The Design of Social Protection Programs for the Poor:

In-Kind Asset Transfers versus Unconditional Cash Transfers

Imran Rasul, Orazio Attanasio [UCL]
Oriana Bandiera, Robin Burgess, Adnan Qadir Khan [LSE]
Schanzah Khalid [CERP]

Pakistan Poverty Alleviation Fund
Restoring Hope, Securing the Future, Ending Poverty

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Catalyzing Rigorous Policy Research

Social Protection Programs

- **This study:**
- compare household responses to **in-kind asset transfers** vs. **unconditional cash transfers**

- design of SPP is a **key policy** issue for many countries:
  - evidence base on high returns to asset transfers [Banerjee et al. 2015, Bandiera et al. 2015]
  - emerging evidence on the efficacy of UCT [Blattman et al. 2014]

- Pakistan policy debate: BISP UCT, in-kind asset transfers…

- **Economic theory:** with perfect markets and standard decision making processes, always possible to **perfectly replicate** outcomes from in-kind transfers using UCT

- Implication: can never do worse with UCT

Why Might Returns to In-kind and Cash Transfers Differ?

- market imperfections faced by the poor:
  1. transactions costs in accessing markets: distance/time
  2. missing/imperfect markets: skills, information [Das et al 2005, de Janvry and Sadoulet 2005]
  3. informal taxation by kin (imperfect market for social insurance) [Fafchamps et al. 2013, Angelucci et al. 2015]

- decision making of the poor:
  4. household decision making: marital preferences/bargaining
  5. individual (unitary) decision making:
     - labelling/mental accounting/flypaper effects
     - commitment/self-control
     - demand for control

Policy Issues for Choice Between In-Kind and UCT

- **political support** among non-beneficiaries might hinge on in-kind over cash

- **endorsement effects** of in-kind (or labelled) transfers
  [Benhassine et al. 2013]

- in-kind transfers more **costly to implement** than UCT
  - parallels to literature comparing CCT and UCT

- Our study: understand how such concerns might need to be weighed against the <u>differential effectiveness</u> of the two types of SPP

PPAF Intervention Components

- HH listing in each village [poverty scores 0-100]
- Eligible households: poverty score 0-18
  - the poorest 30% of households

- Market assessment in all villages
- T1: choice of in-kind transfer from asset menu
  - household can choose **multiple** asset-skill bundles up to the value of PKR62K
- T2: same choice but with one more listed option
  - equivalent valued UCT [PKR62K]

Example of a Village Asset List

Livestock	Retail	Crop Farming	Non-Livestock Production
Goat Raising (One Goat @ 15k)	Grocery Shop (material up to 50k)	Cultivation of cotton (seeds 20k + fertilizer 15k)	Tailoring (Sewing machine 6k + table 4k)
Dairy Farming (One Cow @ 48K)	Fruit Stall (Stall @ 5k + Fruit up to 45k)	Pesticides @ 50k	
Calf Rearing (One Calf @ 25k)	General Store @ 50k		
Fodder @ 50k	Barber Shop @ 35k		
Veterinary Medical Store @ 50k	Carpenter Shop @ 30k		
Animal Breeding Shop @ 40k	Cycle Repairing Shop @ 35k		

- Household can choose **multiple asset bundles** up to the value of **PKR50K**
- **Fine tuning:** prices shown are indicative average values, but lots of variation (e.g. depending on age and breed of cow: 30-70K)
- Associated training always valued at additional **PKR12K**

Surveys and Timeline

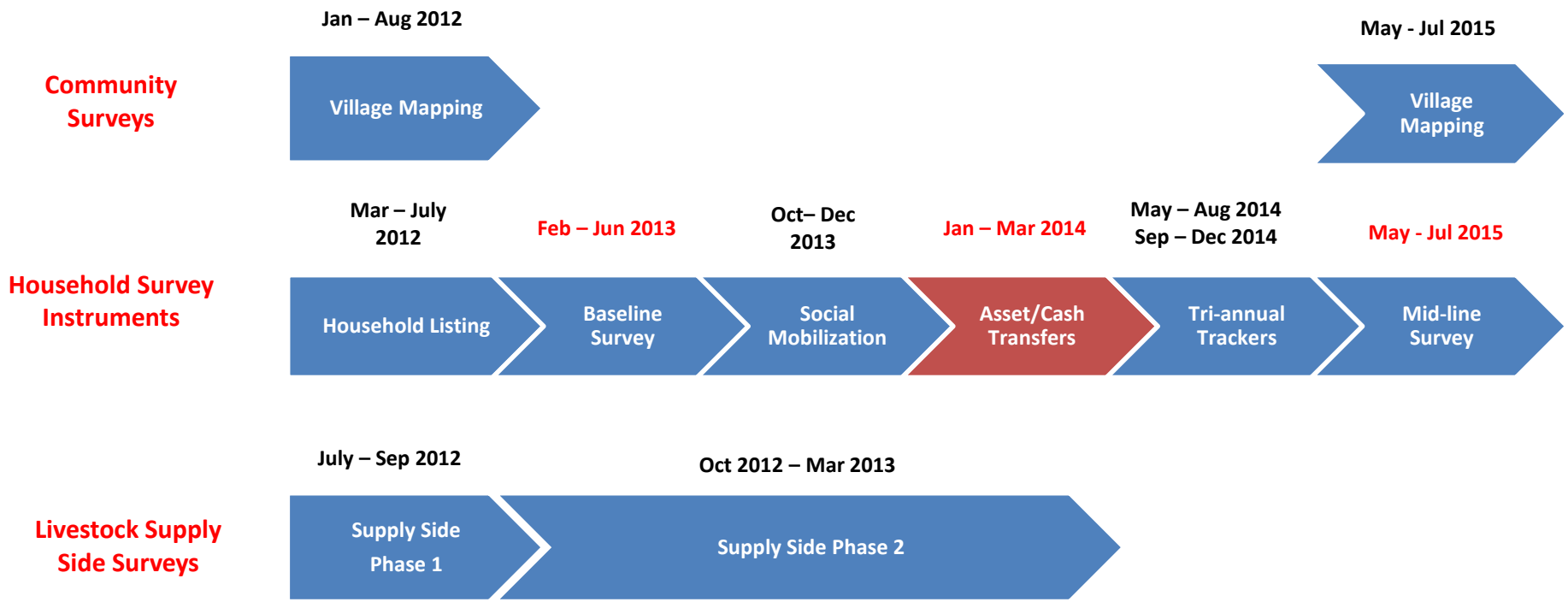
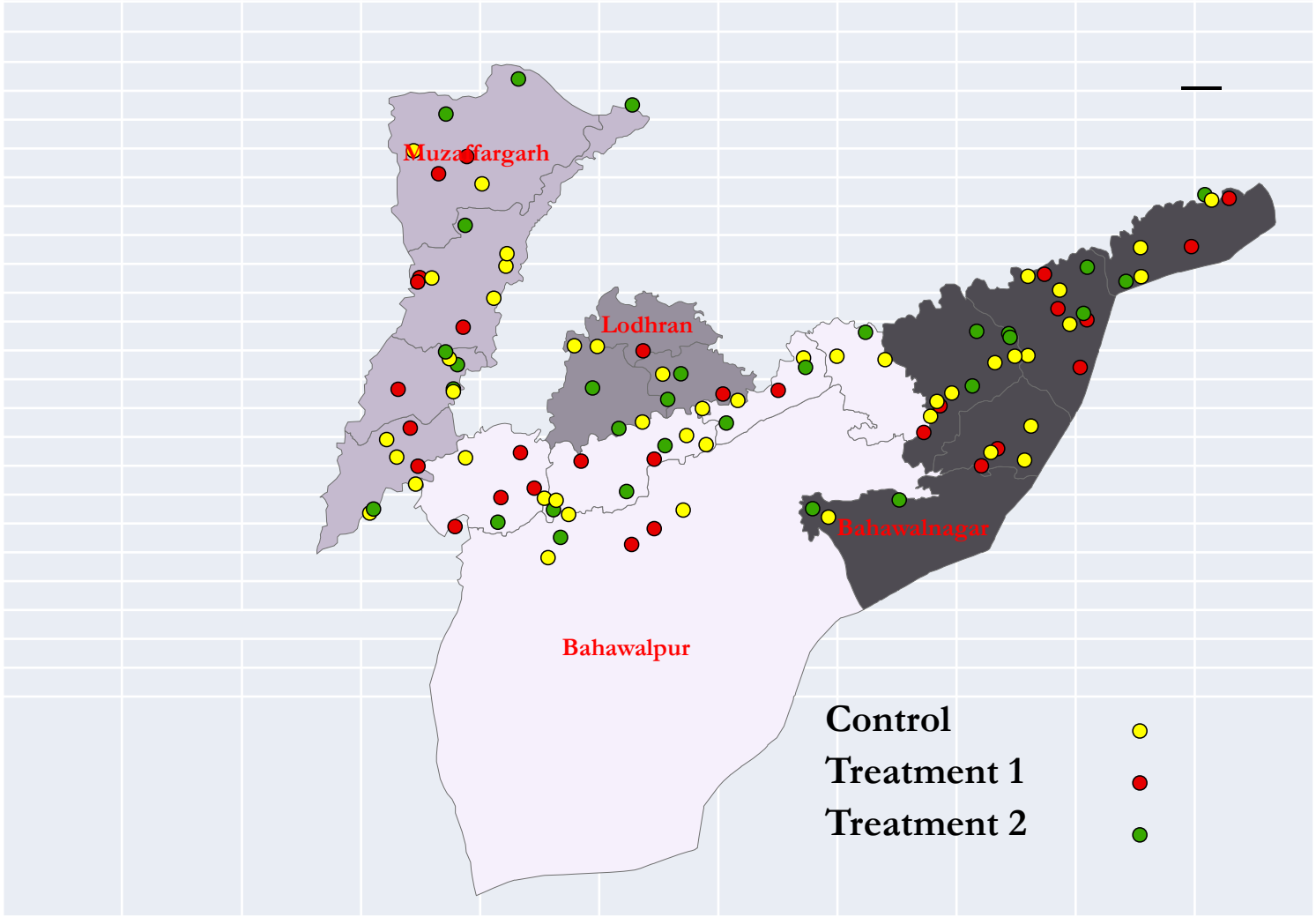


Fig 1: Study Area and Sample Villages, by Treatment Status



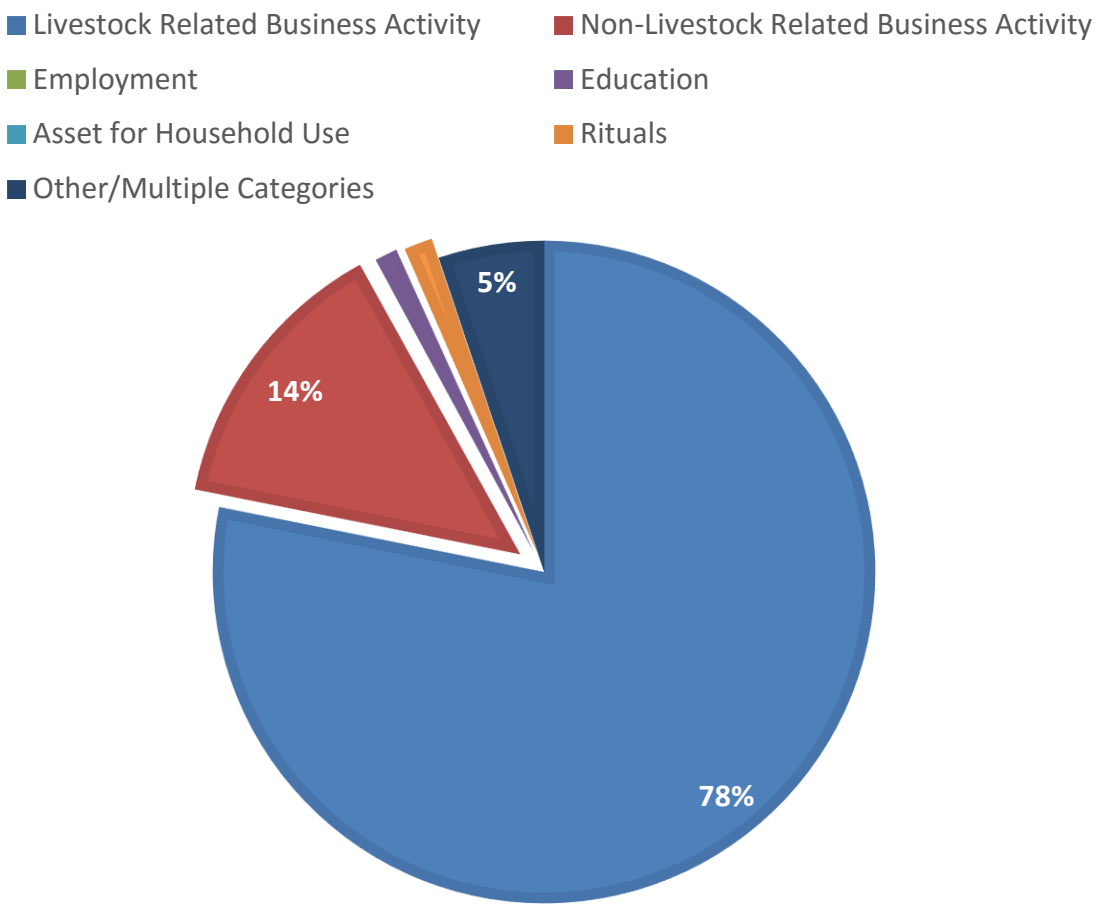
Notes: The map shows the study area covering four districts in Punjab. There are 45 Control villages and 58 Treatment villages. Treatment villages are divided between 29 villages in Treatment group 1 (receiving the offer of in-kind asset transfers and associated training), and 29 villages in Treatment group 2 (receiving the offer of in-kind asset transfers and associated training, or the equivalent unconditional cash transfer).

- Stratified random sampling: strata are geography and village size
- **[Table 1: Random Assignment – villages and households look identical before the intervention]**

Asset Choices

	Treatment 1		Treatment 2	
	Number of HHs	Percentage	Number of HHs	Percentage
Asset Category				
Livestock: Productive Animals	518	58.5	18	1.9
Livestock: Draft Animals	222	25.1	10	1.1
Livestock: Combination	29	3.3	4	0.4
Retail	84	9.5	3	0.3
Crop farming	8	0.9	0	0.0
Other Asset Choices	24	2.7	0	0.0
Cash			912	96.3
Total	885	100	947	100

T2: Intended Use of UCT



Not much intention to use UCT for assets we did not offer (e.g. education, migration)

T2: Actual use of UCT

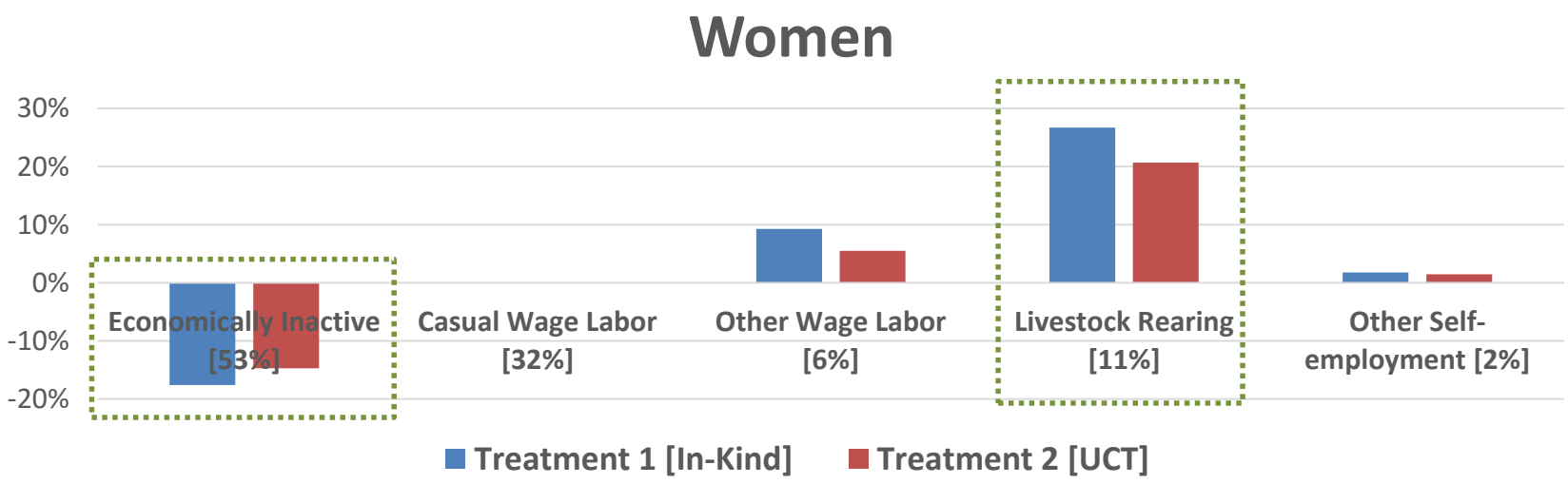
Livestock Choices/Purchases				
Means, standard deviation in parentheses				
	Proportion of HHs that Chose Animal		Average Price per Animal (Rs)	
Animal Type	(1) Treatment 1 [In-Kind]	(2) Treatment 2 [UCT]	(3) Treatment 1 [In-Kind]	(4) Treatment 2 [UCT]
Cows	**.228**	**.201**	**48,643**	**50,810**
	(.420)	**(.401)**	**(2,372)**	**(16,264)**
Calves	.447	.158	27,818	20,712
	(.498)	(.365)	(8,418)	(12,229)
Buffaloes	.060	.030	43,053	59,609
	(.237)	(.171)	(10,188)	(26,099)
Goats	.186	.145	14,898	10,919
	(.390)	(.353)	(10,389)	(7,621)
% HHs with livestock transfer/purchase	86.9%	**46.1%**		

more variation in prices paid for livestock with UCT

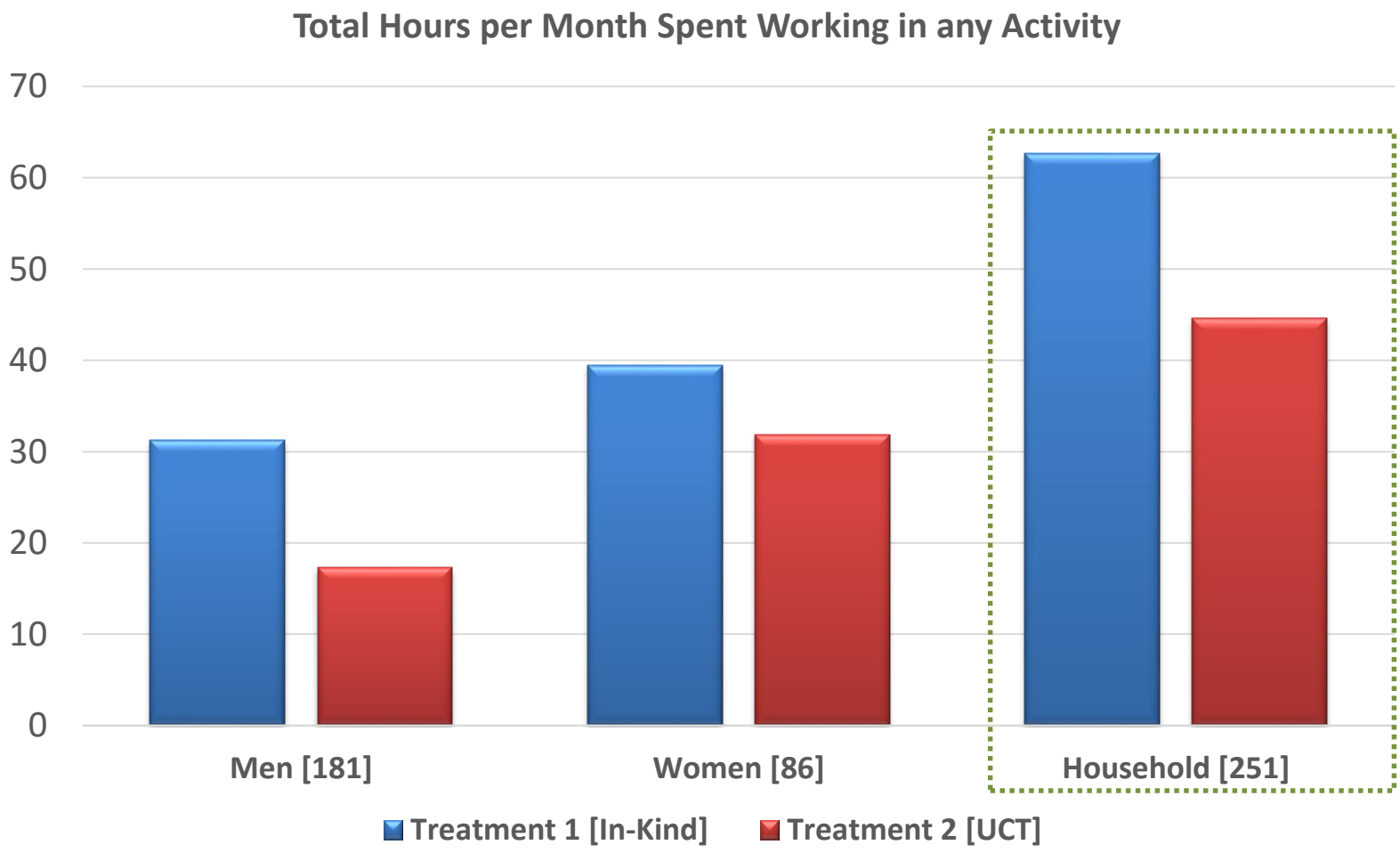
Very Short Run Impacts [one year]

- Labor market activity by spouse:
  - extensive margin
  - intensive margin
- Expenditures:
  - consumption, savings, investment

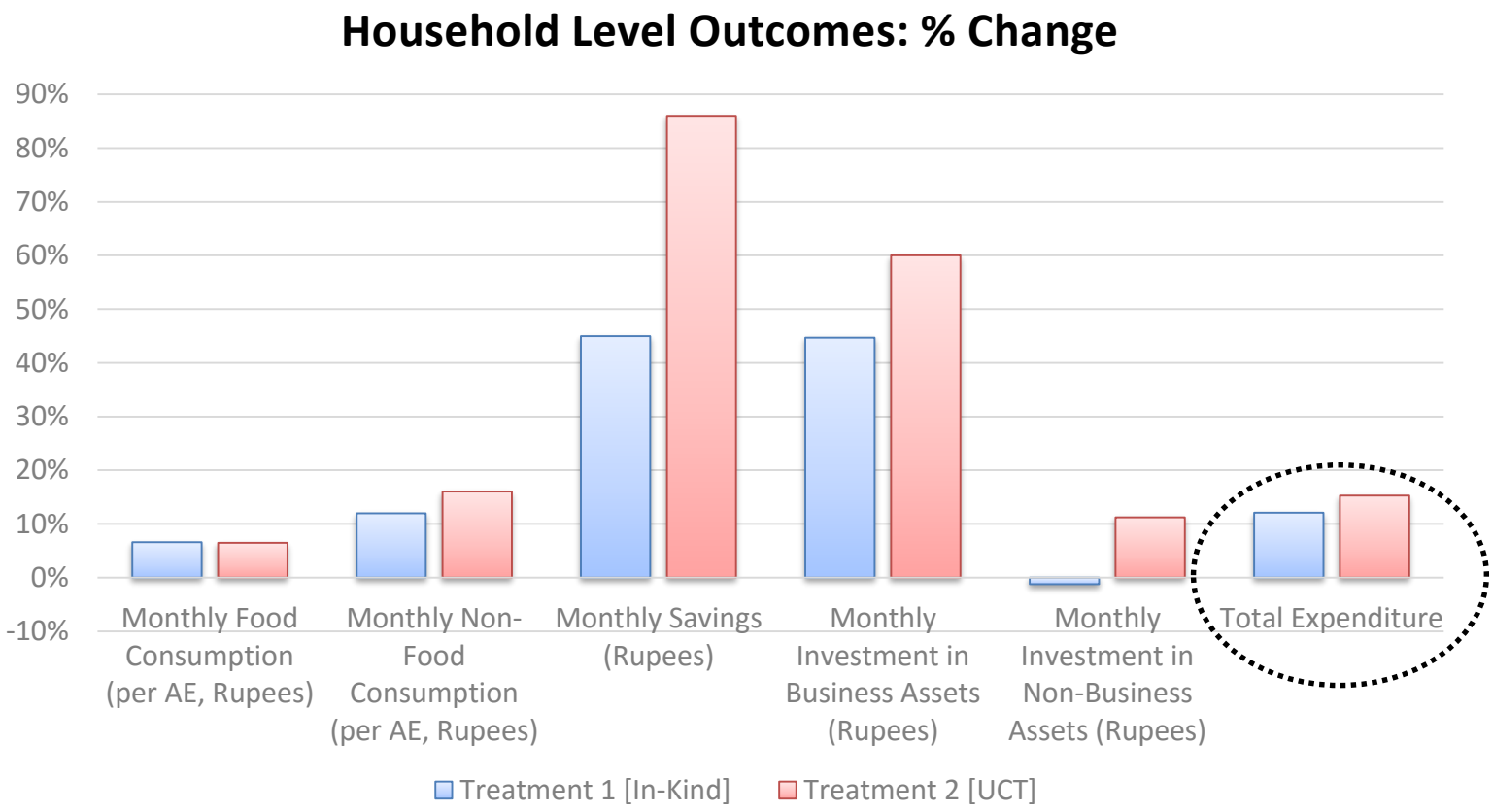
Labor Market Activity: Extensive Margin



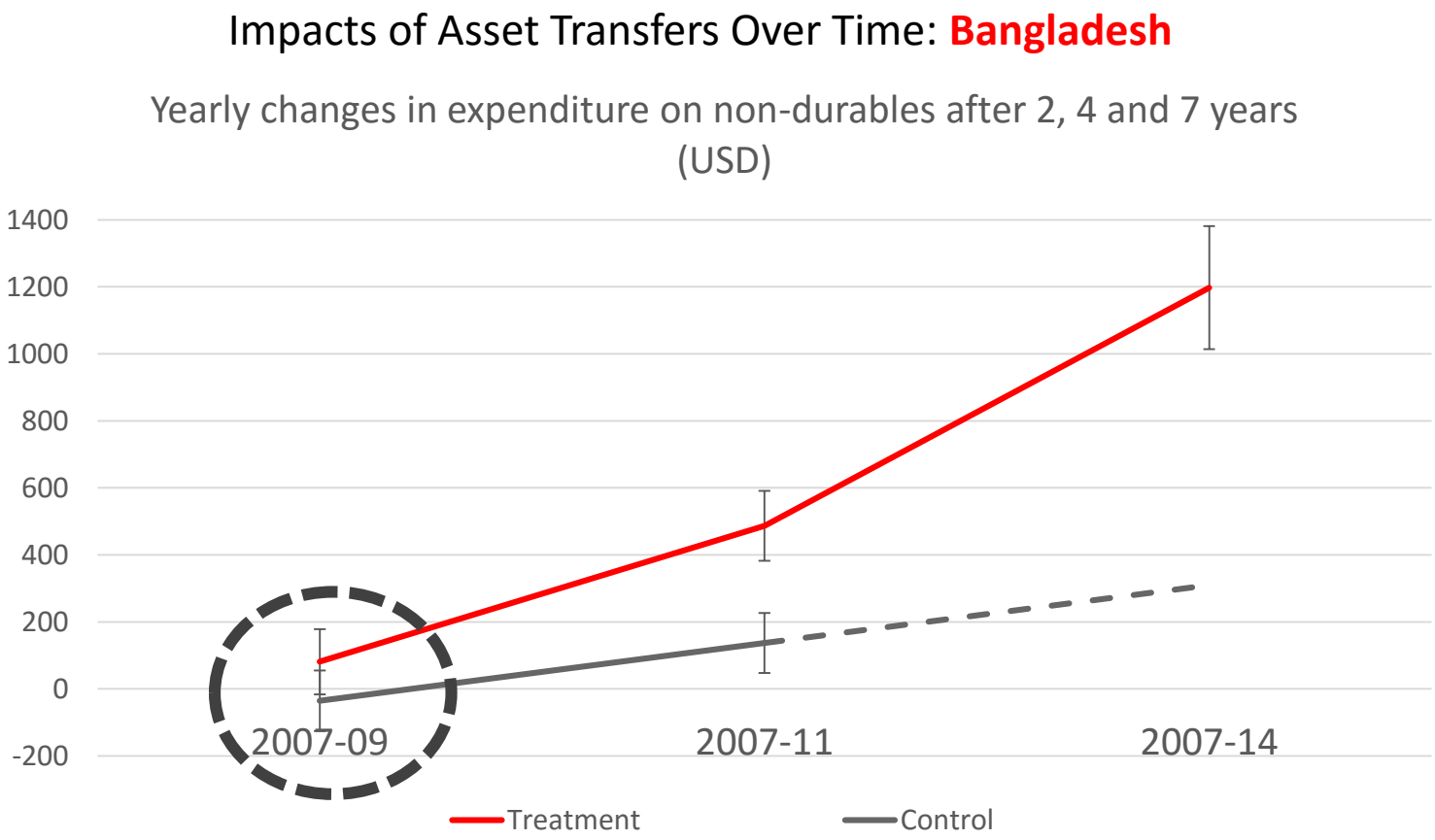
Labor Market Activity: Intensive Margin



Expenditures



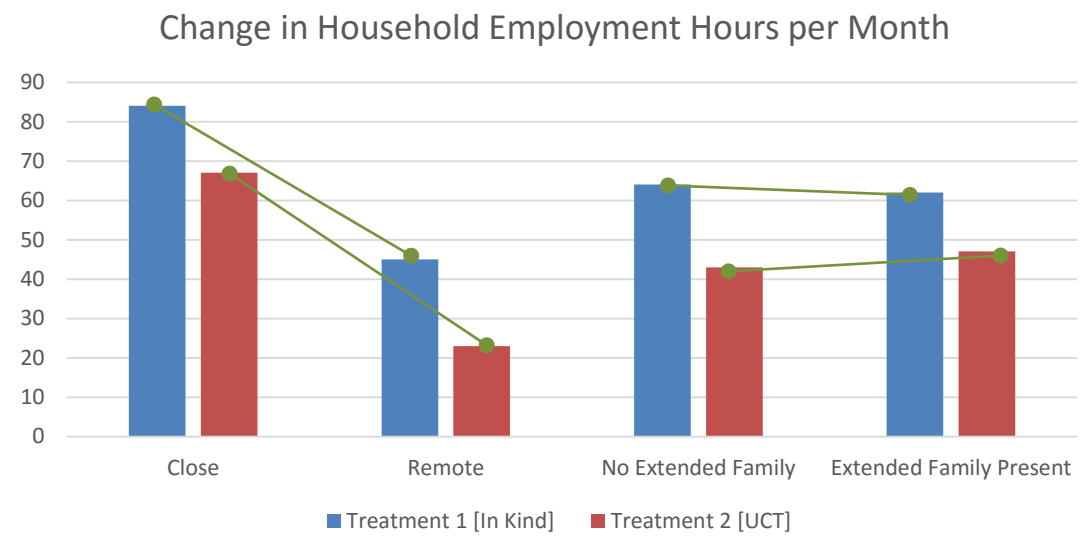
Next Step 1: Evolution of Outcomes

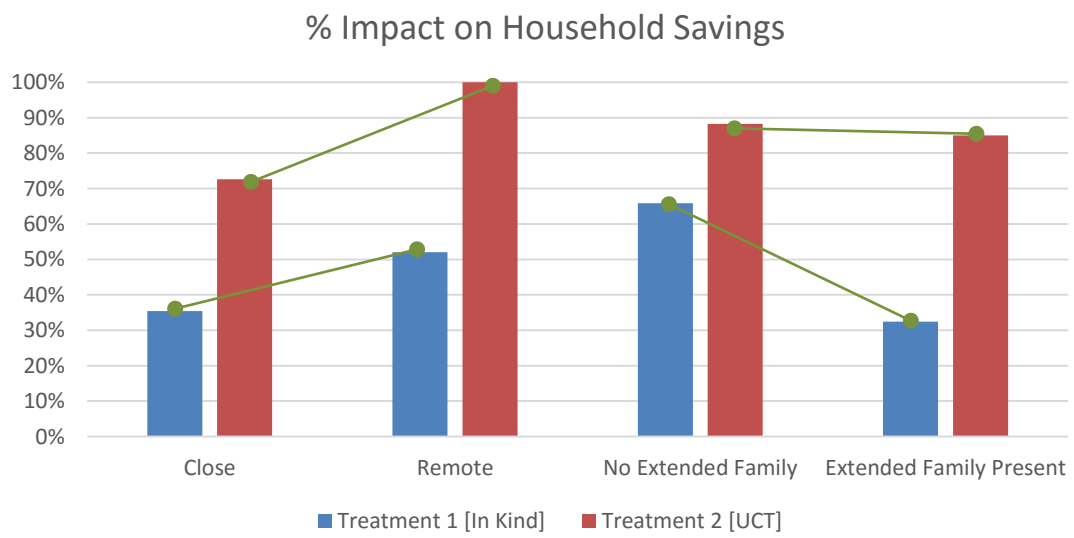


In Pakistan, even after very short run of one year, we see some important wedges opening up in differential responses to in-kind asset transfers and UCT:

- economic activity of women
- engagement in livestock rearing activities
- total hours of labor supplied across work activities

Next Step 2: Heterogeneous Impacts





Next Step 3: GE Effects

Evaluation Design: Household Sampling				
	Treated Ultra Poor	Non-treated Ultra Poor	Non-Poor	Total Households
Household Census	1832	7605	32061	41498
Baseline Survey	1688	1662	11063	14413
Livelihood Investment Plan	1832	0	0	1832
Tracker 1	1809	1554	0	3363
Tracker 2	1806	1518	0	3324
Midline Survey	1772	5917	10234	17923
	Evaluation of impacts of in-kind transfers versus UCT on Ultra Poor households			
	Spillover effects on other Ultra Poor households in the same village			
	Spillover and distributional effects non-poor households in the same village			

- Village wide spillover effects can differ between in-kind and UCT transfers targeted to the UP:
  - cash creates pure income effect on demand for goods
  - have differential price effects [Cunha 2013, Cunha, De Giorgi and Jayachandran 2014]