Analysing Poverty Dynamics
The use of mixed methods research

Presented by: Vidya Diwakar
Chronic Poverty Advisory Network, ODI, London, UK
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
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
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**
Mixed methods for poverty dynamics

Drivers, causality, combinations

Magnitude, associations

Pathways and processes

Poverty dynamics

Levels of analysis

Macro

Structural

Institutions

Community

Household

Indiv.
Poverty dynamics in Ethiopia

**Poverty mobility**

- 2011/12 and 2013/14
- 2013/14 and 2015/16

**Poverty trajectories**

- Transitory escapers: 11%
- Impoverished: 8%
- Sustained escapers: 14%
- Churners: 5%
- Chronic poor: 5%
- Never poor: 44%
- Other: 0%
Poverty dynamics across countries

QUANT

- NEPAL (1995/96-2010/11)
- RURAL BANGLADESH (1997-2010)
- ETHIOPIA (2011/12-15/16)
- TANZANIA (2008/09-12/13)
- RURAL KENYA (2000-10)
- UGANDA (2005/06-11/12)
- RWANDA (2010-14)

Transitory escapers | Impoverished | Sustained escapers | Chronic poor | Churners | Never poor | Other

Note: Rwanda only has two waves and the following legend:
Life history trajectory

AMAN
Born 1974
Kedida Gamela District, SNNP Region, Ethiopia

Hello history trajectory:
1. **Born**
2. Helps his parents with farming
3. Drops out of school (Grade 8)
4. Leaves to work on a state farm
5. First child born
6. Gets married
7. Builds new house using savings
8. Father dies, returns to village, inherits 0.125 HA of land
9. Good production year
10. Takes a loan to start cow fattening business
11. Stops cow fattening business

Well-being over time:
- 1970
- 1980
- 1990
- 2000
- 2010
Mixed methods for poverty dynamics

Poverty dynamics

Drivers, causality, combinations
Magnitude, associations
Pathways and processes

Levels of analysis
Indiv.
Household
Community
Institutions
Structural
Macro
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.”
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

To buy food/goods for the household
- Other
- Transitory escapers
- Impoverished
- Sustained escapers

To buy inputs e.g seeds/fertiliser/pest
- Transitory escapers
- Impoverished
- Sustained escapers

To pay for health expenses
- Transitory escapers
- Impoverished
- Sustained escapers

To buy livestock
- Transitory escapers
- Impoverished
- Sustained escapers

To pay for building materials
- Transitory escapers
- Impoverished
- Sustained escapers

To buy farm or other tools/implements
- Transitory escapers
- Impoverished
- Sustained escapers

Reasons for loans, 2009, ERHS
"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 microfinance, 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
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Mixed methods for poverty dynamics

Poverty dynamics across Contextualised levels of analysis

Drivers, causality, combinations
Magnitude, associations
Pathways and processes

Macro
Structural
Institutions
Community
Household
Indiv.

Policy options
Policy gaps
Evaluations
Thank you
Questions?
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Equation

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

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

- **PHILIPPINES (2003-2009)**
- **RURAL CAMBODIA (2008-2017)**
- **NEPAL (1995/96-2010/11)**
- **RURAL BANGLADESH (1997-2010)**
- **ETHIOPIA (2011/12-15/16)**
- **TANZANIA (2008/09-12/13)**
- **RURAL KENYA (2000-10)**
- **UGANDA (2005/06-11/12)**
Annex: Sustained vs transitory escapes

A transitory escape from poverty...