Analysing Poverty Dynamics

The use of mixed methods research

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Chronic Poverty Advisory Network, ODI, London, UK

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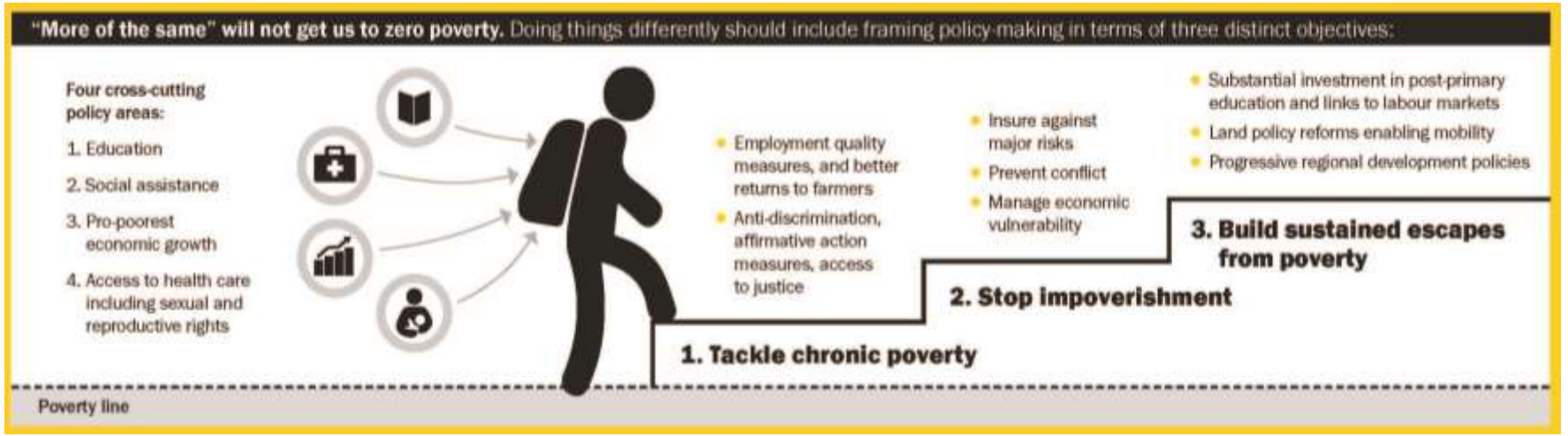
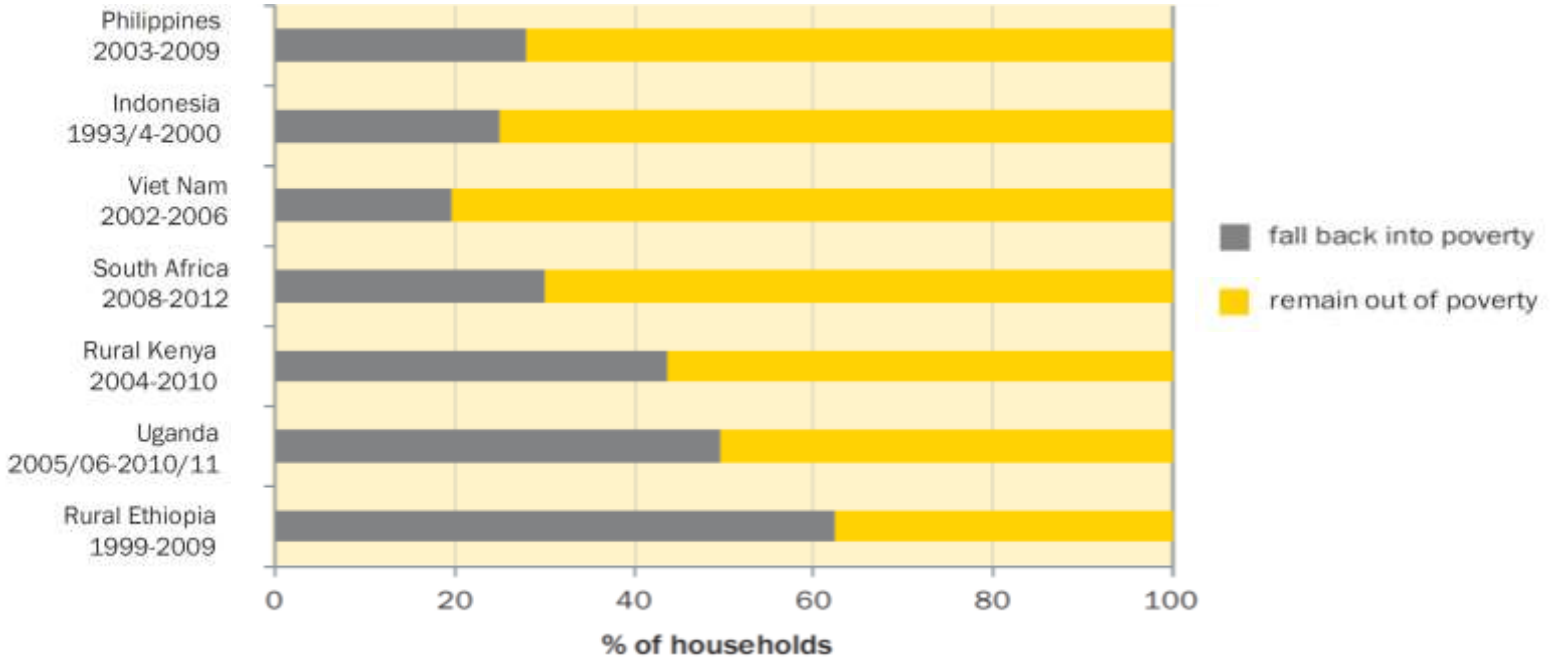
ODI

Contextual underpinnings
Eradicating extreme poverty – 2014-5 Chronic Poverty Report



http://www.chronicpovertynetwork.org/

Introducing the research-
escapes from poverty are not always sustained



Mixed methods for poverty dynamics research

An example from Ethiopia

Research by: Yisak Tafere, Tassew Woldehanna; Chiara Mariotti, Vidya Diwakar

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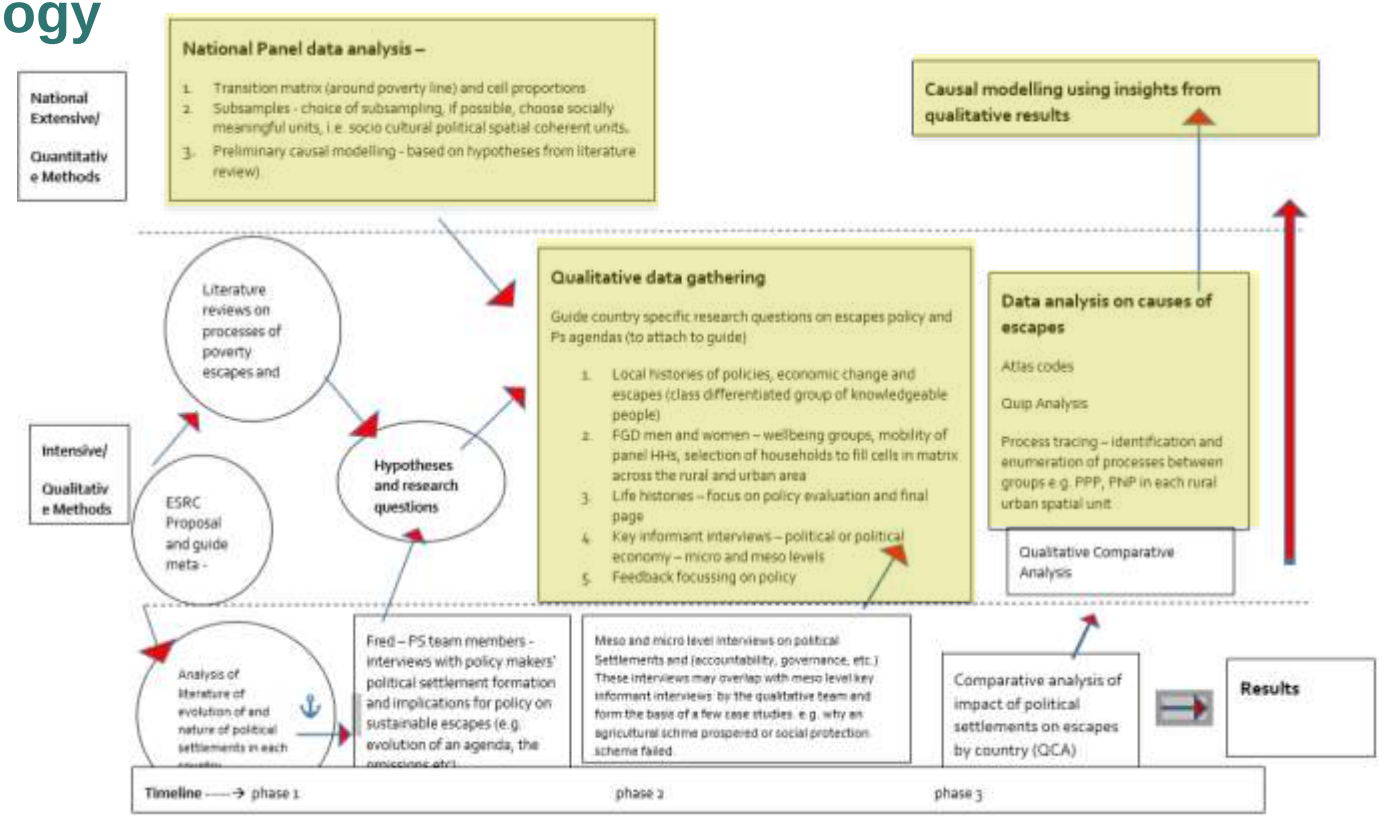
Methodology

- **Mixed methods**
- **Quantitative** regression-based analysis of recent, national panel data
- **Qualitative** fieldwork- focus groups, interviews with key informants, knowledgeable members, life history interviews



Countries with recent panel data

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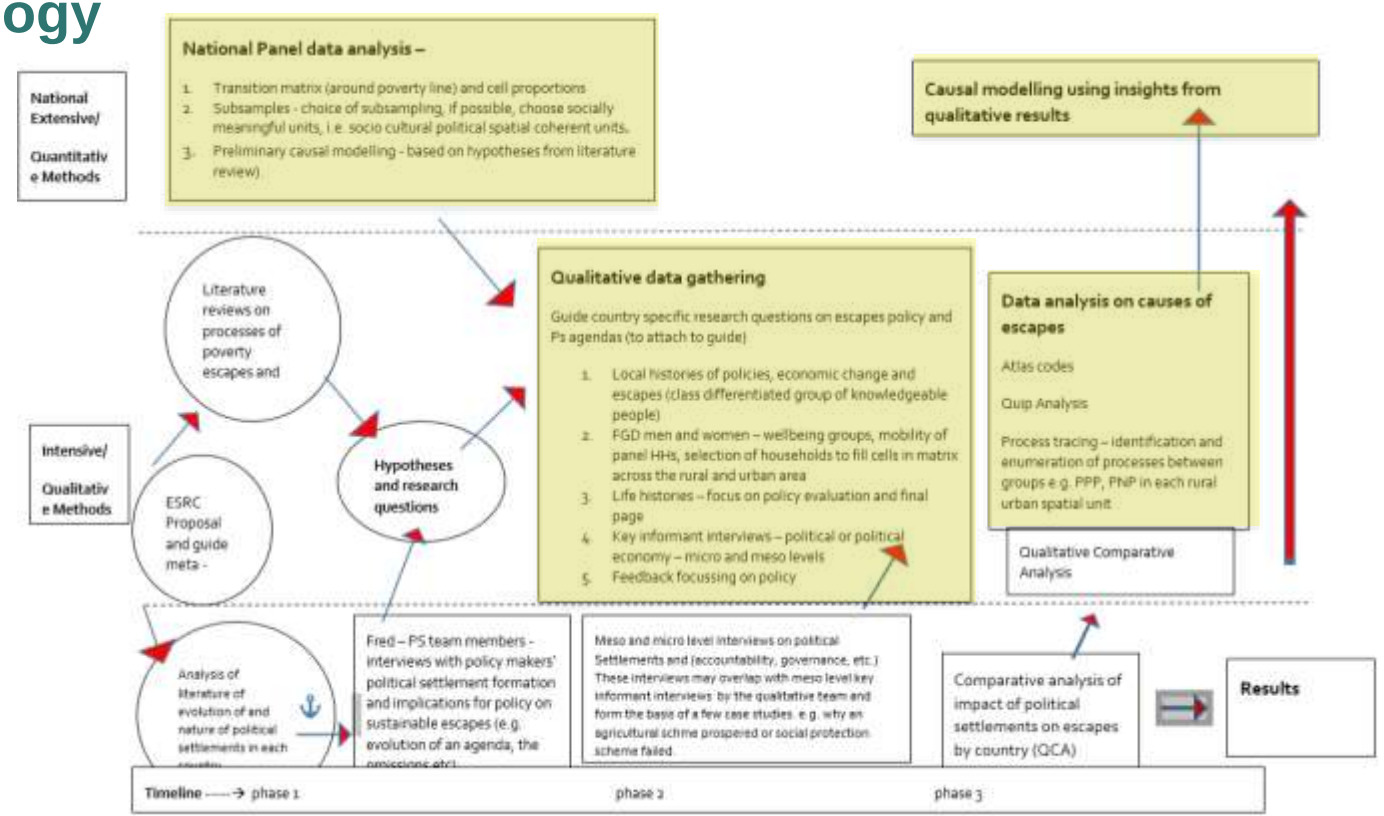
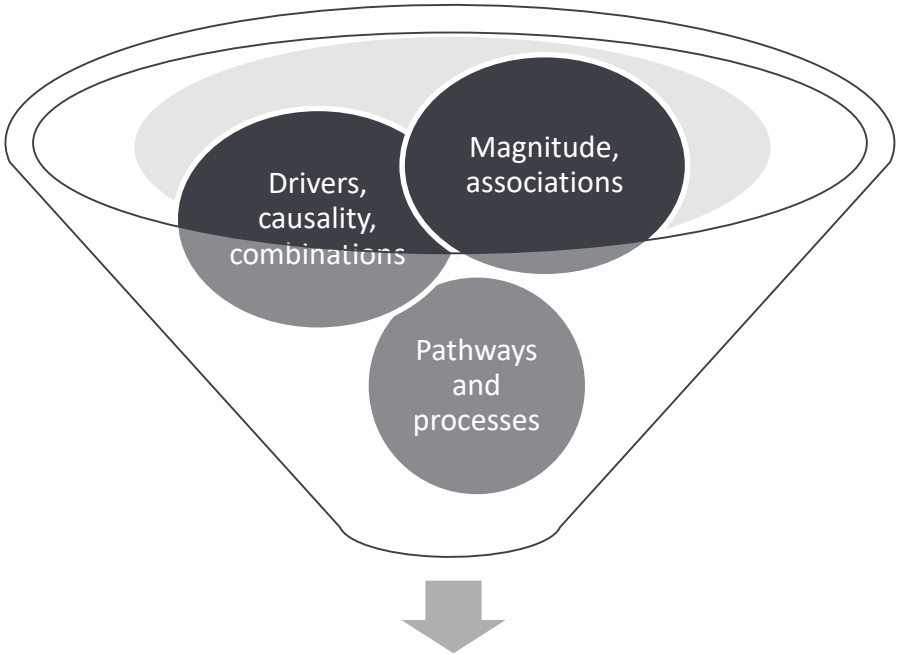
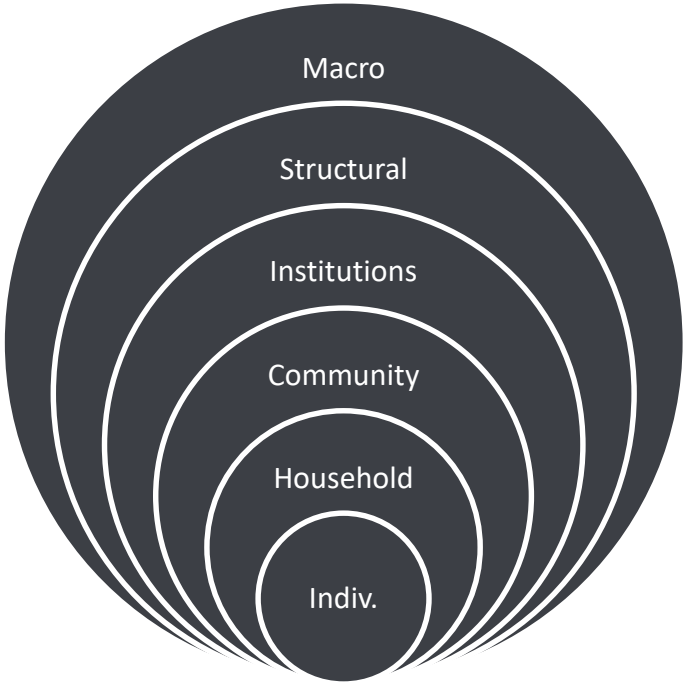


Mixed methods for poverty dynamics



Poverty dynamics



Levels of analysis

Poverty dynamics in Ethiopia

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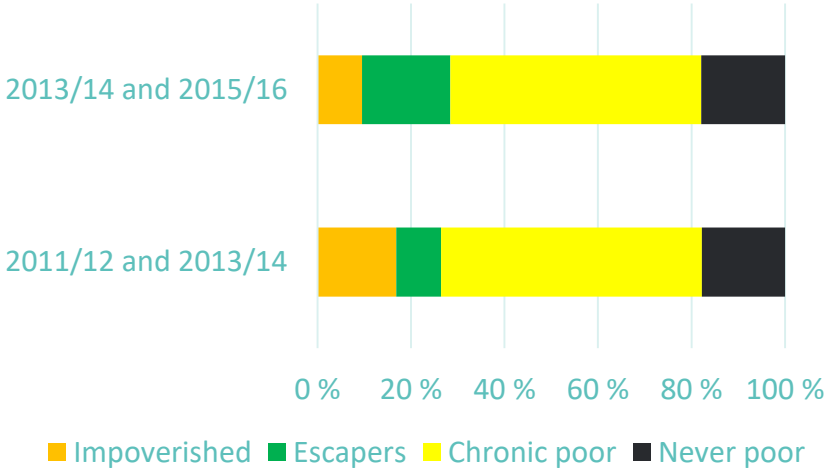
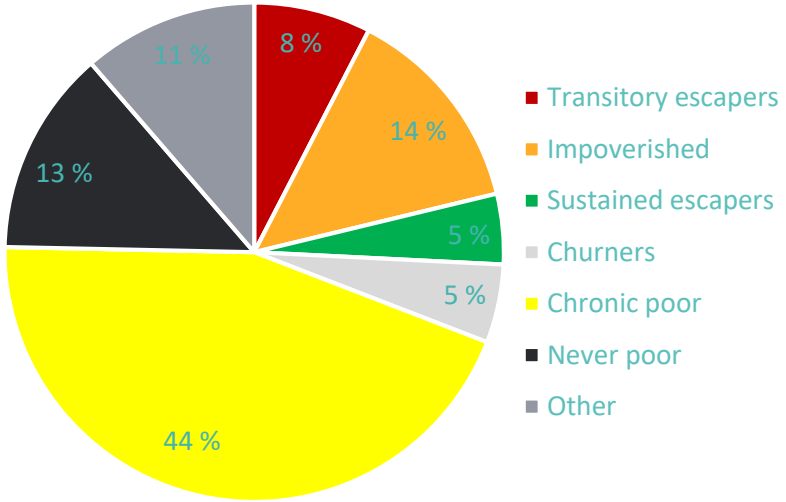
Poverty mobility



Poverty trajectories



Poverty dynamics across countries

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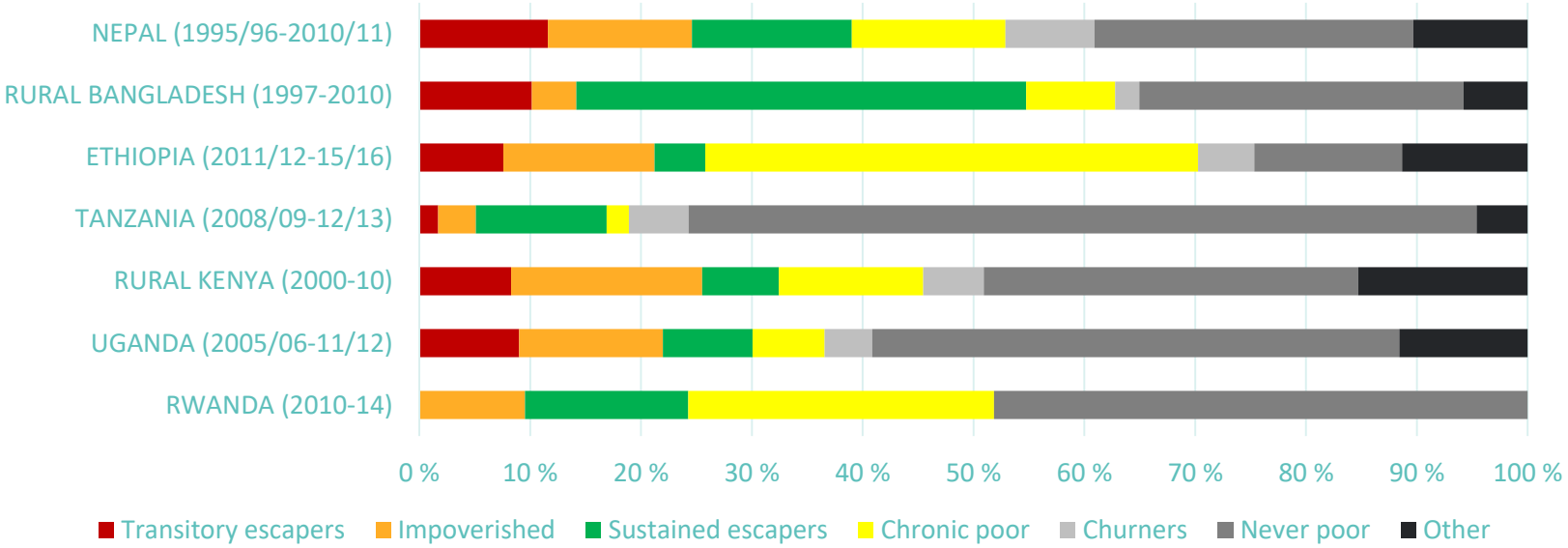

Note: Rwanda only has two waves and the following legend: Descenders Escapers Chronic poor Never poor

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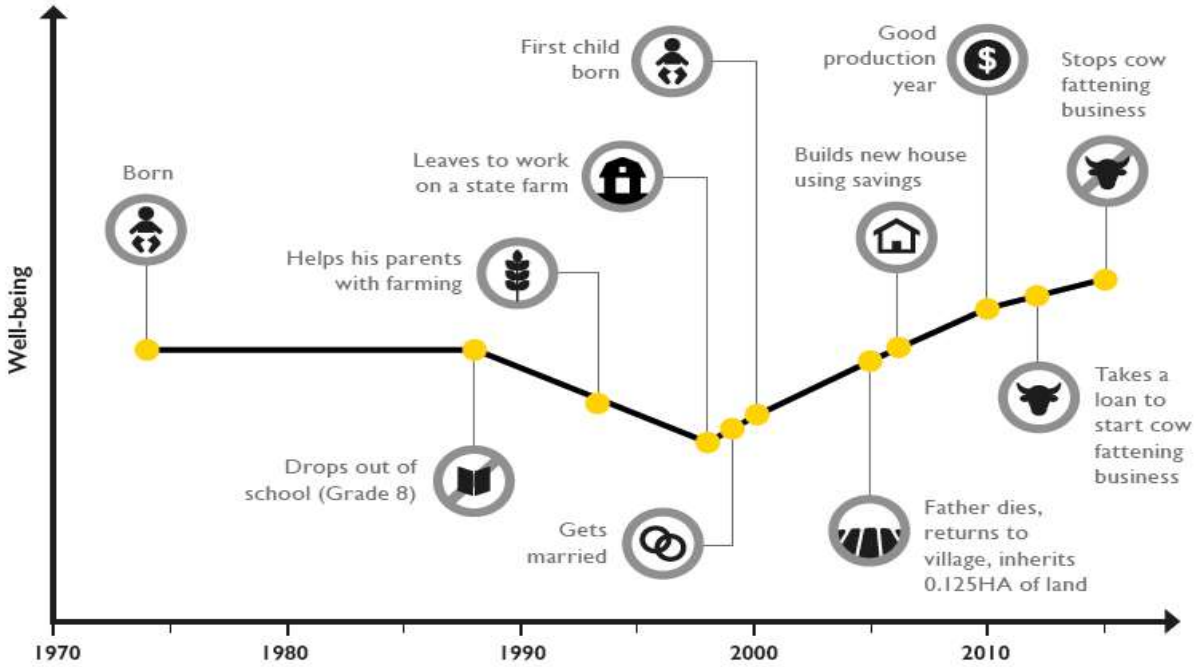
Life history trajectory

QUAL



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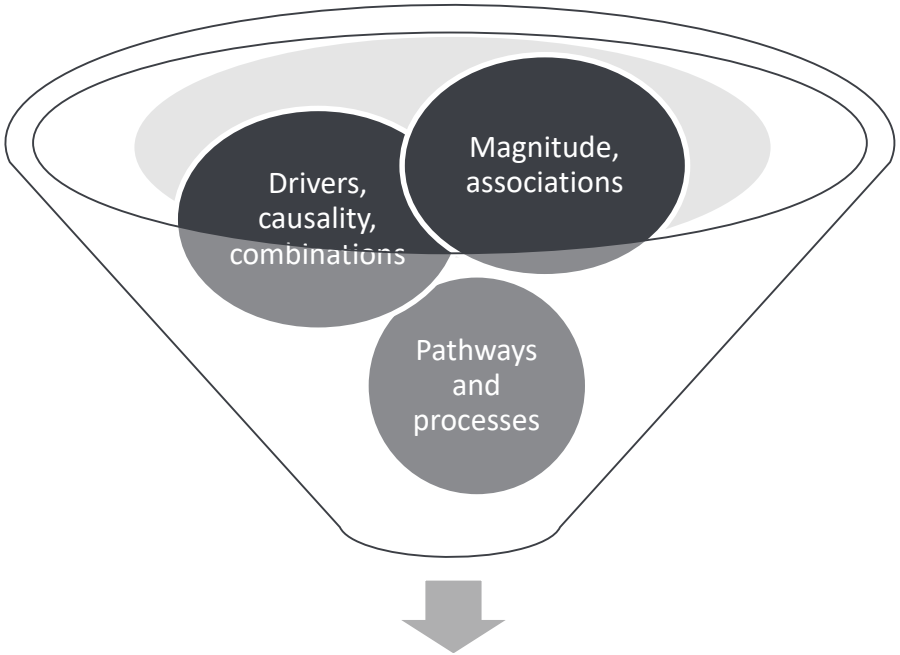
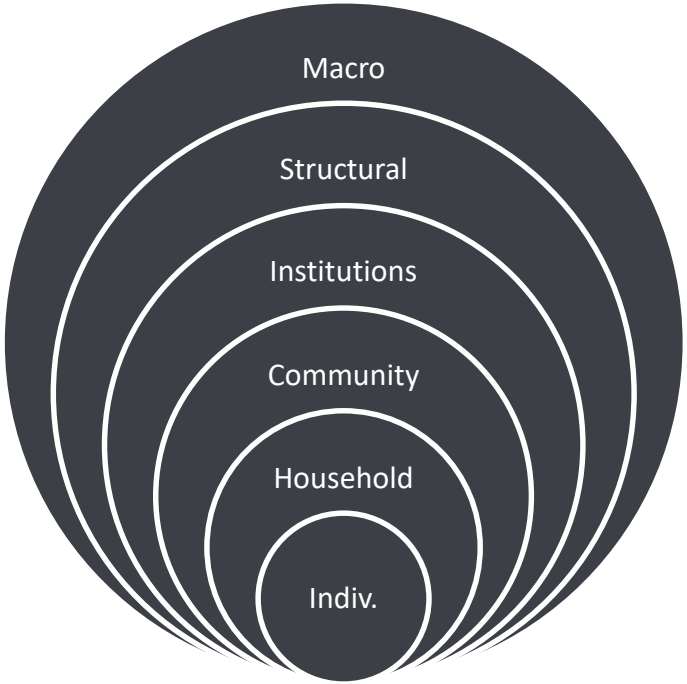
Mixed methods for poverty dynamics



Poverty dynamics

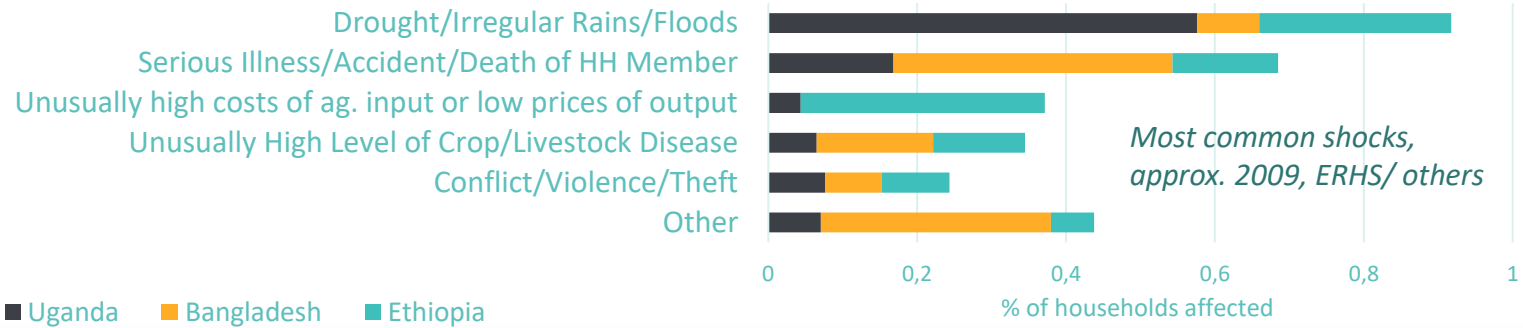


Levels of analysis

Pathways, combinations, and causality

Quant: Households which experience a flood compared to no flood are 5 times as likely to experience an escape from poverty that is transitory vs sustained.

Qual: *"Mo, 50, has three wives; one of them inherited after the death of her husband. He has 21 children. In 2016, the family lost 4 hectares of harvest due to hail storm and flooding. As the food aid provided by local administration was not enough, they had to sell two oxen to purchase grain from the market and feed the family. The economic situation of the family declined over the last five years."*



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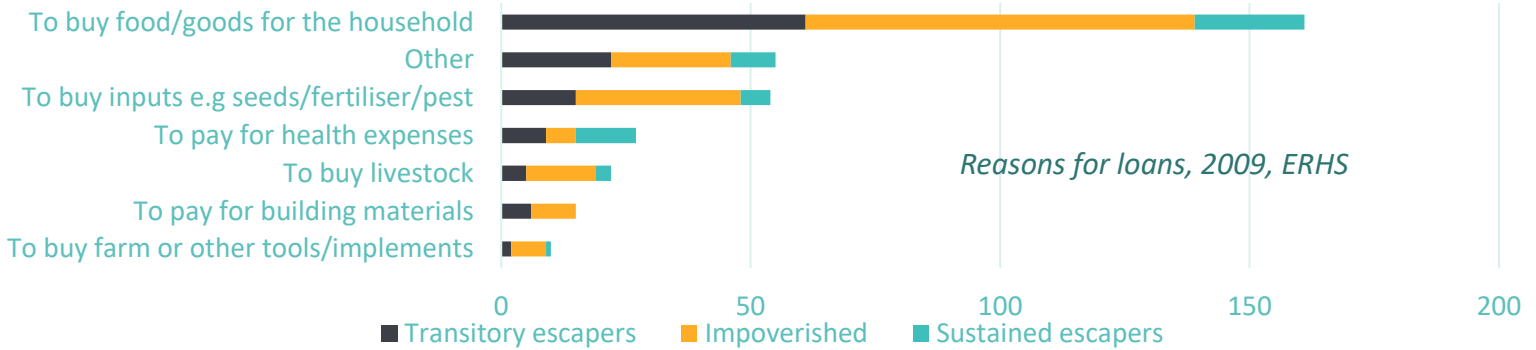
Qualifications, deeper understanding

Quant: Receipt of credit in the year preceding survey is associated with a 43% less risk of impoverishment relative to a sustained escape.

Qual: challenges- *1) people may not able to repay it when crops fail. 2) borrower has to save some of the money in bank. 3) interest rate too high for farmers. 4) association asks for monthly interest payments, but farmers do not have a permanent income. 'It is the micro-finance that makes our farmers destitute!' FGD men*

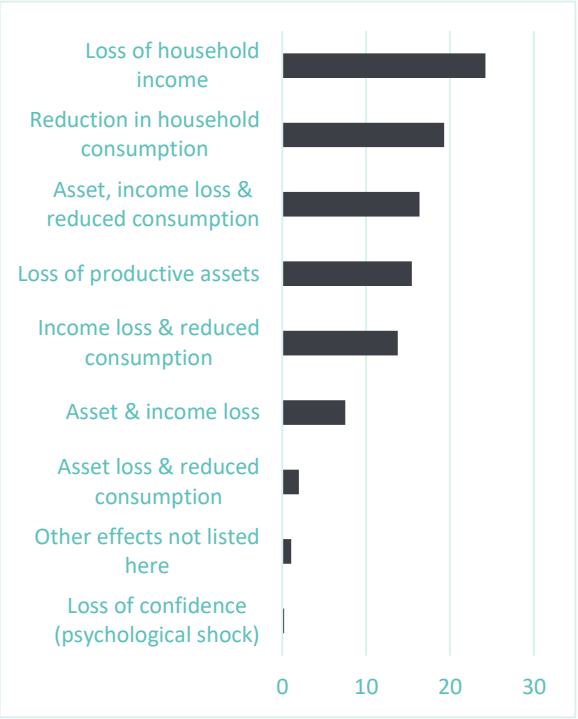


Reasons for loans, 2009, ERHS

Processes, sequences

*"I have Birr 1,800 **income from the job** [working as a guard] I have been involved in. Because of this income, I am saving Birr 250 in **iqub** [local saving] weekly… also both in the rural **Credit Association** and in the urban saving of Dedebit micro-finance, in which I had saved Birr 1000 but withdrew Birr 500 for some **emergency**. The household took credit to get involved in **non-farm activities**. Dedebit Micro-Finance lent the family Birr 10,000 and they have already paid it back. We have also bought **cattle**. My plan is to replace these local-bred cattle with other foreign [modern] bred cows so that I could improve my economic situation by getting **additional income**. I have decided and started the process to buy a **foreign-bred milking cow**….."*

- Tsehayu, 42, household head, Tigray site



Effect of shocks, 2009, ERHS

Trends, generalizability

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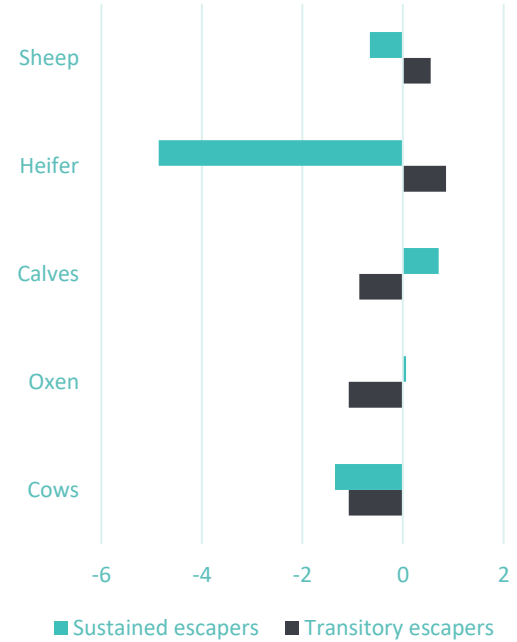

Change in livestock, 1997-2009, ERHS

Generalizability over subsamples of interest

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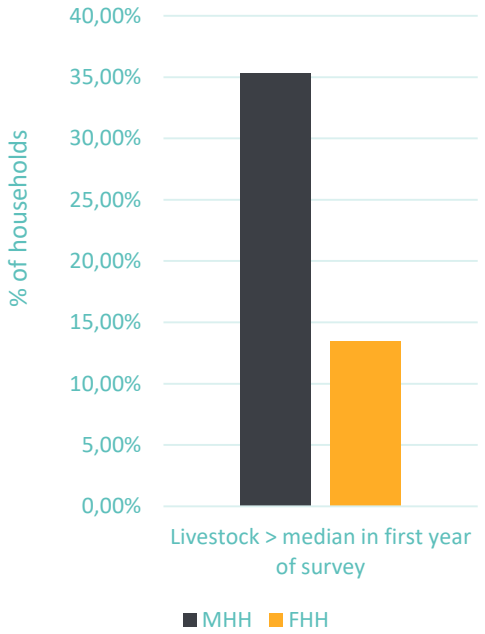
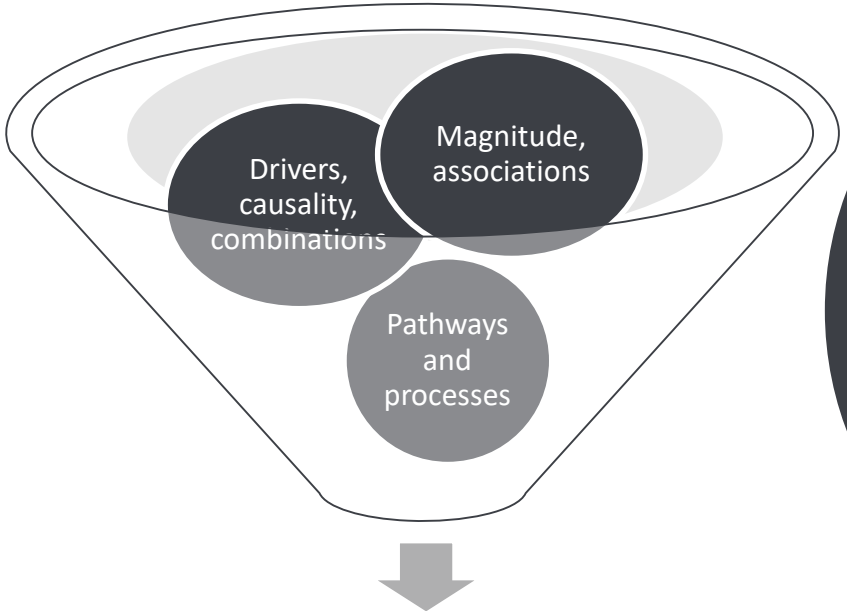
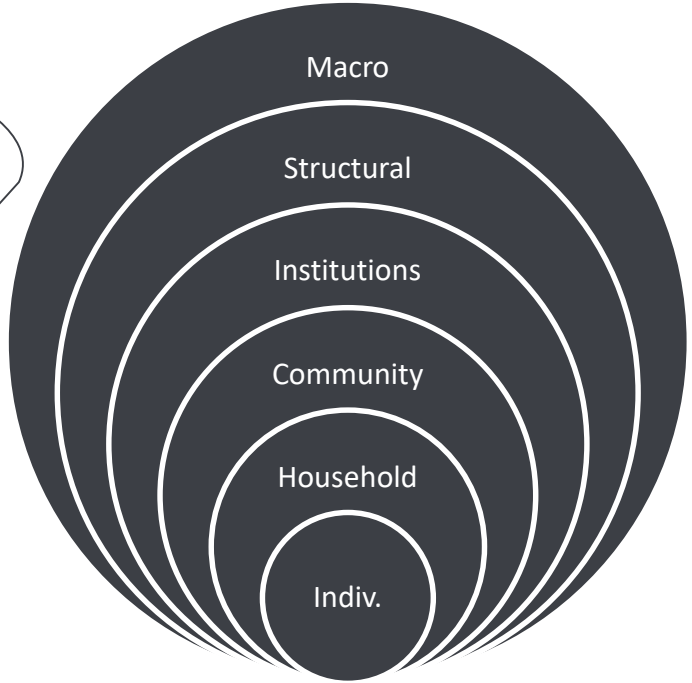


Livestock by gender, 2009, ERHS

Mixed methods for poverty dynamics





Poverty dynamics across Contextualised levels of analysis

Policy options

Policy gaps

Evaluations

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Thank you

Questions?

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Annex: Country data

Country	Country report	Panel data (years/ households)		Qualitative data (sample/date)		
Rural/ urban	Source	Dataset and years	N	LHIs	FGDs	KIIs
Bangladesh (R)	Scott and Diwakar, 2016	· Chronic Poverty and Long Term Impact Study: 1997/2000, 2006, 2010	1193	293 (2007) 60 (2016) 24 (2016)	16 0 6	0 0 18
Cambodia (R)	Bird et al., 2018, forthcoming	· Agriculture, Rural Development and Poverty Reduction Survey: 2001, 2004, 2008, 2011, 2014, 2017	852	60 (2018)	36	TBC
Ethiopia (R)	Mariotti and Diwakar, 2016; Woldehanna et al., 2018	· Ethiopian Rural Household Survey: 1994, 1995, 1997, 1999, 2004, 2007, 2009; · Living Standards Measurement Survey: 2011, 2013, 2015	1056 3388	23 (2016) 75 (2017)	2 8	3 10
Kenya (R)	Scott et al., 2018	· Tegemeo Agricultural Panel Survey: 2004, 2007, 2010	1243	20 (2008) 60 (2017)	TBC 4	TBC 15
Nepal (R & U)	Diwakar, 2018	· Nepal Living Standards Survey: 1995, 2003, 2010	434	40 (2017)	8	18
Philippines (R & U)	Diwakar, 2018, forthcoming	· Family Income and Expenditure Survey: 2003, 2006, 2009	6519	40 (2018)	8	19
Tanzania (R & U)	Kessy et al., 2018; Da Corta et al., 208	· Living Standards Measurement Survey-National Panel Survey: 2008, 2010, 2012	3079	106 (2009) 20 (2017) 60 (2017)	18 8 24	52 15 29
Uganda (R & U)	Scott et al., 2016	· Living Standards Measurement Survey-National Panel Survey: 2005, 2009, 2010, 2011, 2013	1398	60 (2006-8) 24 (2016)	TBC 6	TBC 21

Annex: Econometric specification

Equation

$$Pr\left(Poverty\ Trajectory_{i,t} = 1 \mid \beta, v_{i,t}\right) = F\left(\beta_0 + \beta_1 Head_{i,t} + \beta_2 Household_{i,t} + \beta_3 Region_{i,t}\right)$$

for $v_i = (1, Head_i, Region_i, H_i)$

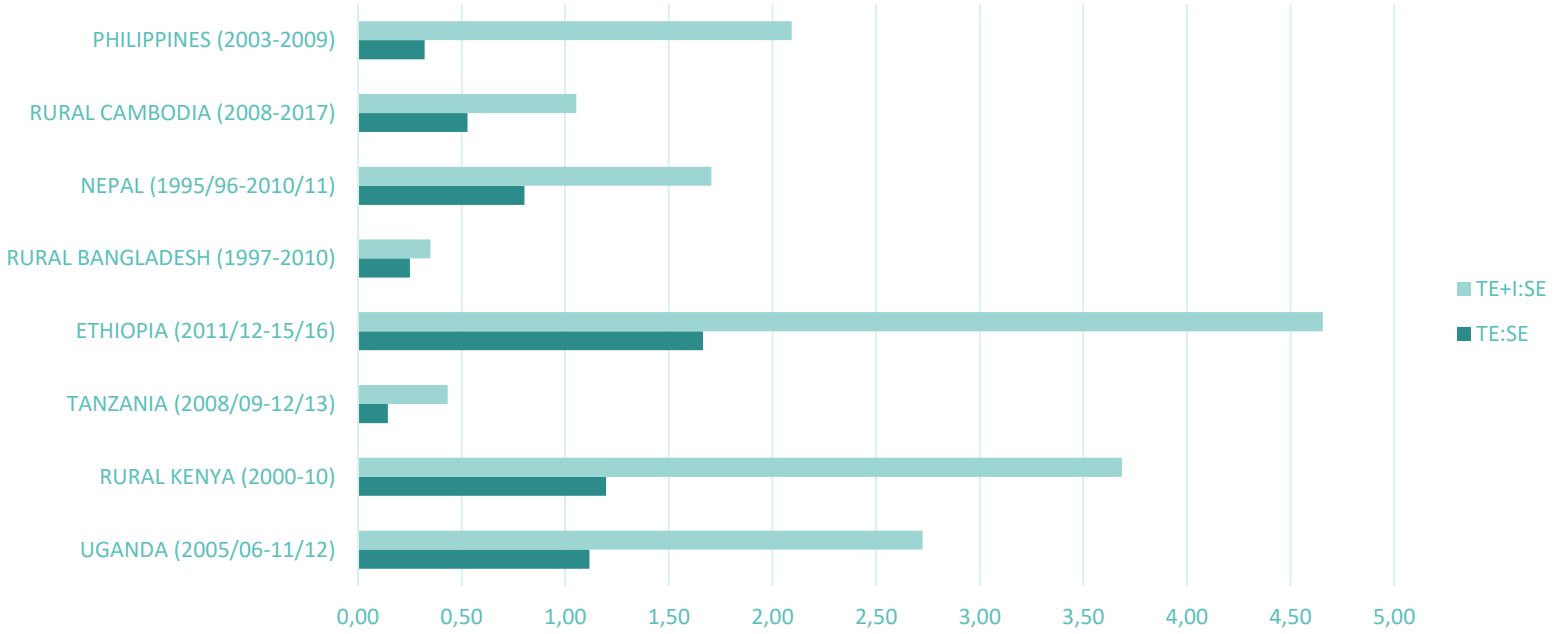
where $Poverty\ Trajectory_i$ is probability of the household i experiencing a transitory poverty escape, chronic poverty, becoming impoverished, or sustaining a poverty escape,

$Head$ is a vector of variables defining the characteristics of the household head,

$Region$ is a set of dummy variables on household region, and if it is urban or rural, and

$Household$ is a vector of household specific controls, including shocks in the following wave.

Annex: Poverty trajectory ratios



Annex: Sustained vs transitory escapes