

Growing Agricultural Livelihoods



Rigorous Evidence from Randomized Controlled Trials



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The Office of the Vice President of the Republic of the Philippines (OVP) is developing its flagship program, Angat Buhay, that focuses on six key advocacy areas: food security and nutrition, rural development, public education, universal health care, women's empowerment, and housing and resettlement. The program primarily seeks to reduce stunting and malnourishment and increase access to income-generating enterprises, among other goals. To achieve this, Angat Buhay is adapting a food security program called the Partnership Against Hunger and Poverty (PAHP).

The PAHP intervention provides assistance to the rural poor by organizing farmers into incorporated associations and establishing communal vegetable farms. During this process, beneficiaries are provided seeds and/or livestock and trained to make these assets productive through a series of agricultural workshops. In addition to providing for the landless beneficiaries, the communal farms are also demonstration farms: sites to teach association members how to grow vegetables and livestock in their own backyard farm. Looking forward, the OVP

is considering adding a credit component to help beneficiary farmers expand their agricultural activities.

By subscribing to the PAHP model, Angat Buhay endeavors to provide families access to healthy food by growing their own vegetables in their backyards or in a communal farm. If there is excess produce from backyard farming, then it can be sold to neighbors or the local market. If there is still surplus produce beyond the local market, associations sell produce to larger markets outside their locality.

Many programs similar to Angat Buhay have been implemented and evaluated across the world, and the OVP can benefit from the lessons learned through these evaluations. While all the interventions in this brief have been rigorously tested, the evidence comes from outside of the Philippines, and sometimes solutions that work in one situation may not work as well in another. Careful monitoring and evaluation as these programs are adapted to a new context will help stakeholders understand whether programs produce the intended results.

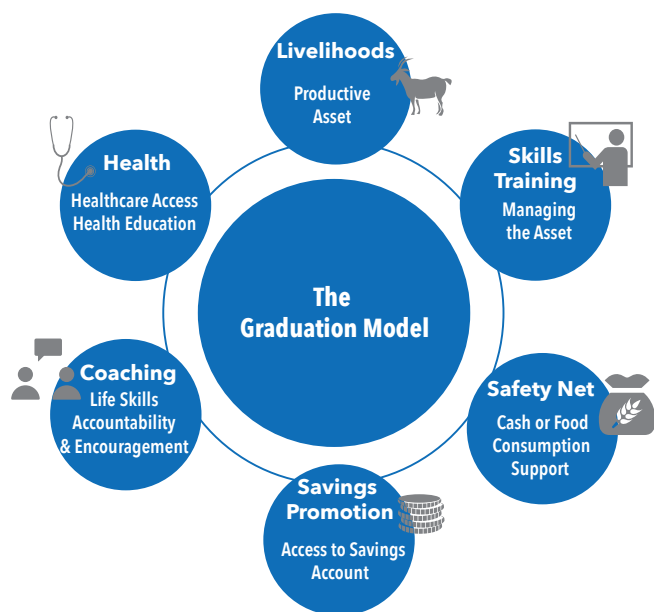
Based on the studies included in this brief, we suggest that the program planning consider:

1. Holistic approaches to livelihoods development for the very poor;
2. The profitability and not just productivity of new farming techniques;
3. The ways that people learn, behave, and communicate in the real world;
4. Properly equipping farmers to engage in new output markets; and
5. That increasing access to traditional forms of credit may not be enough to improve farmers' profitability.



A holistic approach to livelihoods development for the ultra-poor boosts livelihoods, income, and health

Six randomized evaluations of a multifaceted livelihood program for the ultra-poor led to large and lasting impacts on their standard of living across a diverse set of contexts and implementing partners.¹ This holistic livelihood program, called the Graduation approach (since it aims to “graduate” participants from extreme poverty) provided ultra-poor households with a productive asset, training, regular coaching, access to savings, and consumption support (a cash transfer). The beneficiaries choose the livelihood they would like to start. This shapes which asset transfer they receive, as well as the training and coaching content. Livestock was a common livelihood choice. The six-country study showed that this comprehensive approach for the ultra-poor boosted livelihoods, income, and health and led to large and lasting impacts on their standard of living. Researchers continue to evaluate the components of the Graduation approach in order to identify how to make the program even more cost-effective, but nonetheless the graduation program is an effective way to improve consumption and income from self-employment among the extreme poor.



Consider profitability and not just productivity of new farming techniques

Generally, traditional agricultural extension methods such as test plots and farmer field schools have had limited impacts on technological adoption among farmers. Rigorous studies

featured in this review suggest the following about conducting agricultural trainings and information dissemination activities:

- **Focus on profits, not just yield.** Farmers are unlikely to adopt agricultural technologies that are not demonstrably profitable (even if they increase yields). As such, policymakers should consider the costs of adoption, in addition to the technology’s benefits. Increased yields do not always translate to increased profits.²
- **Training content should be context-specific.** There is no one-size-fits-all program that can improve adoption of productive technologies—agroclimatic conditions and soil fertility can vary greatly across farms, so training content and recommendations must be relevant and applicable to local contexts.³ Programs that are able to tailor the message to individual farmers have sometimes been more successful than standard farmer trainings.⁴



Take into account the ways that people learn, behave, and communicate in the real world

- **Simplify information into easier-to-understand rules of thumb.** Adopting a new agricultural technology or understanding the proper use of existing technologies can be a difficult learning problem.⁵ Thus, simple “rule-of-thumb” trainings and tools can be effective in improving agricultural management practices.⁶
- **Consider behavioral biases.** General information dissemination is often not effective. There are behavioral biases that need to be considered in the design of information programs, such as present bias (when people give stronger weight to benefits they may receive more immediately, rather than those that are farther off) and procrastination.⁷ Social bias, which can affect whether farmers perceive extension officers to be effective, can also affect whether training programs work.⁸ Moreover, the evidence demonstrates that training is effective when coupled with actual demonstration, provision of complementary tools and inputs, or free samples of the new technology,⁹ and/or insurance against risk,¹⁰ so that farmers can overcome barriers to adoption.
- **Communication is effective when it is personal and/or direct.** Effective modes of communication include trainers, farmer demonstrators who have networks within the farmer community, or direct and consistent communication with farmers using mobile phones.¹¹ It is potentially more effective to use multiple messengers and to have messengers who are similar to the beneficiary farmers.¹²



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Properly equip farmers to engage in new markets

There has been much attention in agricultural research on connecting farmers to output markets, in hopes that access can increase income. To effectively connect farmers to new markets, the evidence so far suggests keeping these points in mind:

- **Providing price information is not enough.** Simply providing frequent information on prevailing market prices for crops does not necessarily lead to significant changes in sales or revenue for the farmer.¹³ There is also mixed evidence on whether price information increases farmer bargaining power or encourages farmers to sell at better but more distant markets.¹⁴ This is often because farmers face high transport costs that limit their bargaining power. However, there is evidence of price information influencing the decision-making process of most disadvantaged farmers in terms of information asymmetry.¹⁵
- **Farmers may need assistance in accessing output markets.** Especially in accessing an output market for the first time, farmers may need additional assistance—like connections to banks, retail providers of farm inputs, or exporters, certifications to sell to foreign markets, and transportation—to properly equip them to do so.¹⁶ It is important to study the context to understand the challenges that potential beneficiaries face in order to provide appropriate assistance. For example, in Kenya, researchers and NGOs first identified several specific challenges that smallholders faced (limited information on pricing and exporting opportunities, limited access to reliable contracts with large exporters, lack of trust between farmers and exporters, no relationship with financial institutions, and limited access to and financing for transportation of crops) and then designed and evaluated an intervention with that in mind.



Increasing access to traditional forms of credit may not be enough to improve farmers' profitability

There is low take-up of credit among farmers, even if access to capital leads to changes in agricultural activity that would increase yields and profits. Research in this area surfaces important lessons to overcome this challenge:

- **Credit may not be the primary constraint to technology adoption.** While access to credit may be important, one should consider the relative strength of the various constraints that farmers face when considering which intervention(s) to prioritize. Evidence in Ghana demonstrated that aversion to risk was the main constraint to agricultural investment, and thus risk-reducing products such as insurance were more effective at increasing investment and productivity than credit provision.¹⁷
- **Credit products should be tailored to the seasonality in farmer income and consider possible alternatives for traditional collateral.** Credit products that allow farmers to save during harvest either by allowing payment at the end of the season or by disbursing loans at harvest or end of the season pose as effective options to increase investment, yields, and profits.¹⁸ Offering non-traditional and in-kind collateral options is a possible way to overcome barriers to credit take-up.¹⁹
- **Credit may have differential impacts on poor, less productive farmers.** Where credit can help improve agricultural investment and profits, these outcomes may be experienced more by those who are already relatively productive.²⁰ These findings suggest that credit alone will likely not help improve agricultural productivity of very poor farmers, but rather would need to be complemented with other interventions to achieve the desired impact. While the impacts on productivity and profits may not be large, access to credit can substantially increase food security for those farmers who do not have agricultural income during the dry season (i.e. they have non-irrigated farms) and lack access to non-farm income opportunities.²¹

Conclusion

Rigorous evidence from randomized controlled trials provides a wealth of information for the Angat Buhay program, although all this guidance should be contextualized. The OVP should consider the evaluations in this brief while taking into consideration the different contexts in Angat Buhay pilot areas. Right-fit monitoring and evaluation of the Angat Buhay pilot can facilitate this process.

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Writer: Riza Halili | Editors: Heidi McAnnally-Linz, Bethany Park, Peter Srouji | Designer: Cara Vu | Icons: Lucas fhñe, romzicon, TukTuk Design (The Noun Project)

IPA Philippines: info-philippines@poverty-action.org | www.poverty-action.org/philippines

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