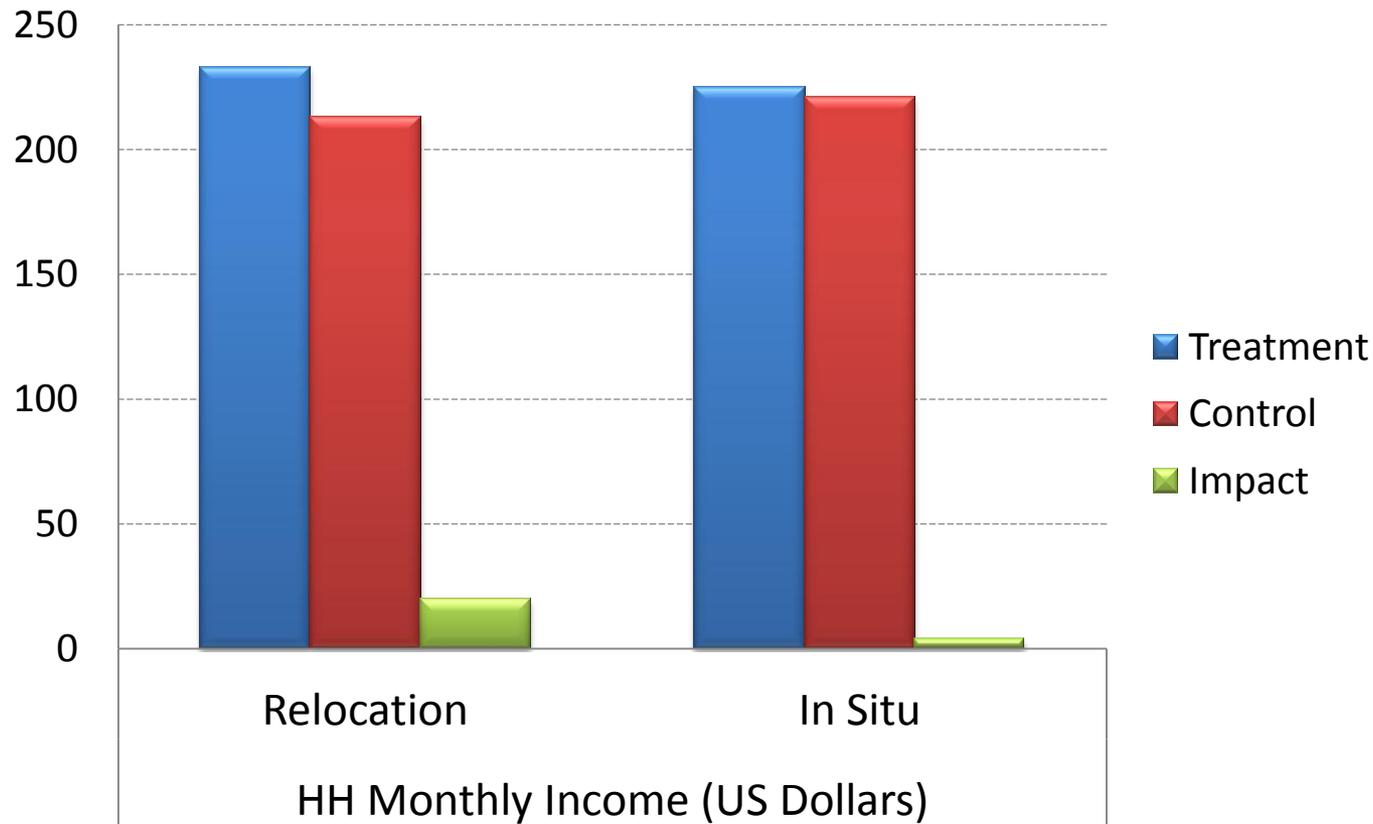
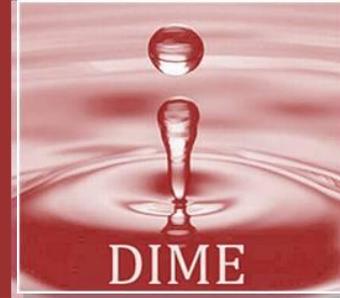
RELOCATION



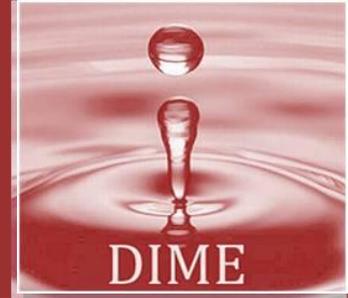
IN SITU



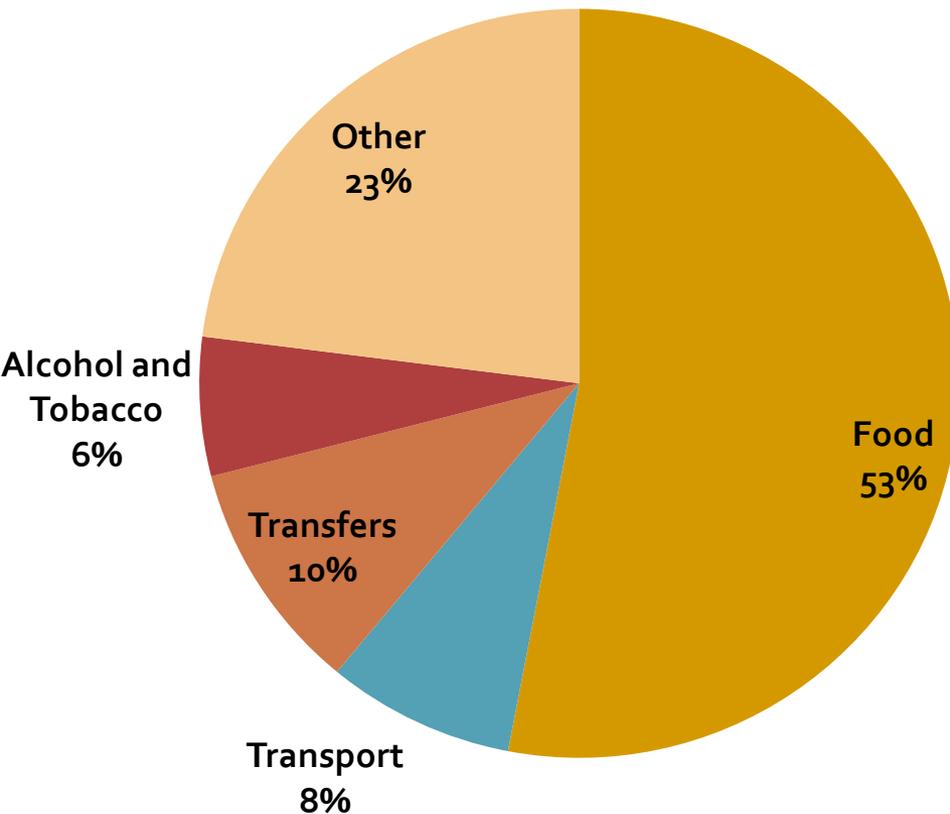
Household Income



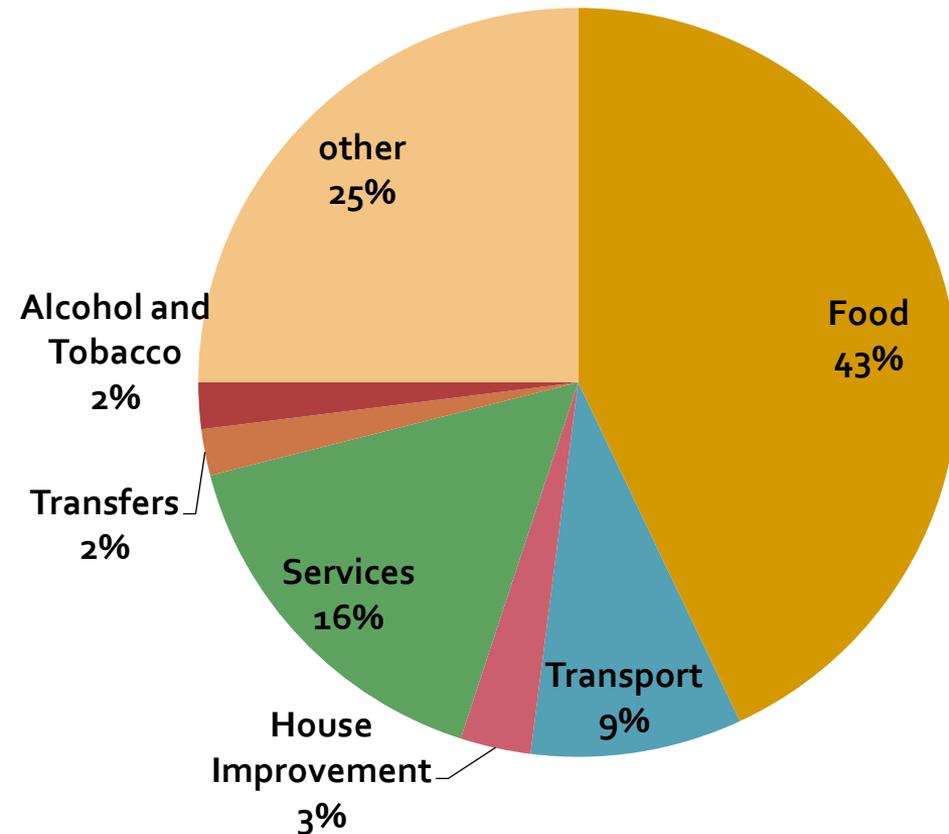
Expenditure Patterns (Relocation)



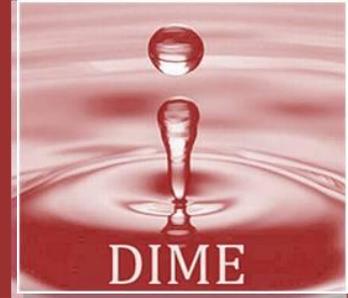
CONTROL



TREATMENT



Recommendation 3:



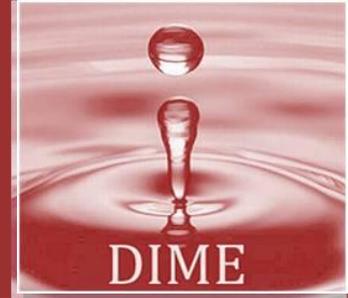
Households should be provided with financial awareness support when upgrading takes place to ensure that their resultant increases in expenditure are sustainable and do not impose heavy debt burdens on themselves or the Municipality



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Main Results



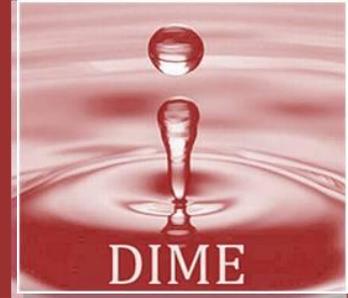
1. Child Health
2. Effects of Improved Tenure Security
3. Asset Accumulation
4. **Crime**
5. Household Sizes



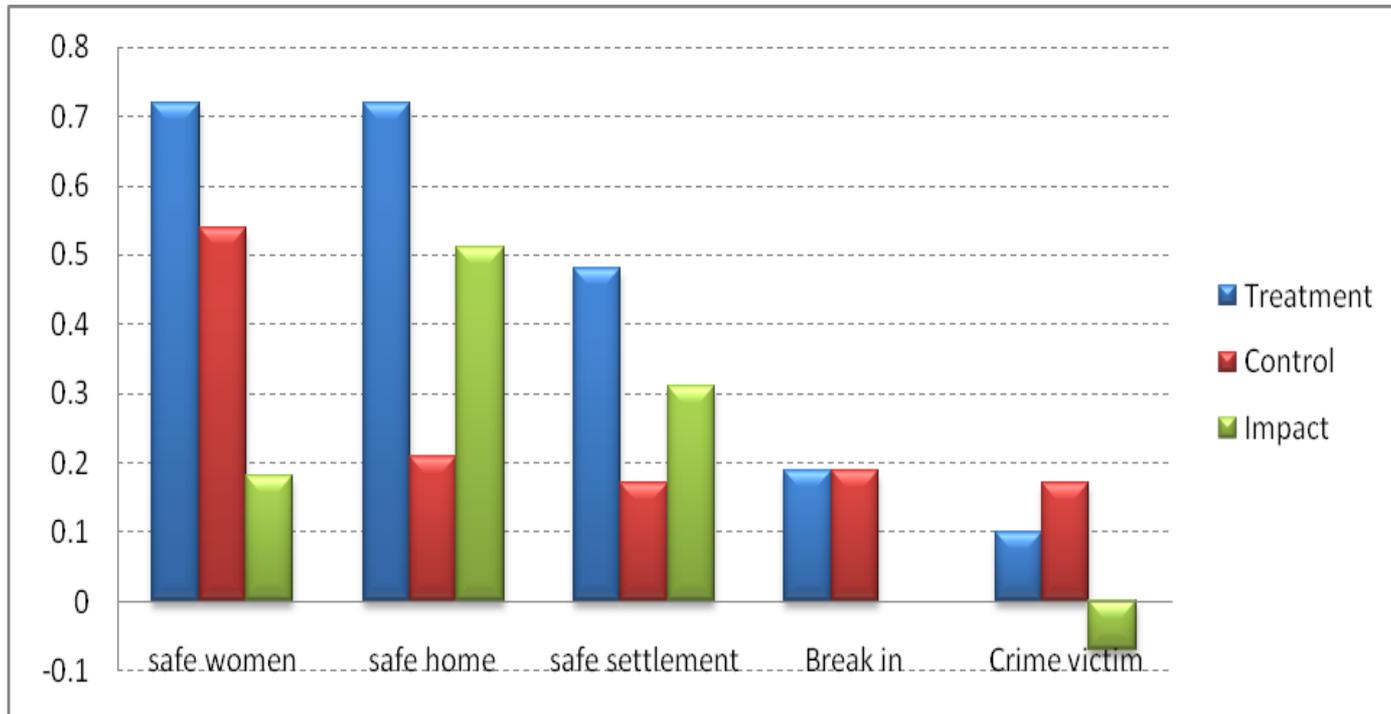
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Crime: Perception and Reality

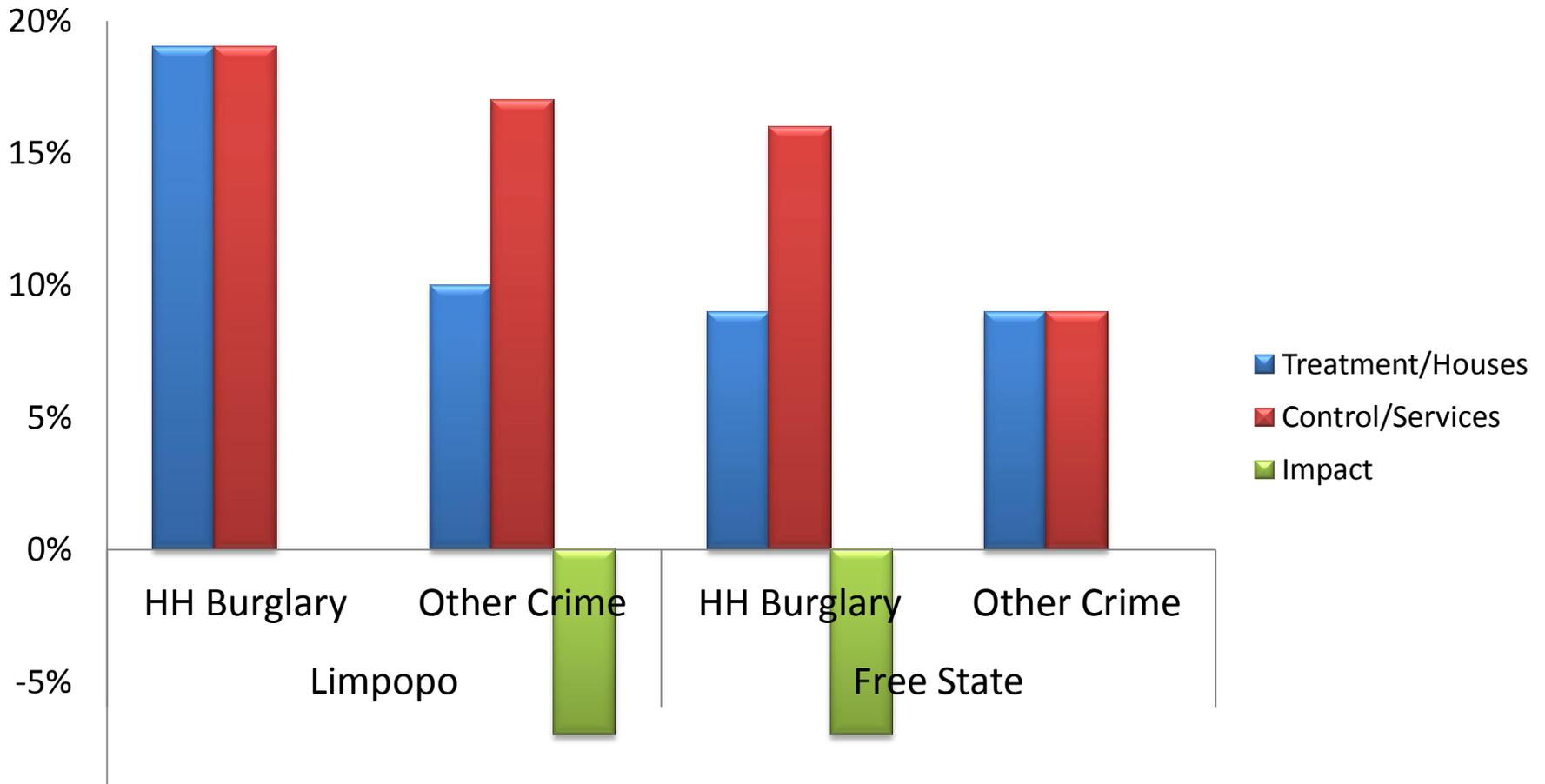
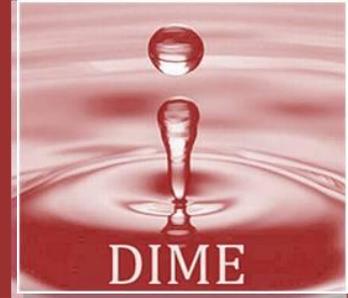


RELOCATION

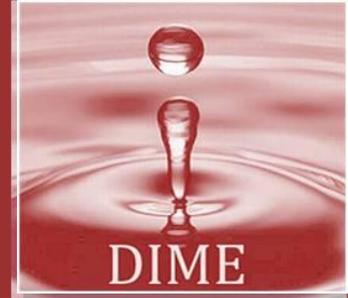


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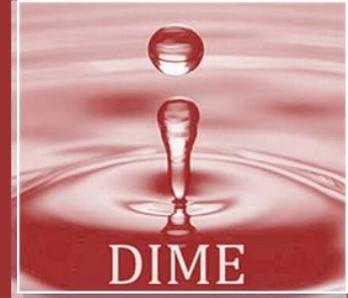


Recommendation 4



Incremental upgrading (especially the provision of electricity before top structures) should take special care to account for the potential of increased household burglaries resulting from asset accumulation

Main Results



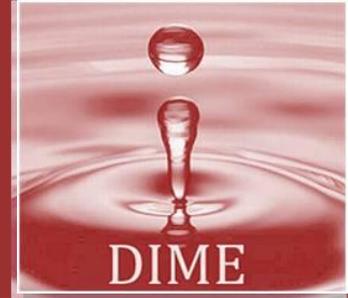
1. Child Health
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Household Size

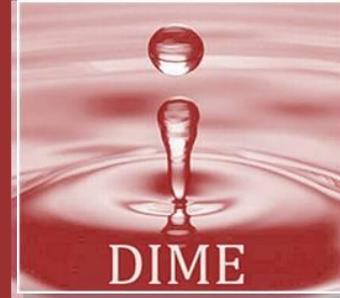


Little difference in Free State, but significantly larger HH sizes for unserviced houses (4.14) than serviced stands (3.65)

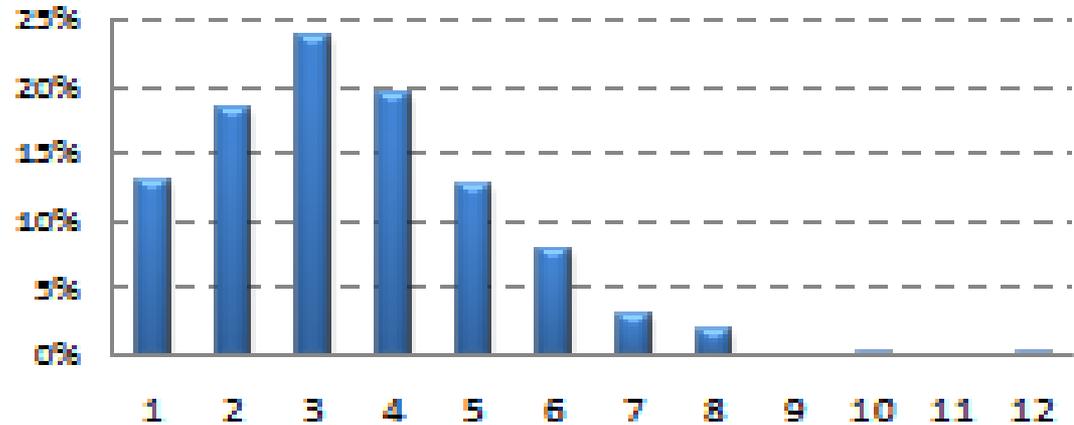
Impacts for relocation:

Indicator	Treatment	Control
HH size	3.86	1.84
Spouses staying with HH Head	85%	54%
Transfers as % of expenditure	2%	11%
% of HHs with children at house	65%	23%
% HHs getting child support grants	55%	34%

Household Size (Cont.)

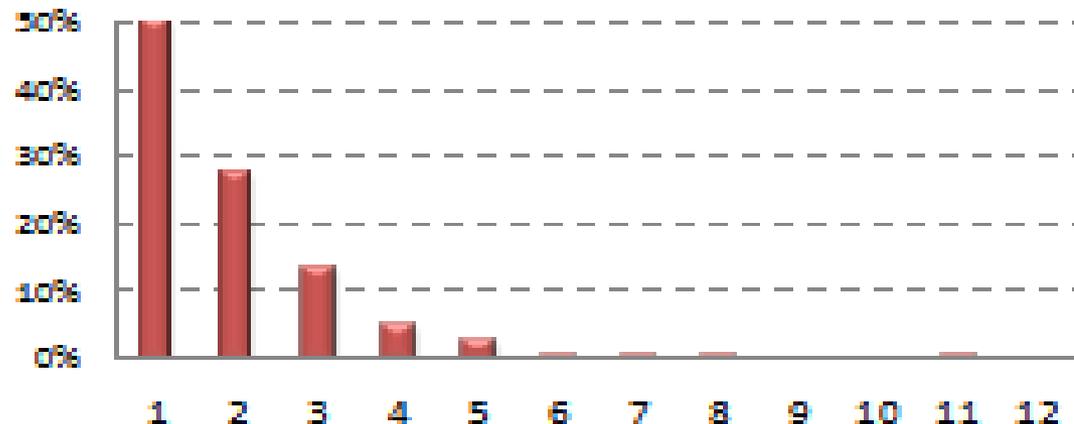


TREATMENT



Household Size for Treatment Group

CONTROL



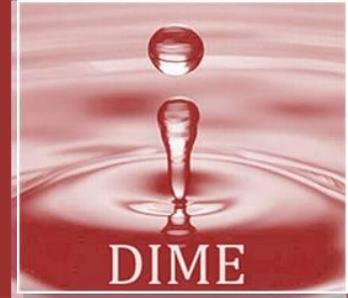
Household Size for Control Group



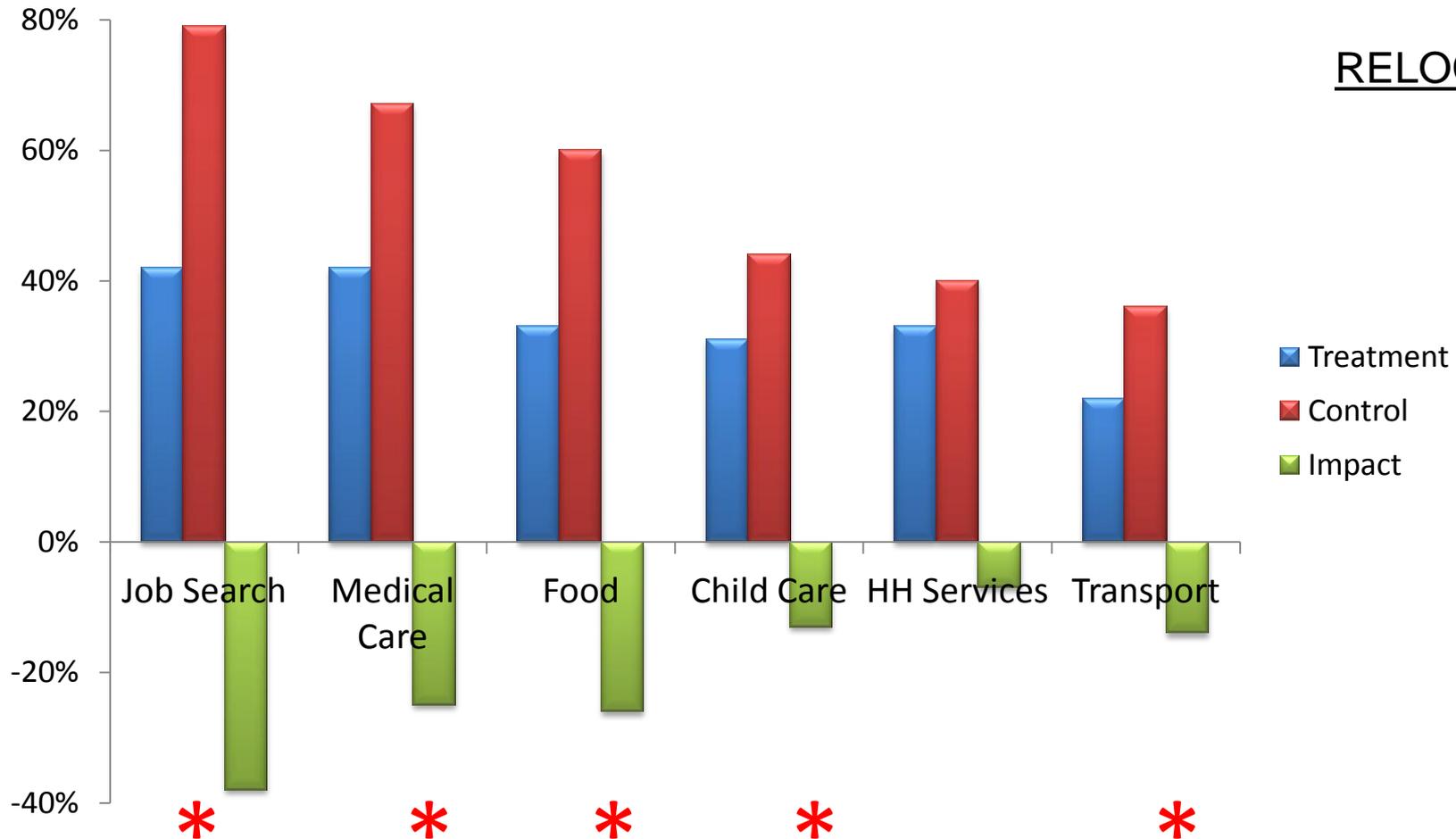
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Social Interactions: Reliance on Neighbors



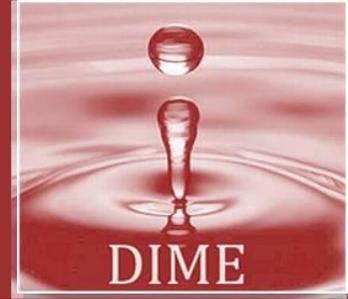
RELOCATION



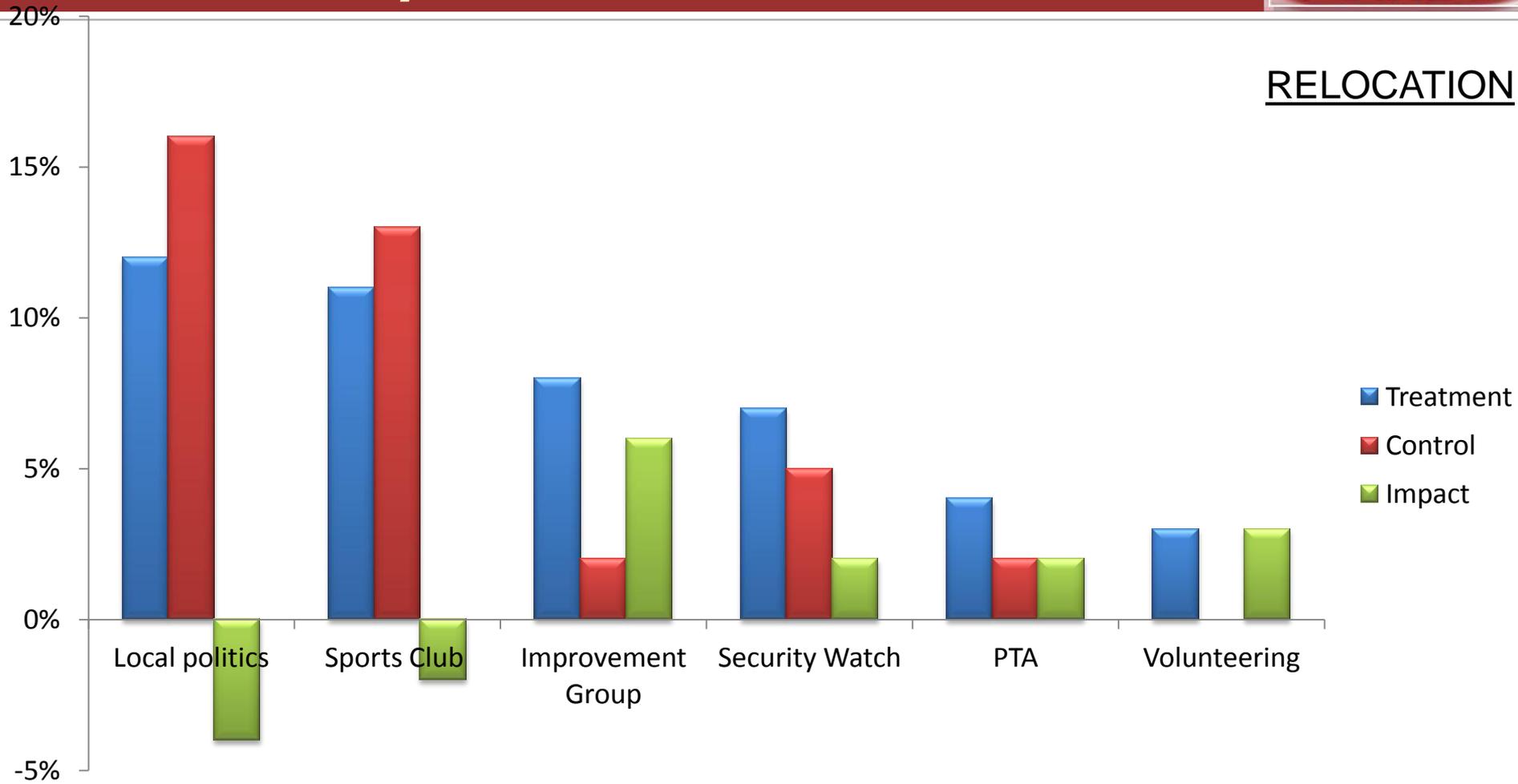
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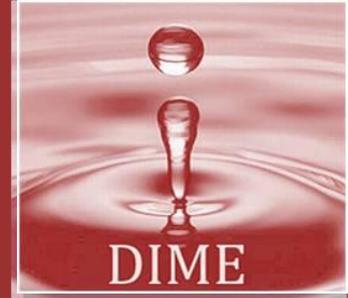
Social Interactions: Community Involvement



RELOCATION



Recommendation 5:



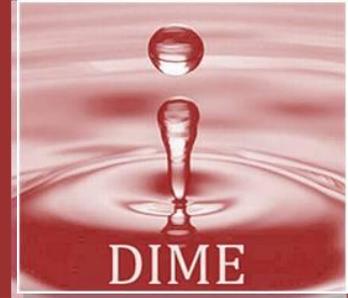
Careful planning should be done to develop the required social amenities and estimate expected utility usage when upgrading a settlement to account not only for the *current* residents, but also the potential influx of *new* residents that join households as a direct result of upgrading interventions



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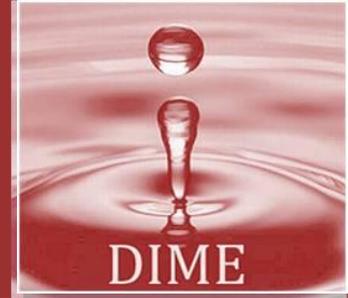
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Summary of Results



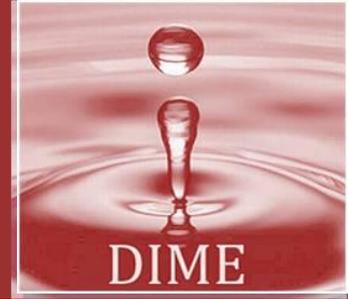
- The research has found strong program impacts in a number of areas including:
 - Household demographics and social cohesion
 - Asset accumulation and financial stability
 - Child health outcomes
 - Crime perceptions
 - Household upgrading and rental practices

Moving Forward



- So we have some numbers. What now...?
- These results are meant to stimulate debate and are not authoritative
- Further studies should build on this to guide future research, policy and implementation debate within an **evidence-based** framework

Contacts



Thank You

For more information:

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