



Ethiopia's PSNP – Impacts and Challenges*

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Outline

- ❑ Objectives and introduction
- ❑ PSNP – Context and features
- ❑ Impact the PSNP
 - Approach – measurement, impact;
 - Data (focus on the highlands);
 - Findings – food security, nutrition, resilience, Local Economy effects;
- ❑ Some Observations



Objectives and Introduction

- ❑ **Objectives** – highlight some key findings of IFPRI research on PSNP and resilience
- ❑ Rigorous and regular evaluation 2006-2014 (until the end of PSNP 3)
 - On-going evaluation of PSNP4 (2016-2020)
 - learn, adjust, redesign;
- ❑ Regular evaluation dimensions:
 - Process – targeting, payments, implementation capacity, ...
 - Outcomes – food insecurity (food gap, food expenditure), asset accumulation (TLU, house quality),
- ❑ Other evaluation dimensions:
 - Nutrition (child anthropometry, household diet diversity);
 - Vulnerability and resilience – key targets;
 - Local economy (general equilibrium) effects – productivity, growth;

Context – Incidence and Impact of Drought

Incidence of Drought in Ethiopia (1965-2015)*

□ Drought:

- Recurrent;
- Some widespread, others local;
- Appear to increase in frequency (particularly in some parts of the country);

□ There are:

- other weather shocks – flooding;
- non-weather shocks – pests, human and animal health, economic, political (including conflict);

Year	Total affected
1965	1,500,000
1969	1,700,000
1973	3,000,000
1983	7,750,000
1987	7,000,000
1989	6,500,000
1997	986,200
1998	
1999	4,900,000
2003	12,600,000
2005	2,600,000
2008	6,400,000
2009	6,200,000
2011	4,805,679
2012	1,000,000
2015	10,200,000

*Source: EM-DAT: The Emergency Events Database - Universite catholique de Louvain (UCL) - CRED, D. Guha-Sapir - www.emdat.be, Brussels, Belgium (Created on: December 03, 2017)

Notes: *Affected* - People requiring immediate assistance during a period of emergency, i.e. requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance.

Context - Incidence and Impact of Drought

- ❑ Drought shocks have transitory and long-term impact;

Shocks	PSNP Woredas (2008-20016)			
	Incidence		Impact	
	"Low-lands"	"High-lands"	"Low-lands"	"High-lands"
Drought	56.3	45.8		
Loss of household income			25.7	34.9
Reduction in household consumption			25.4	32.8
Pests or diseases that affected livestock	23.2	8.4		
Loss of household income			22.0	32.6
Reduction in household consumption			23.7	12.6

Source: Authors' calculation using PSNP Surveys (2010-2016) data.

Incidence and Impact of Drought

- Evidence of longer-term effects based on the 1984/85 drought/famine - Dercon (2004), Dercon and Porter (2014), Tafere (2017);

Economic growth, child height, child health, cognitive and non cognitive abilities

- 10% lower rainfall today associated with 1 percentage point decline in growth about 4–5 years later;
- Greater severity associated with worse outcomes – about 16 percentage points lower growth (Note: average CV of rainfall high);
- affected children aged 12-36 months are significantly shorter, by at least 5 cm, as adults (20 years later);
- Second generation - Mothers' exposure to famine in early childhood has a negative effect on their children's health (height-for-age z-scores), cognitive (number of years of schooling) and non-cognitive (locus of control) human capital;

Source: Authors' calculation using data on daily rainfall in millimetres (mm) extracted from the National Aeronautics and Space Administration (NASA) website (<http://power.larc.nasa.gov/cgi-bin/cgiwrap/solar/hirestimeser.cgi?email=daily@larc.nasa.gov>)

Response to drought shocks

- ❑ Response has evolved over time, still is;
- ❑ Relief – annual appeals system, shortcomings (delay, lack of predictability);
- ❑ PSNP – coordinated, multi-year, predictable, ‘productive’
- ❑ Part of comprehensive development planning;
- ❑ Broad social protection agenda;



The PSNP – Features

□ *The PSNP – Objectives and Components*

- aims to smooth consumption (protect assets) through transfers in chronically food insecure communities (targeting)
- has two components: Public Works (PWs) and Direct Support (DS);
- builds community assets - soil and water conservation (SWC), irrigation, roads, schools, clinics... - through PWs projects

□ *The PSNP – Size*

- Large – up to 8 million beneficiaries; Cost - US\$1.5 billion (2005-09); US\$2.1 billion (2010-14)
- Multi-year, multi-donor – coordination between GoE and donors;

□ *The PSNP – M&E*

- independent and collaborative monitoring and evaluation in the design;

Note: PSNP has fewer interventions than BRACC, but much larger

The PSNP – Impact Summary

- ❑ ***Food security*** – improved food security, as measured by the ***food gap***, particularly in the highlands;

- ❑ ***Disincentive effects:***
 - does not reduce labour supply,
 - does not appear to crowd out private transfers.

- ❑ ***Livelihoods and asset creation*** - mixed evidence;

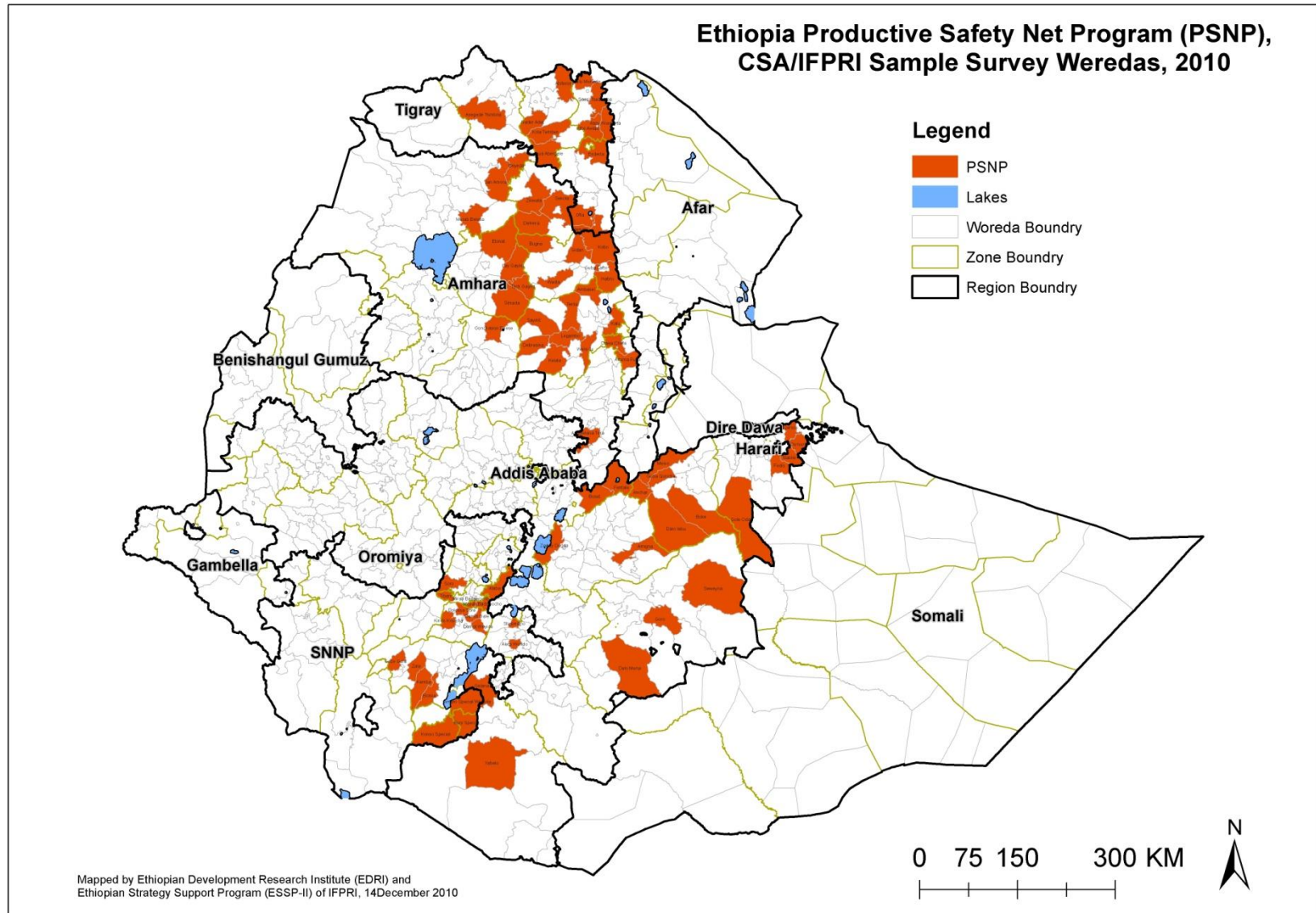
- ❑ ***Economy-wide effects*** - the benefits of PSNP significantly exceed the cost of PSNP transfers due to multipliers via local and national markets;



Data: Highlands (Tigray, Amhara, Oromiya, SNNP)

- ❑ “Core” data – a panel of households (beneficiaries and non-beneficiaries) in 68 *woredas* in Tigray, Amhara, Oromiya and SNNP interviewed in 2006, 2008, 2010, 2012 and 2014;
- ❑ Significant effort to minimize attrition:
 - 3,670 hh in 2006; 3,091 hh in 2014.
 - Attrition rate of 15.8% (including 100 hh where *woreda* was dropped) or 1.7% p.a. (better than US Census Bureau)
- ❑ Major effort to ensure comparability over time:
 - Survey fielded at approximately same time of year
 - Core questions, enumerator training etc. not changed
 - Core team (JH, AS, YY) involved since 2006
- ❑ But no “non-PSNP *kebeles*”; therefore cannot quantitatively assess impact of public works; also, first survey occurred one year after PSNP began;

Data: Highlands



Data and Approach: Highlands

□ *Additions to core:*

- **quantitative data** at the *kebele* (since 2006) and *woreda* (since 2010) levels
 - *Woreda* data focuses on resources needed to implement PSNP and HABP; data on payment processes
 - *Kebele* data focuses on local infrastructure and implementation of PSNP and HABP
- **qualitative data and analysis** – FGDs, KII, Case histories ... at the regional, and selected *woreda* and *kebele* levels

□ *Approaches*

- matching and difference-in-difference;
- instrumental-Variables Household Fixed Effects estimator;
- No RCT (now with LT programme);

Impact of PSNP on Child Nutrition

- ❑ PSNP improved household level (calorie) availability and food security as well as dietary diversity at the household level.
- ❑ *Improvements were not seen at the child level.*
 - Little change in child nutritional outcomes due to PSNP;
 - Child diet quality remains poor.
- ❑ Missing link - nutrition knowledge of mothers and the household at large:
 - Mother had limited contact with health extension workers;
 - Mother had received little information on good feeding practices;
 - Poor hygiene and water practices observed
- ❑ The new PSNP (PSNP 4) aims to achieve some of these – by linking some of these nutrition knowledge components with the PSNP;

Impact of PSNP on Resilience

- ❑ Multiple conceptualisations of resilience and vulnerability;
- ❑ **Resilience**
 - a *recovery trajectory* following a specific shock.
 - an *ex-post* approach (study reported below):
- ❑ Impact of PSNP
 - beneficiaries recover after no more than 2 years, rather than taking up to four years) – *resilience*;
 - Considerable food gap remains;



Impact of PSNP on the Local Economy

- ❑ PSNP has two components: Transfers (T) and Community assets via Public Works (PW)
 - Community assets - Soil and water conservation (SWC), Irrigation, Roads, Schools, Clinics...
- ❑ Most evaluation focuses on recipient households
 - But impacts may spread far beyond recipients:
 - Cash Recipients spend their money within their economy;
 - Public works affect agro-ecological and economic environment;
- ❑ Implication
 - Need to evaluate the FULL impact;
 - Full impacts **locally**, and **nationwide**

Impact of the PSNP on Productivity and Growth

❑ *Yield growth:*

- PSNP-related SWC infrastructures enhanced crop yields by 2.8 percent on average (econometric analysis);

❑ *Local Economy Impact:*

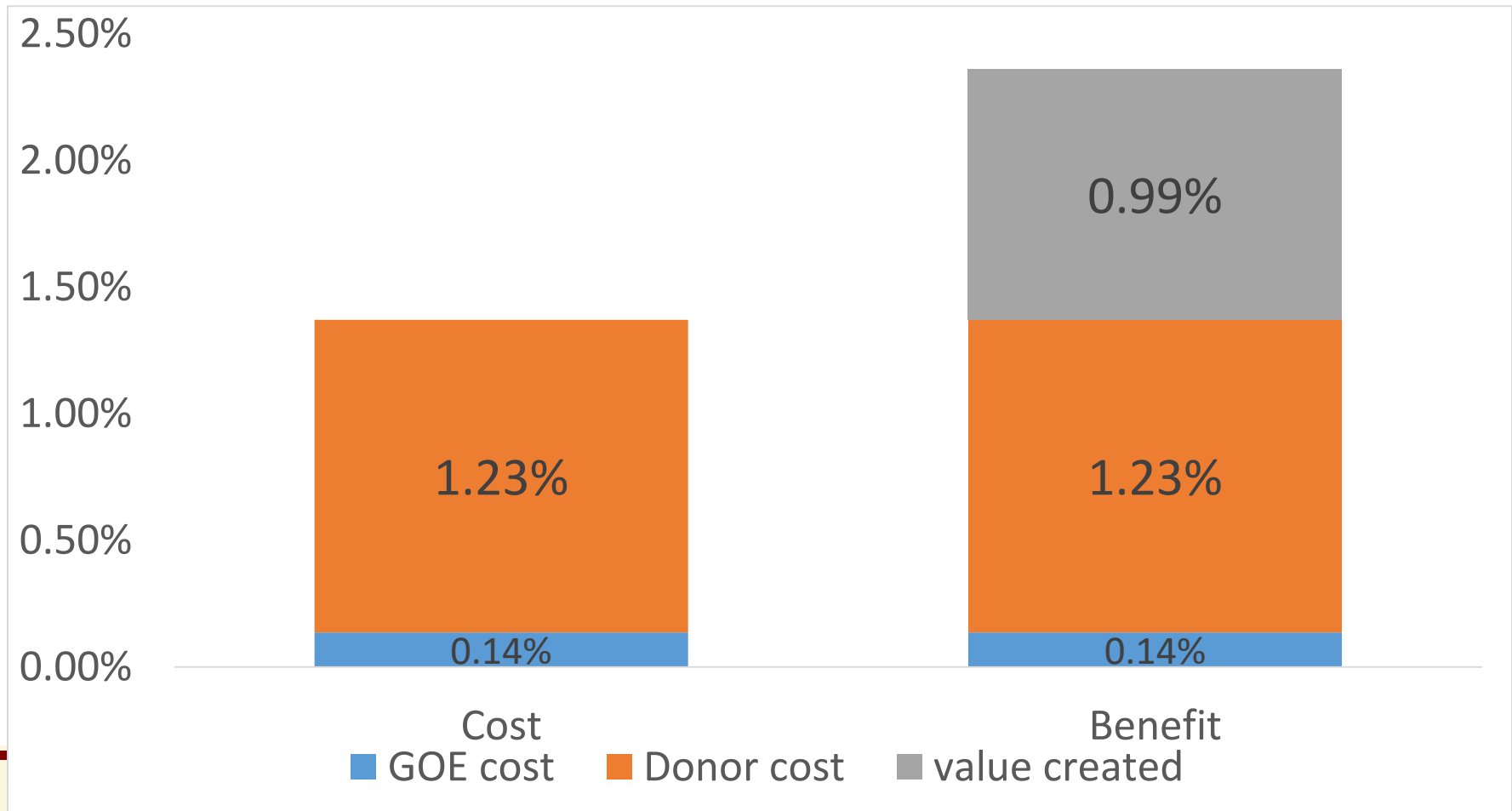
- PSNP generated income multipliers ranging from 1 to 2.4 ETB per ETB transferred depending on the *kebele* (eight LEWIE models);



Impact of PSNP on the Local Economy

❑ *National Economy Impact: CGE estimates*

Approximate costs and benefits of PSNP nationwide (% of GDP)



❑ Significant productivity and growth challenges continue;

The PSNP4

- ❑ *PSNP4* is more nutrition sensitive
 - Increasing nutrition sensitive targeting – PLW, malnourished children;
 - Improve Knowledge, Attitude and Practices (KAP) of nutrition-related behaviour through BCC and WASH
 - other innovations – social workers, ...
- ❑ Livelihood improvements – livelihoods component (with a livelihoods transfer ‘scale-up’), *a variant of the graduation model;*

The PSNP – Challenges

- ❑ Targeting – geographic and community
 - This proved problematic in the *lowlands*;
- ❑ Timeliness of payments – much improved, some weaknesses continue;
- ❑ Graduation – difficult, less understood;
- ❑ Sustainability – resources, coverage; increasing role of GoE in financing;
- ❑ Considerable food security and vulnerability remains – even with PSNP;
- ❑ PSNP4 and ongoing evaluation
 - nutrition sensitive, livelihoods component (with a livelihoods transfer ‘scale-up’), other innovations (TDS, Social workers, ...)
 - further successes and lessons expected;

The PSNP – Challenges

❑ Considerable vulnerability remains;

Two examples:

- Up to 75% more vulnerable people in drylands in 2030 (2010=100, medium fertility scenario)
- Child Stunting;

Stunting Incidence among Children Under 5 (%)					
		2005		2016	
AEZ zone		Non-PSNP	PSNP	Non-PSNP	PSNP
Drought prone		46	47	37	33
Pastoralist		50	60	35	34

Source: Authors' calculation using DHS (2005-2016) data. AEZ classification as earlier presentations.

- PSNP as a platform for response to shocks (relief delivery);
- Broader point: “Emergency is a failure of development”

The PSNP – Messages

- ❑ Large social protection programme can be operated in a poor country, even without means-tested targeting;
- ❑ Commitment indispensable – GoE (at different levels), development partners;
- ❑ Independent, rigorous, and regular evaluation vital;
- ❑ Genuine dialogue, learning and redesign essential;
- ❑ **Complementarity** – addressing emergency, enhancing resilience, and promoting development



References

Evaluation Reports – 2006, 2008, 2010, 2012, 2014 (years evaluation conducted)

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Thank You

