



Food and Agriculture Organization  
of the United Nations

Social Protection

From Protection to Production

# Synergies between Social Protection and Agriculture: What is the evidence so far?

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**Master Course in Public Policy & Human Development**

Maastricht, March 29, 2017

# Background

- Around the world, 1B poor people and 780M hungry
- Concentrated in SSA, living in rural areas, their livelihoods depending largely on agriculture
- Coordinated and coherent agricultural and social protection policies and programs to break the intergenerational transmission of poverty
- **Ag interventions** address some of the constraints limiting access to natural resources, productive inputs, financial and advisory services and markets
- **SP** provides liquidity to invest more time and resources in ag, increase participation in social networks and better manage risks

# What is coherence?

- The Framework for Analysis and Action (FAA) in Gavrilovic et al. (2016) defines coherence as:

*“a systematic promotion of complementary and consistent policies and programs across sectors, thereby creating synergies to combat rural poverty and food insecurity more effectively”*

- Coherence to avoid/minimize conflicting interactions between policies/programs
- Coherence can be pursued horizontally (across ministries/agencies) or vertically (across different levels of government)
- Coherence as a result of chance or through deliberate coordinated actions between stakeholders

# Why Ag and SP can be more effective when working together?

1. Neither agriculture nor social protection alone can address all constraints faced by poor rural households
2. Coherence avoids potential harm

## 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;

# Typology of combined interventions as per the literature survey

- a. **Sustainable Livelihood Programs (SLP)**: single programs with multiple components including both agricultural and social protection interventions;
- b. **Complementary Programs (CP)**: programs from the two sectors that are designed and/or implemented in a somewhat coordinated and/or aligned manner;
- c. **Overlapping programmes (OP)**: programs 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

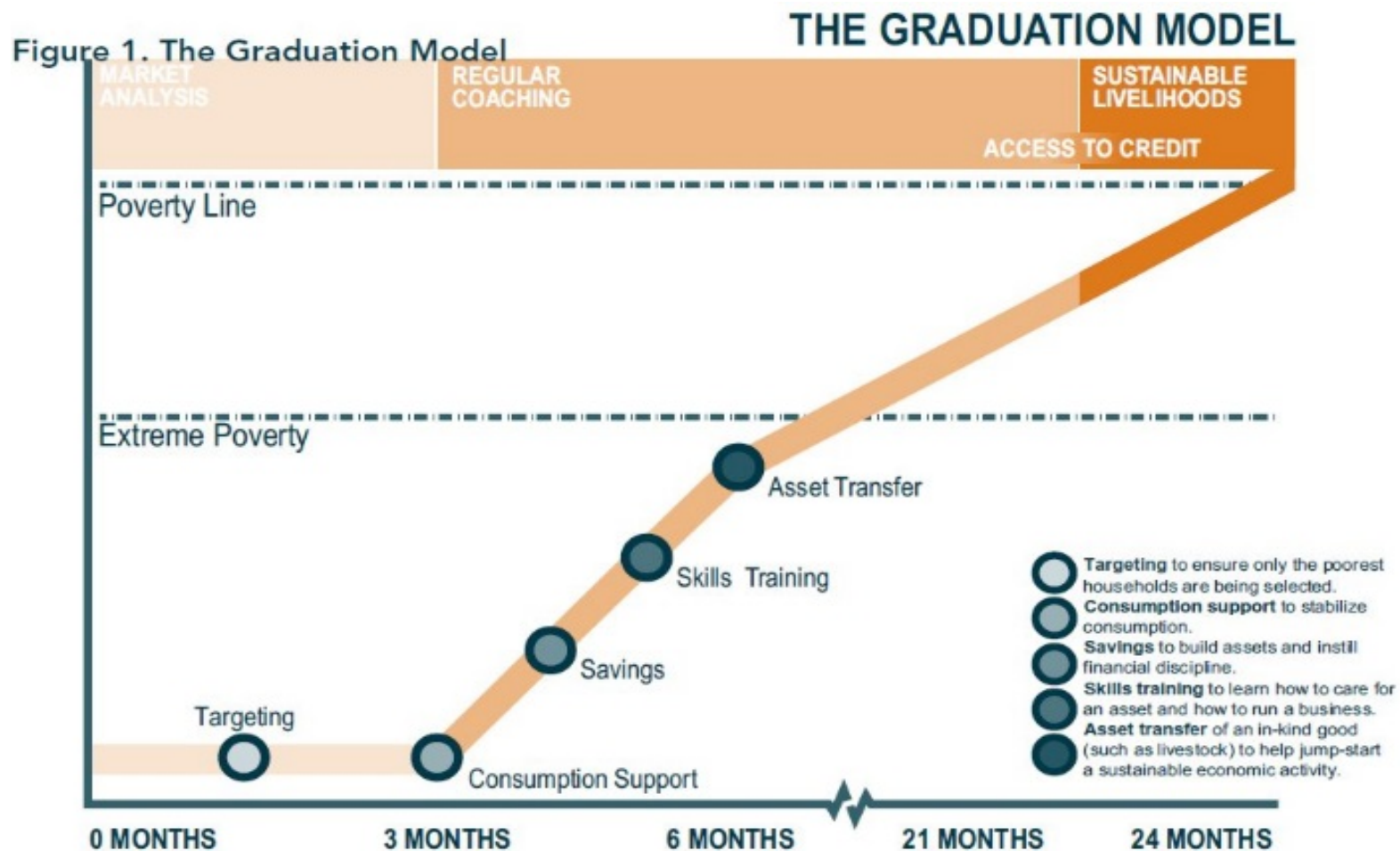
Sustainable Livelihood Programmes: CFPR I and II and FSUP - Bangladesh; Graduation into Sustainable livelihoods (India (2), Pakistan, Ethiopia, Ghana, Honduras and Peru)

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)

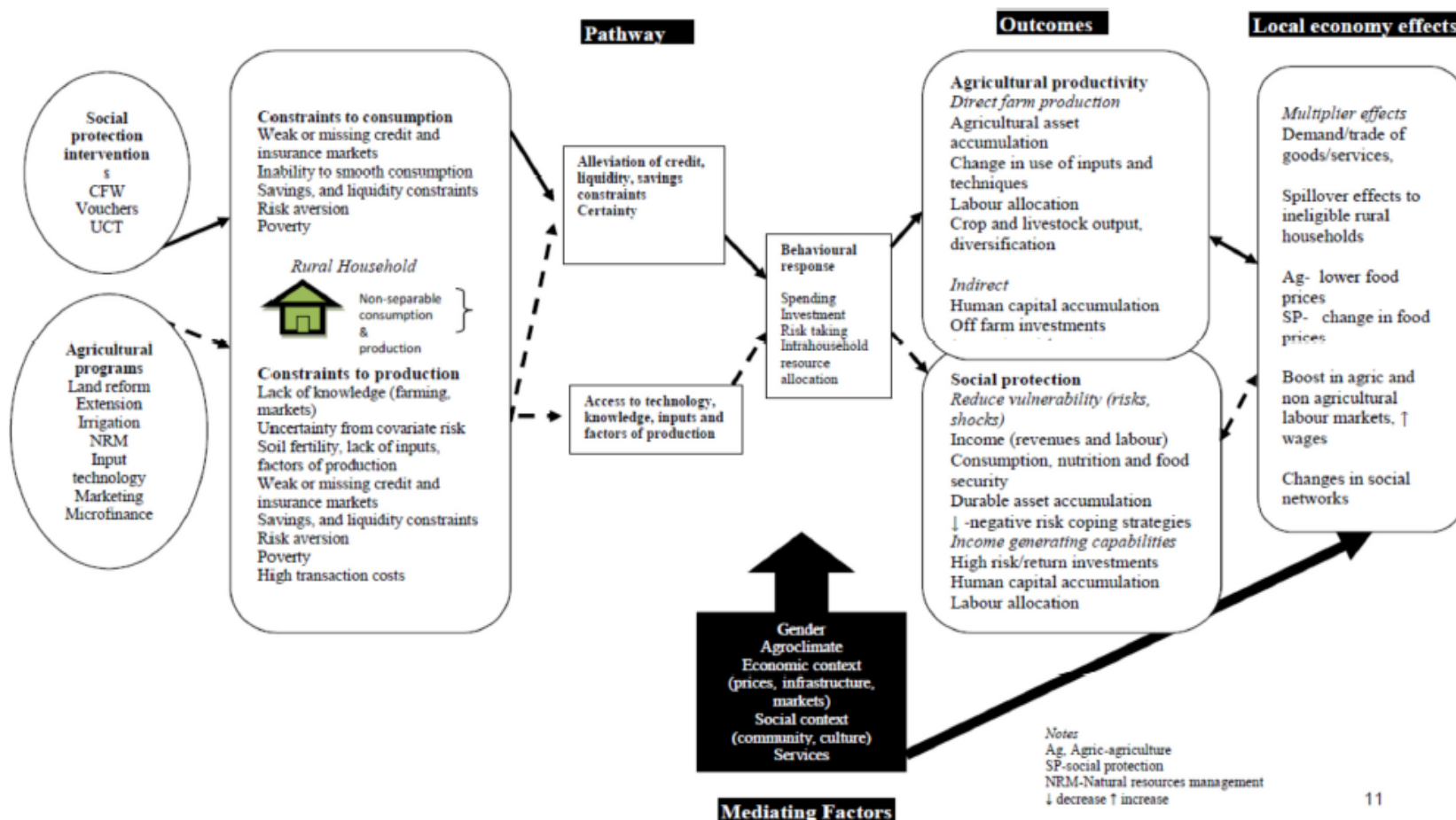


# The BRAC model





# Theory of change



Ref: Tirivayi et al. (2013)

# 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 programs

| year   | Freq. | %   |
|--------|-------|-----|
| 2009   | 2     | 5   |
| 2010   | 2     | 5   |
| 2011   | 1     | 3   |
| 2012   | 7     | 19  |
| 2013   | 1     | 3   |
| 2014   | 5     | 14  |
| 2015/6 | 19    | 51  |
| Total  | 37    | 100 |

## Evaluation papers by region: Asia

| Country    | PROGRAMMES: Papers and/or Reports   | N  |  | %  |
|------------|---|----|--|----|
| ASIA       |   | 17 |  | 46 |
| Bangladesh | <b>CFPR Phase 1 (SLP):</b> Ahmed et al. (2009); Emran et al. (2014) ;<br>Raza et al. (2012) ; Krishna et al. (2010); Misha et al. (2014);<br><b>CFPR Phase 2 (SLP):</b> Raza & Ara (2012); Bandiera et al. (2013);<br><b>CLP Phase 1 (SLP + CP):</b> HTPSE Limited (2011)<br><b>ER+ (SLP+CP):</b> Hernandez et al. (2015);<br><b>FSUP (SLP):</b> BDI (2012)<br><b>SHOUHARDO (CP):</b> Smith et al. (2011) | 12 |  | 32 |
| India      | <b>Graduation into Sustainable Livelihood (SLP):</b> Banerjee et al. (2015);<br><b>Graduation into Sustainable Livelihood (SLP):</b> Bauchet et al. (2015);<br><b>Indira Kranti Patham – IKP – (CP) :</b> Prennushi & Gupta (2014)  | 3  |  | 8  |
| Pakistan   | <b>Graduation into Sustainable Livelihood (SLP):</b> Banerjee et al. (2015)   | 1  |  | 3  |
| Vietnam    | <b>P-135 II (CP):</b> IRC (2012)  | 1  |  | 3  |

## Evaluation papers by region: LAC

| Country     | PROGRAMMES: Papers and/or Reports  | N  | %    |
|-------------|--|----|------|
| LAC         |  | 11 | 29.7 |
| Peru        | <b>Graduation into Sustainable Livelihood (SLP):</b> Banerjee et al. (2015);<br><b>Juntos and Sierra Sur (OP):</b> Aldana et al. (2016);<br><b>Juntos and Rural credit (OP):</b> Del Pozo (2014);<br><b>Juntos and Waku Wiñay (CP):</b> Escobal and Ponce (2015) | 4  | 10.8 |
| Brazil      | <b>Bolsa Familia and PRONAF (OP):</b> Garcia et al. (2016)   | 1  | 2.7  |
| Chile       | <b>IEF and Fosis's productive support (CP):</b> Fernandez et al. (2016)  | 1  | 2.7  |
| Colombia    | <b>Familias en Acción and Oportunidades Rurales (CP/OP) :</b> Moya (2016)  | 1  | 2.7  |
| Honduras    | <b>Graduation into Sustainable Livelihood (SLP):</b> Banerjee et al. (2015)  | 1  | 2.7  |
| Mexico      | <b>Oportunidades and PROCAMPO (OP):</b> Naude et al. (2016)  | 1  | 2.7  |
| Nicaragua   | <b>Atencion a Crisis and complementary programmes (CP) :</b> Macours et al. (2012)   | 1  | 2.7  |
| El Salvador | <b>Comunidades Solidarias Rurales and rural development interventions (OP):</b> De Sanfeliú et al. (2016)  | 1  | 2.7  |



# Evaluation papers by region: SSA

| Country      | PROGRAMMES: Papers and/or Reports   | N | %   |
|--------------|---|---|-----|
| AFRICA       |   | 9 | 24  |
| Ethiopia     | <b>Graduation into Sustainable Livelihood (SLP):</b> Banerjee et al. (2015);<br><b>PSNP + OFSP/HASP (CP):</b> Gilligan et al. (2009); Hoddinott et al. (2012); Nega et al. (2010) | 4 | 11  |
| Uganda       | <b>Women's Income Generation Support – WINGS (SLP):</b> Blattman et al. (2014)  | 1 | 2.7 |
| Ghana        | <b>Graduation into Sustainable Livelihood (SLP):</b> Banerjee et al. (2015)   | 1 | 2.7 |
| Lesotho      | <b>Child Grant Programme and Linking Food Security and Social Protection (CP):</b> Dewbre et al. (2015)   | 1 | 2.7 |
| Malawi       | <b>Social Cash Transfer Programme and Farm Input Subsidy Programme:</b> Pace <i>et al.</i> (2016)   | 1 | 2.7 |
| Burkina Faso | <b>Local Education Assistance and Procurement project (LEAP):</b> integrating local procurement into a longstanding school feeding programme: Upton <i>et al.</i> (2012)          | 1 | 2.7 |

# Key features of the combined programs 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 programs 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)  | 12 |
| Differences in differences   | 5  |
| Differences in differences with propensity score matching with [non-parametric methods: e.g. nearest neighbor, kernel]                                     | 6  |
| Differences in differences with propensity score matching (parametric method: inverse probability weighting)   | 2  |
| 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   | 2  |
| 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  | 37 |

## Outcomes assessed in the evaluations

|                                     | N  | %  |
|-------------------------------------|----|----|
| Income, consumption or expenditures | 30 | 81 |
| Assets                              | 28 | 76 |
| Productive Assets                   | 28 | 76 |
| Food security and nutrition         | 23 | 62 |
| Productivity                        | 21 | 57 |
| Savings                             | 18 | 49 |
| Occupation                          | 17 | 46 |
| Credit                              | 16 | 43 |
| Community participation             | 13 | 35 |
| Poverty                             | 5  | 14 |
| Agricultural inputs                 | 7  | 19 |

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

- Overall, IEs 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, IEs 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, 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 IEs 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 IEs 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 work is mixed

- *Bolsa Familia in **Brazil** seems to be associated with a decrease in child work, 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 children engagement in farming activities, particularly for girls.*
- *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 labor allocation

- ❑ Combined programmes do not generate dependency but instead, tend to stimulate labour force participation among beneficiaries.
- *SLP increases the proportion of farm self-employment, particularly among women, as they are the core beneficiaries of the asset transfers.. 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.*
- *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.*
- *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**.*

## Impact on consumption, expenditure and income

- ❑ Overall the IEs 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 HGSPF initiatives.
- Cost-benefit analysis are missing in most evaluations



# Thanks!

