

Combined effects and synergies between agricultural and social protection interventions: what is the evidence so far?

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Literature review objectives

- To gather and systematize evidence on the value added of coordinated and coherent social protection (SP) and agricultural interventions (AI);
- To assess whether it is possible to identify which type of combined interventions have had the greatest impacts within different contexts;
- To contribute to defining a future evidence-generation agenda by identifying critical knowledge gaps;

Coherence and coordination between agricultural and social protection interventions in the FAA - categories

- 1. Multiple interventions combined into a single programme: same households have access to different components (e.g asset transfers + cash transfers).**

$$\text{Impact} = \text{SP} + \text{AI} + (\text{SP} * \text{AI})$$

- 2. Exploiting potential synergies between different interventions, even when they have different objectives and target groups.**

Typology of combined interventions as per the literature survey

- a. Sustainable Livelihood Programmes (SLP): single programmes with multiple components including both agricultural and social protection interventions;
- b. Complementary Programmes (CP): programmes from the two sectors that are designed and/or implemented in a somewhat coordinated and/or aligned manner;
- c. Overlapping programmes (OP): programmes from both sectors without alignment or coordination which beneficiaries can partially overlap at the individual/household and/or at geographical/community level only in an unplanned manner

Examples of combined interventions

Sustainable Livelihood Programmes: CFPR I and II and FSUP - Bangladesh; Graduation into Sustainable livelihoods (India (2), Pakistan, Ethiopia, Ghana, Honduras and Peru)

Complementary Programmes: Indira Kranti Pathan (IKP) (India), P-135 II (Vietnam), PNSP+OFSP/HABP (Ethiopia), CGP+LFSSP (Lesotho); Haku Wiñay (Peru), Atencion a crisis + investment grant or vocational training (Nicaragua).

Overlapping Programmes: Oportunidades+Procampo (Mexico); Bolsa Familia + rural credit (Brazil); CCT + food security and agricultural development (El Salvador)

Search Protocol: based on experts' feedback database search and hand-search

- a.) Population of interest: rural poor and vulnerable population living in Latin America and the Caribbean, Asia, Africa and Eastern Europe
- b.1) Agriculture interventions: rural development, access to markets, natural resources management, distribution of (improved) seeds, fertilizer subsidies (vouchers), extension services, subsidized credit, investment grants, asset (livestock) transfers, and homestead gardening
- b.2) Social protection interventions: social cash transfers (including CCTs, CTs and social pensions) and public works, as well as other broad categories that in some contexts are not classified as social protection such as asset transfers, home-grown school feeding programmes, microfinance, and weather-based crop insurance;
- Outcomes of interest: income, expenditure/consumption, asset or wealth index, poverty, purchase and use of inputs such as fertilizers, investment in productive assets including land and livestock, labour market participation and occupational choices, hours of work, private transfers, sources of income, food security and indicators for involvement in social networks and social participation

Criteria for selection

- Only papers and/or evaluation reports produced after 1990;
- Only papers written in **English, Spanish**, Portuguese and French;
- Use a robust impact evaluation methodology, based on an adequate identification strategy, including the definition of a clear comparison group and counterfactual.
- Use of experimental (randomized control trials), usually seen in the literature as the gold-standard among the evaluation techniques, and non-experimental designs (e.g. differences-in-differences, propensity score matching, regression discontinuity design, generalized propensity score and instrumental variables)

Total number of evaluation papers/reports of combined programmes

year	Freq.	%
2009	2	5.9
2010	2	5.9
2011	2	5.9
2012	6	17.6
2013	1	2.9
2014	5	14.7
2015/6	16	47.1
Total	34	100

Identified combined programmes and evaluation papers by region: Asia

Country	PROGRAMMES: Papers and/or Reports	N	%
ASIA		16	47
Bangladesh	<p>CFPR Phase 1 (SLP): Ahmed et al. (2009); Emran et al. (2014) ; Raza et al. (2012) ; Krishna et al. (2010); Misha et al. (2014);</p> <p>CFPR Phase 2 (SLP): Raza & Ara (2012); Bandiera et al. (2013);</p> <p>CLP Phase 1 (SLP + CP): HTPSE Limited (2011)</p> <p>ER+ (SLP+CP): Hernandez et al. (2015);</p> <p>FSUP (SLP): BDI (2012)</p> <p>SHOUHARDO (CP): Smith et al. (2011)</p>	11	32
India	<p>Graduation into Sustainable Livelihood (SLP): Banerjee et al. (2015);</p> <p>Graduation into Sustainable Livelihood (SLP): Bauchet et al. (2015);</p> <p>Indira Kranti Patham – IKP – (CP) : Prennushi & Gupta (2014)</p>	3	9
Pakistan	Graduation into Sustainable Livelihood (SLP): Banerjee et al. (2015)	1	3
Vietnam	P-135 II (CP): IRC (2012)	1	3

Identified combined programmes and evaluation papers by region: LAC

Country	PROGRAMMES: Papers and/or Reports	N	%
LATIN AMERICA		11	32
Peru	Graduation into Sustainable Livelihood (SLP): Banerjee et al. (2015); Juntos and Sierra Sur (OP): Aldana et al. (2016); Juntos and Rural credit (OP): Del Pozo (2014); Juntos and Waku Wiñay (CP): Escobal and Ponce (2015)	4	12
Brazil	Bolsa Familia and PRONAF (OP): Garcia et al. (2016)	1	3.0
Chile	IEF and Fosis's productive support (CP): Fernandez et al. (2016)	1	3.0
Colombia	Familias en Acción and Oportunidades Rurales (CP/OP) : Moya (2016)	1	3.0
Honduras	Graduation into Sustainable Livelihood (SLP): Banerjee et al. (2015)	1	3.0
Mexico	Oportunidades and PROCAMPO (OP): Naude et al. (2016)	1	3.0
Nicaragua	Atencion a Crisis and complementary programmes (CP) : Macours et al. (2012)	1	3.0
El Salvador	Comunidades Solidarias Rurales and rural development interventions (OP): De Sanfeliú et al. (2016)	1	3.0

Identified combined programmes and evaluation papers by region: LAC

Country	PROGRAMMES: Papers and/or Reports	N	%
AFRICA		7	21
Ethiopia	Graduation into Sustainable Livelihood (SLP): Banerjee et al. (2015); PSNP + OFSP/HASP (CP): Gilligan et al. (2009); Hoddinott et al. (2012); Nega et al. (2010)	4	12.1
Uganda	Women's Income Generation Support – WINGS (SLP): Blattman et al. (2014)	1	3.0
Ghana	Graduation into Sustainable Livelihood (SLP): Banerjee et al. (2015)	1	3.0
Lesotho	Child Grant Programme and Linking Food Security and Social Protection (CP): Dewbre et al. (2015)	1	3.0

Key features of the combined programmes evaluated and methodologies

- ❑ Strong association between regions and the prevalence of certain categories of programmes in the evaluations as well as with regard to the type of instruments used by the different programmes:
 - Asia: SLP design – focus on livestock transfers and extension services (training) coupled with consumption support (cash transfers); coaching and links with other social services. Bangladesh over-represented.
 - Latin America: CCT programme + extension services and rural credit + some livelihood interventions. Peru over-represented.
 - Africa: More balanced – CP (public works + agricultural interventions), SLP pilots and SCT + livelihoods. Ethiopia over-represented.
- ❑ Graduation into Sustainable livelihood – Large evidence base across regions.

Key features of the combined programmes evaluated and methodologies

- Unlike the literature on single programmes, particularly on SP programmes, there are not much impact evaluation of combined programmes;
- Difficulties in the coordination also affect the evaluation design – whereas SLP had experimental designs, most CP and OP has quasi-experimental design;
- Synergies were particularly difficult to measure across designs (SPL – no variety in design across treated groups (arm treatments); CP and OP – rarely one pure treated group both interventions.
- Focus on AI and SP that overlap at the household level regardless of their nature: SLP, CP or OP – Interest in the Average treatment effect on the treated (ATT) and/or Intention to treat (ITT).
- Not much on effects on non-beneficiaries – only on eligible non-beneficiary when spillover effects are assessed. Clearly linked with the type of methodologies chosen and cost of surveys.
- Not CGE and/or LEWIE. On ex-ante CGE, see Levy and Robinson (2014).

Methodology used in the evaluations

Methodology	N
Randomized control trial (Experimental evaluations)	10
Differences in differences	5
Differences in differences with propensity score matching with [non-parametric methods: e.g. nearest neighbor, kernel]	7
Differences in differences with propensity score matching (parametric method: inverse probability weighting)	1
Differences in differences with propensity score matching (parametric and non-parametric methods) and Klein-Vella Heteroscedasticity-Based Identification.	1
Panel data: fixed effects and random effects	1
Panel data: Fixed effects with propensity score matching	1
Single difference using Generalized Propensity Score (dosage)	1
Single Difference and difference-in-differences based on retrospective questions	1
Single Difference with propensity score matching	4
Single Difference (pooled data): Generalized Propensity score matching (cross section) – Inverse Probability Weighting (parametric)	1
Single Difference (treatment: different entry cohorts)	1
Total	34

Outcomes assessed in the evaluations

	N	%
Income, consumption or expenditures	28	85%
Assets	26	79%
Productive Assets	26	79%
Food security and nutrition	21	61%
Productivity	19	58%
Savings	18	55%
Occupation	17	52%
Credit	16	48%
Participation	13	39%
Poverty	5	15%
Agricultural inputs	5	15%

Investment in land: owned land, rented land and cultivated land

- *Overall the impact evaluation results summarised show an increase in access to and/or utilization of land.*
- *For SLP, the evidence suggests that in the case of **Bangladesh** (e.g. CFPR Phase 1 and 2 and FSUP) part of the return yielded by the livestock-based income generating activities has been invested in using more land, either from purchases or renting.*
- *For CP there is evidence of more land utilization in **Lesotho** with the combination of the LFSSPP to the CGP and in **India**, the IKP programme had led to an increase in the area of cultivated land by the poorest.*
- *For OP, overlap of rural credit and the CCT programme Juntos In **Peru** seem to have increased land utilization.*

Investment in productive assets, sustainability and impacts on production

- Overall, the evaluations show positive impacts on asset accumulation, including both productive and durable assets.
- SLP: Impacts are higher for better-off beneficiaries; stronger impacts on asset accumulation were observed for the **Ethiopia** pilot where the asset transfer was combined with the consumption support of the PNSP.
- CP: Similar evidence was also found in the evaluations of combination between PSNP and OFSP/HABP in **Ethiopia**.
- For other CP and even some OP, there is evidence that agricultural interventions such as extension services and access to better technology are likely to trigger some synergistic effects when combined cash transfers or public works programmes in terms of asset accumulation and adoption of new technologies. Positive impacts were observed for the IKP in **India**; the P-135 in **Vietnam**; the Sierra Sur and Juntos and Rural credit and Juntos in **Peru**; CSR and EP in **El Salvador**; and for the interaction between the coverage of Bolsa Familia and PRONAF in **Brazil**.
- However, there is only mixed evidence for the extent to which investments in productive assets are translated into higher production and higher business revenue

Access to credit and savings

- Overall the evaluations of *SLP* show positive impacts on savings and access to formal credit.
- *SLP*: Positive impacts on savings, but attenuation in the long-run. Positive impacts on credit access and/or a shift away from informal loans towards formal ones. A note of caution refers to the fact that positive impact on financial inclusion seem to be restricted to better-off participants.
- Evaluations of *CP* also show positive impacts on access to credit for beneficiaries such as in the case of the combination of the *PSNP* and the *OFSP* in **Ethiopia**.
- Even in the context of *OP* there has been some positive impacts: in **El Salvador**, participating or having participated in the *CCT* programme facilitated access to credit, mostly formal.

Diversifying economic activities and sources of income

- ❑ Overall the evaluations of the combined programmes show some diversification of economic activities within agriculture (including homestead gardens and livestock raising), but also a shift away from agriculture towards non-farm business.
- In many of the SLP, part of the livestock revenue has been used to foster high return crop production (FSUP in **Bangladesh**), but not necessarily non-farm business.
- Diversification into non-farm business was more common in the evaluation of programmes whose objective was clearly to enable vulnerable households to have a non-farm source of income such as in **Nicaragua** (CCT+ investment grant) and **Uganda** (WINGS), but this type of impact was also found in the case of the combination of PSNP and OFSP in **Ethiopia** (as well as for the PSNP only), and in the ER+ in **Bangladesh**.
- In the case of some CP and OP, the economic diversification was part of the complementary agricultural programme, usually as extensive services and implied the introduction of new crops.

Negative coping strategies

□ Evidence on child labour is mixed

- *Bolsa Familia in **Brazil** seems to be associated with a decrease in child labour, the interaction between Bolsa Familia and rural credit goes in the same direction, however in **Lesotho** the combined interventions seems to have led to an increase in child labour, particularly for girls. The scarce evidence for **Bangladesh** CFPR shows no impact on child labour, a result similar to the one found in **Colombia** for the combination of a CCT programme with rural intervention.*
- *As for begging and other undesirable forms of occupation, the evaluation of the CFPR 1 in **Bangladesh** shows reductions in their prevalence, but with attenuated effects in the long term.*
- *Asset depletion seems to be successfully avoided in SLP, more likely due to the consumption support component, although no evaluation has disentangled its effect.*

Shifts in labour allocation

- *SLP evaluations show increases the proportion of farm self-employment, particularly among women, as they are the core beneficiaries of the asset transfers. In some cases, increases in male self-employment are also observed in both farm and non-farm self-employment. Most of this increase in farm self-employment comes at the expense of time spent in wage labour, but the overall balance does not suggest reduction in work intensity, just a reallocation in line with the programmes objectives.*
- *This is also observed among interventions that aim to enable rural households to diversify their incomes by engaging in non-farm activities such as in **Uganda** (WINGS) and **Nicaragua** CCT plus investment grant for non-farm business. Even in these cases some small increases are seen in farm self-employment as well,*
- *Similar impacts were also found for CP such as the PSNP plus OFSP in **Ethiopia** and the combination of the LFSSPP with the CGP in **Lesotho**.*
- *Thus, the overall results suggest that combined programmes do not generate dependency but instead, tend to stimulate labour force participation among beneficiaries.*

Impact on consumption, expenditure and income

- ❑ Overall the evaluations show positive impacts on income, total expenditure and total and per capita food expenditure. The latter seems to have led to improvements in food security.
- SLP and CP, mainly in **Asia** and in **Africa** show very positive impact in all these dimensions. In the SLP particularly for the poorest quintiles.
- In **Latin America** the results seem more mixed with some combinations failing to improve incomes (Sierra Sur and Juntos) and/or food security indicators (Familias en Acción and Oportunidades Rurales), whereas others show positive impacts on per capita income (Bolsa Familia and PRONAF and Juntos and Haku Wiñay) and food security indicators (CCT plus investment grant in Nicaragua and CCT plus rural development in El Salvador).

Positive results: summary

- Investment in productive assets;
- Savings and access to formal credit;
- Diversifying sources of income towards more stable, permanent and profitable sources;
- Shift towards self-employment, particularly for women, and/or shift towards more profitable and decent employment;
- Food security;
- Income, consumption and expenditure levels; and
- Poverty reduction.

Mixed results

- Investment on productive assets and financial inclusion were much larger or restricted to the better-off beneficiaries. Reaching the poorest of the poor still seems challenging even within the context of SLP;
- The extent to which higher investment leads to long term productivity and income gains, particularly for CP programmes in Latin America;
- Adequacy of standard agricultural extension services for the targeted population of social assistance programmes;
- Trade-off between wage labour and self-employment as a sustainable local development strategy;
- Impact on child labour;
- Direction and scale of spillover effects;
- Effects of scaling-up.
- Sustainability of the results over time.

Which type of combined interventions have had the greatest impacts?

- ❑ At this stage it is difficult to assess it due to the association between groups of interventions and robustness of evaluation designs...
- SLP tend to be experimental or have more robust quasi-experimental design;
- However, most SLP evaluations with experimental design did not disentangle the contribution of each component and measuring synergies.
- CP and OP had less robust evaluation design and were overrepresented among LAC, particularly, among CCT plus cash transfers (exception: Macours et al. (2012))

Evaluation gaps

- More robust evaluation of CPs and OPs with a clear setting to measure synergies and still focusing on individual/household outcomes;
- More evaluations of combined interventions on the community and local markets (LEWIE models)
- Access to markets have been under-evaluated.
- Impact evaluations of programmes that combine local purchases with food assistance, including HGSF initiatives.
- Cost-benefit analysis are missing in most evaluations

Thank you



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