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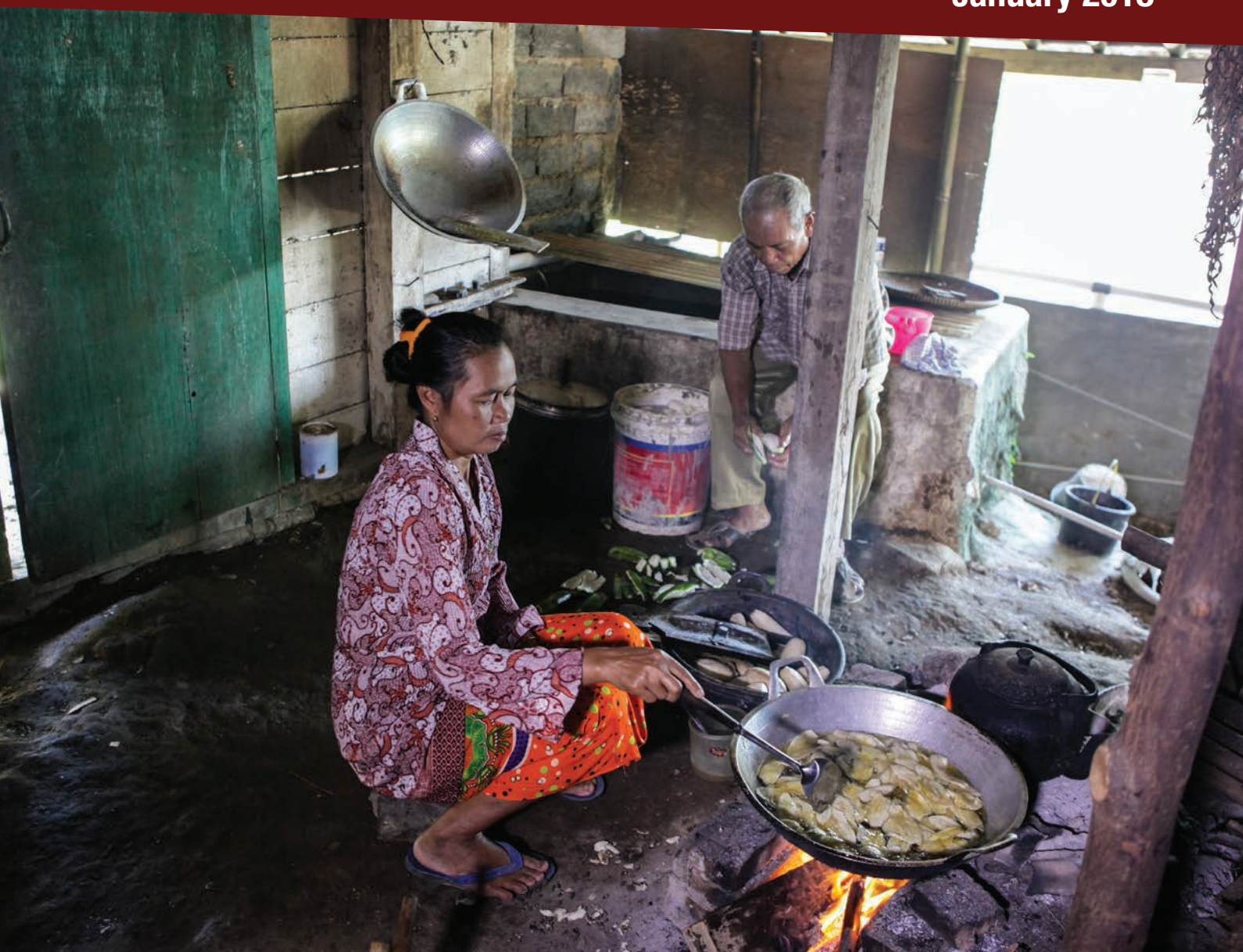


Australian Government

Research Report

Short-run Results from a Randomized Evaluation of the Livelihoods Pilot (PKKPM) in Indonesia

January 2018



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Table of Contents

Table of Contents	iii
Abstract.....	vii
1. Introduction	1
2. Country Context	5
3. Intervention Strategy & Key Objectives	7
4. Knowledge Gaps and Related Empirical Literature	11
5. Key Research Questions.....	13
6. Detailed Project Activities.....	15
7. Intended Outputs and Outcomes	19
8. Design of Impact Evaluation.....	21
PKKPM: Roll-out plan and research design	22
Sampling Strategy	23
The Population	23
Planned Surveys	23
9. Results of Baseline Study.....	25
Descriptive Statistics of the Households.....	26
Nature of Livelihoods.....	26
Seasonal Migration.....	28
Social Assistance	28
Assets, Savings and Loans	29
Consumption, Income and Labour Supply	30
Empowerment.....	31
Preliminary Impacts	32
Networks	32
Savings and Loans	32

Income, labour supply and migration	32
Consumption.....	33
10. Conclusion	35
11. References	37
Appendices.....	43
Annex 1: Power calculations and sampling	44
Annex 2: Balance Tests	48
Annex 3: Survey Instruments.....	59

List of Figures

Figure 1	Summary of other components of P2B	8
Figure 2	Summary of PKKPM's approach	17
Figure 3	Average per-capita household expenditure across old decile (IDR).....	26
Figure 4	Average per capita household expenditure across new decile (IDR) ^a	26
Figure 5	Percentage of households with any member engaged in the livelihoods, by decile (%)	27
Figure 6	Livelihoods of male, by livelihoods, by decile (%).....	27
Figure 7	Livelihoods of female, by livelihoods, by decile (%)	27
Figure 8	Percentage of households with any seasonal migration by province (%)	28
Figure 9	Average amount of assistance received by household (IDR), by old decile.....	29
Figure 10	Average amount of assistance received by household (IDR) by new decile.....	29
Figure 11	Current savings according to source and deciles	29
Figure 12	Percentage of loans used for productive purposes.....	30
Figure 13	Reasons for not taking a loan	30
Figure 14	Total monthly cash income	30
Figure 15	Women's role in decision making	31
Figure 16	Self Labour Activity.....	31
Figure 17	Mobility	31
Figure 18	Access to birth certificates	31
Figure 19	Reason for not having a birth certificate	31

List of Tables

Table 2	Number of households and distribution across deciles.....	44
Table 3	Assumption for the power calculations of the evaluation.....	45
Table 4	Total number of households and number of sampled households by province.....	46
Table A.1	Table of means and balancing test at the <i>kecamatan</i> level	48
Table A.2	Table of means and balancing test at the village level for PKKPM treatment <i>kecamatan</i>	49
Table A.3	Table of means and balancing test at the village level for PKKPM treatment and control <i>kecamatan</i>	54
Table B	Summary of the draft survey instruments.....	59

Abstract

Improving the livelihoods of poor households in a sustainable manner is the priority of governments in many poor and middle-income countries. However, the evidence of what works and what doesn't in encouraging micro-entrepreneurship and enhancing livelihoods is limited, especially in middle-income countries such as Indonesia. Some of the promising initiatives (global and local) have tried to combine various activities by adopting a multi-sectoral approach (providing capital or assets, training, savings and consumption-easing support, social networks, market linkages, etc.) to help the poor graduate out of poverty. Thus, based on past experiences from Indonesia and current global evidence, the Government of Indonesia has designed an overarching umbrella of programs, Pengembangan Penghidupan Berkelanjutan (P2B), to improve the livelihoods and productivity of the poorest self-employed and poor households. This impact evaluation aims to assess the effectiveness of the core component of P2B: a community-based livelihoods program with a group loan (PKKPM).

1. Introduction



Enhancing the livelihoods of the poor and poorest households is critical to every country's poverty reduction efforts. Very often poverty reduction programs such as cash transfers and agriculture productivity initiatives leave out the middle poor¹. In developing countries, most of these households are either self-employed in smallholder agriculture, or have micro-businesses, or both. Hence, increasing the productivity of these micro-entrepreneurs (or self-employed households) is critical, both to provide sustained income from informal employment and to enable them to graduate from social protection programs (World Bank 2012). Recent experimental work has also suggested that micro-entrepreneurship can lead to long-term economic security and enhancement of income for poor households (Bandiera et al. 2013; Blattman et al. 2013; Blattman et al. 2014; Fiala 2013).

So, what can be done to initiate, develop and grow micro-entrepreneurship? Until recently, one of the most popular interventions in various countries including Indonesia was micro-credit provision. It was assumed that removing capital constraints would be sufficient to enable poor people to become micro-entrepreneurs, or to grow their businesses. Hence, large resources have been and continue to be channeled into programs and companies providing small loans, with the expectation that the poor would buy productive assets and grow their small businesses. However, most of experimental evidence from microfinance has failed to find these positive results on income, assets and business profits (Banerjee, Karlan and Zinman 2015; Banerjee 2013; Kaboski and Townsend 2012), with the exception of one study in Uganda (Fiala 2013).

Could it be that poor don't have the business skills or the training to utilize these funds appropriately? The existing body of evidence on the combined effects of training and micro-finance has mostly found positive effects on improved investment, knowledge and attitudes, but impacts on profits and incomes have been more elusive (Berge, Bjorvatn and Tungodden 2011; Bjorvatn and Tungodden 2010; Bruhn and Zia 2011; Cho and Honorati 2014; Cho et al. 2012; Giné and Mansuri 2014; Karlan, Knight and Udry 2012; Karlan and Valdivia 2011), except in two studies from Mexico (Calderon, Cunha and De Giorgi 2013) and Uganda (Fiala 2013). To summarize, training programs have some effects on improving the performance of microloans, but their cost-benefit analysis depends on context and the nature of the training (Drexler, Fischer and Schoar 2014). Furthermore, other reasons such as lack of patience, small loan sizes and family pressure to take care of immediate household needs have also been cited for the lack of optimal investments in businesses.

More recently, a lot of experimental evidence has also suggested that instead of loans, giving direct unconditional grants can be enough to encourage entrepreneurship. Most notably, a recent impact evaluation from Uganda found a large and significant impact on income achieved by providing a small grant to poor households (Blattman et al. 2013). Other impact evaluations in other parts of world have also found positive results from providing cash transfers with various combinations of business training and other capacity building activities (Blattman et al. 2014; Fafchamps et al. 2011; Macours, Premand and Vakis 2012; De Mel, McKenzie and Woodruff 2008). However, given the popularity of cash transfers and micro-loans, it is surprising that there is only one rigorous impact evaluation comparing loans and grants. That suggests that the complete package of loans and training was the most effective (Fiala 2013).

¹ This is defined as households living on US\$1-2 (PPP) per day.

Finally, a few programs, mostly in South Asia, have tried to take a multi-sectoral approach of combining micro-loans with micro-savings, business training, group training, social networks and demand-driven technical training (with a focus on agriculture). Although the experimental evidence on these programs is limited, most studies have found large and significant effects on consumption, asset size and skills (Behera et al. 2013; Datta 2013; Parajuli et al. 2012; Prennushi and Gupta 2014; Deininger and Liu 2013a, b). Similarly, a recently published six-country study found that a multi-sectoral program approach combined with assets transfer (instead of micro-loans) has positive returns and long-term effects (Banerjee et al. 2015). This impact evaluation aims to add to this nascent literature on the effects on such multi-sectoral sustainable livelihoods programs for encouraging and growing micro-entrepreneurship by evaluating an innovative government-run program in Indonesia.

2. Country Context



Indonesia, the fourth most populous country in the world, has multiple poverty reduction programs like many other developing countries. Although these programs have contributed to significant reductions in Indonesia's poverty to date, poverty in Indonesia remains stubbornly high. More than 28 million Indonesians (11.4% of the population) continue to live below the poverty line and there are still about 70 million people living slightly above the poverty line who are very vulnerable to shocks that can easily push them into poverty.

The Government of Indonesia (GOI) is committed to accelerating the pace of poverty reduction with a renewed commitment from the new administration. This is in accordance with the Long-Term National Development Plan (RPJP) 2005-2025 and is a part of the technocratic document of the forthcoming five-year Mid-Term National Development Plan (RPJMN) 2015-2019. It is subsequently provided in the Government Annual Work Plan (RKP) 2015. GOI has developed a comprehensive strategy to accelerate and expand Indonesian economic development by increasing investments to improve economic growth in the long run. In 2013, the Government of Indonesia also passed a new landmark Village Law (popularly called the UU Desa), which builds on the country's decentralization framework and provides direct funding to villages to meet their needs according to the principles of *gotong royong* (mutual cooperation), democracy, participation, equality, empowerment and sustainability.

A critical component of this strategy is a comprehensive poverty reduction plan based on integrating and connecting poor and very poor Indonesians with new economic opportunities to ensure equitable outcomes and acceleration of poverty reduction in the future. These people also need to be protected from various shocks, including those that may occur following the acceleration of economic activities. One of the crucial components of mitigating this risk is to enhance the existing livelihoods of the poorest and very poor households in Indonesia.

The rural livelihoods strategy builds on the community empowerment program called Program Nasional Pemberdayaan Masyarakat (PNPM), which was started 14 years ago. PNPM has used the community-driven development (CDD) approach to deliver both community-based infrastructure activities and a Revolving Loan Fund (RLF) targeting the productive poor. While these community-based programs in Indonesia have been very successful², they need to continuously adapt and improve, consistent with implementation experience, changes in national policies and local-level demand. Based on these factors, the National Development Planning Agency (BAPPENAS) has designed a community-based livelihoods pilot program called Pengembangan Penghidupan Berkelanjutan (P2B).

² See Voss (2008) for more details

3. Intervention Strategy & Key Objectives



P2B is an overall umbrella of programs that aims to link together community demands for greater economic empowerment using the sustainable livelihoods approach. It combines the demand-and-supply aspects of livelihoods. This impact evaluation will focus on its core component: Peningkatan Kesejahteraan Keluarga Berbasis Pemberdayaan Masyarakat (PKKPM). The figure below provides a summary of other components of P2B:

Figure 1: Summary of other components of P2B³

PKKPM-P2B	Kube-P2B	P2B-Labour	P2B-Cooperative	P2B-Fisheries	AIP-PRISMA
<ul style="list-style-type: none"> Multi-sectoral livelihoods program with group support, micro-savings, group lending, financial management training and technical training Productive economic infrastructure 	<ul style="list-style-type: none"> Group grants program with financial management training 	<ul style="list-style-type: none"> Make government training programs more inclusive Focus on vulnerable youth 	<ul style="list-style-type: none"> Focus on cooperatives, micro-entrepreneurs, business groups and social enterprises Support for capacity building, financial management support and legal support 	<ul style="list-style-type: none"> Design of the fisheries program is not completed Current draft design has a huge emphasis on providing assets to poor fishermen and fisherwomen 	<ul style="list-style-type: none"> Focused on making markets work for the poor for small and marginal farmers in Eastern Indonesia Funded and supported by donors

Peningkatan Kesejahteraan Keluarga Berbasis Pemberdayaan Masyarakat (PKKPM) built on the long history of the successes and failures of community-based agriculture and micro-loans programs in Indonesia.⁴ It was the first program that linked both the demand and supply sides of various aspects of livelihoods. Its approach was consistent with the nascent body of global evidence that multi-sectoral community-based livelihoods programs can lead to poverty reduction, enhance skills, reduce market failures and eventually improve incomes. PKKPM aims to gradually expand the economic options available to the poor, assisting them to move from insecure poverty to economic independence with a combination of institutional, financial and technical support. It intended to achieve this objective through two broad concepts: social empowerment and economic empowerment.

The initial part of the program focused on developing, empowering and building the self-managed grassroots institutions of the poor and creating an institutional platform for the poor, which also became a platform for 'social empowerment'. This platform was used to **augment poor peoples' voices and their capacity** to engage with a range of public institutions (especially under the new village law) and the officials interacting with the poor, enhancing their ability to take advantage of local livelihoods opportunities and to demand other services and meet other needs.

The institutional development also followed the principle of aggregation, networking the small groups and community-based organizations, thereby enabling greater bargaining power, aggregation of demand and becoming a platform for 'economic empowerment'. Historically, the private sector has shown limited or no interest in what it perceives as poor, uneducated and dispersed producers and consumers, but there is increasing recognition that the rural poor at the 'Bottom of the Pyramid'⁵ actually provide a large, untapped potential market for products and services, as well as a source of quality goods and labour.

³ This schematic has been updated until 2016. It is possible that components have been added or removed from it since then.

⁴ The program has incorporated lessons from previous livelihoods initiatives such as PIDRA, the PNPM-RLF program, PEKKA and SADI.

⁵ See Prahalad (2009) for more details.

To summarize, PKKPM aimed to enable poor people with the skills, organizations and voice to participate in and capture the benefits of the growth taking place in the dynamic Indonesian context, helping communities to help themselves to both engage with government institutions and to make markets work for them. It is envisioned that this would catalyze entrepreneurial activities, enhancing the livelihoods of the poor and poorest households.⁶ **Eventually, the self-employed rural poor in Indonesia should be able to grow their micro-businesses, gain a bigger share of the rural economy and be economically and socially empowered.**

⁶ The two major underlying assumptions behind PKKPM are that rural households have viable business models, but have capital constraints and increasing the size of the capital infusion (loans in this case), along with training, will be enough to make their businesses profitable and grow their incomes.

4. Knowledge Gaps and Related Empirical Literature



Broadly, this impact evaluation aims to contribute to the ongoing conversation about successful ways to encourage micro-entrepreneurship. Recent impact evaluations have suggested various approaches to remove capital constraints such as direct asset transfers with skill building interventions (Bandiera et al. 2013), unconditional cash transfers (Bandiera et al. 2013; Blattman et al. 2013), productive investment grants (Macours, Premand and Vakis 2012), in-kind grants (Fafchamps et al. 2011), cash transfers with skill building (Blattman et al. 2014), micro-savings (Karlan, Ratan and Zinman 2014) and micro-loans (Fiala 2013, Attanasio et al. 2014; De Mel, McKenzie and Woodruff 2008).

Specifically, it intends to add to the nascent bodies of literature on the impacts of community-based livelihoods program (P2B). Livelihoods programs, mostly in South Asia, have demonstrated (with varying degrees of rigor in their impact analyses) that a combination of the abovementioned interventions can lead to poverty reduction, enhance skills and improve agricultural income. For instance, an evaluation of the Poverty Alleviation Fund, a community-based livelihoods program in Nepal, has found large and significant gains in the consumption patterns of poor households (Parajuli et al. 2012). Similarly, various impact evaluations from Andhra Pradesh, India, have found large significant gains in asset accumulation and consumption (Deininger and Liu 2013a, b, Prenzushi and Gupta 2014). Furthermore, a retrospective evaluation of a livelihoods project in Tamil Nadu has also found that participation in the multi-sectoral livelihoods program (with an emphasis on building skills) has resulted in a shift in livelihoods portfolios towards more skilled employment and increased consumption for the poorest households.

5. Key Research Questions



The impact evaluation intends to answer the following questions:

1. Has PKKPM improved the well-being (consumption, income, assets, etc.) of the participant households?
2. Has PKKPM increased the incidence of micro-entrepreneurship in the target areas?
3. Has the PKKPM program reduced capital constraints for the households and improved productive use of capital amongst participants?
4. Have the households' savings improved after participation in PKKPM?
5. Have the participant households witnessed an improvement in their economic, financial and social skills?
6. Have the poorest households become more economically empowered after participation?

6. Detailed Project Activities



As an intervention, PKKPM is a multi-step program and it has the following subcomponents:

1. Institution Building:

It starts with dissemination (also called publicity) of the program to the intended beneficiaries at the village and hamlet level. Interested households in geographical proximity need to form women-only savings and loans groups called Kelompok Penghidupan Berkelanjutan (KPB) – smaller than 20 households – to join the program⁷. Typically, the first group activity is group management training. As the basic groups mature, mixed groups with similar business interests are formed.⁸ Furthermore, as the program matures, it is envisaged that these groups will be connected and linked to each other, forming a large social network.

2. Micro-savings and inter-loaning of savings

Immediately after groups are formed, facilitators and cadres encourage households to save. Although not mandatory for every participant household, the group needs to save to remain active in the program. The program participants are also encouraged to inter-loan these savings and build trust amongst each other.

3. Financial Management and micro-entrepreneurship training

The group savings stage is followed by basic financial management training. After reaching a certain level of maturity, which includes meeting regularly, saving regularly and maintaining accounting books, the last round of micro-entrepreneurship training is provided.

4. Business plan preparation

During this training, poor households are also taught how to prepare simple business plans. Shortly after the training, these households are facilitated to prepare individual business plans aggregated in groups at various levels⁹.

5. Access to Capital

Groups that have prepared appropriate business plans, have been active for six months and have met certain criteria are eligible for group cash grants (for training only) and group loans. The total amount of funds from the program that each household can access for the various components shall not exceed IDR 5 million, or approximately US\$390.¹⁰ PKKPM builds

⁷ The pilot is mobilizing the very poor and poorest members of the community into basic sustainable livelihoods groups called Kelompok Penghidupan Berkelanjutan (KPB), which will become the platform on which additional business groups or Kelompok Usaha (KU) will be formed. KPBs will be the basic groups (10 to 20 people) with representation from only one member from each household (male or female). These should have not received loans from the PNPML RLF program. The KU is the group comprising members from various KPBs having the same business interest or same economic activity, i.e. raising poultry, fisheries, etc. A recent randomized evaluation from India also suggests that participation in a loan program with peers can improve the performance of loans and make them more productive (Field et al. 2014).

⁸ The economic evidence on the role of gender in micro-enterprises and micro-finance suggests it remains limited. As women are generally poorer, in Indonesia as well (Burjorjee, Deshpande and Weidemann 2002), and have less access to loans (Khandker 1998; Yunus 2004), micro-loans and micro-entrepreneurship should have a more pronounced results on women-only programs. However, recent empirical evidence has painted a more mixed picture (Kevane and Wydick 2001) with some evaluations even suggesting greater effects for men in microfinance (Fafchamps et al. 2014; De Mel, McKenzie and Woodruff 2009), while some suggest positive effects on women's enterprises (Field et al. 2014; Ghosh and Guha 2015). In addition, Indonesia has the long history of the women-only RLF program. Thus, policymakers decided that PKKPM participation for the basic savings groups should be restricted to females only and for the business groups should be open to both genders.

⁹ Loans and grant requests can be individual, group business driven (as KUs), or combined for the whole KPB.

¹⁰ The impact of group versus individual lending is highly dependent on the context. Giné et al. (2010) found that removing group liability, or introducing individual liability from scratch, did not affect repayment rates over the ensuing three years. However, Carpena et al. (2013) exploited a quasi-experiment in which an Indian micro-finance institution switched from individual to joint-liability contracts and found that joint liability significantly improves loan repayment rates. Similarly, a randomized trial in Mongolia (Attanasio et al. 2014) found a positive impact of access to group loans on food consumption and entrepreneurship when compared to individual loans (no impact). Similarly, a few studies have found that group grants also perform better than individual grants (Blattman et al. 2013; Blattman et al. 2014).

on Indonesia's long history of community-based group micro-credit¹¹. At 14% of GDP per capita, 1.38 times the national poverty line and two times the cash transfer program, the loan size is significantly higher than any other existing loan program.¹² The community decides the interest rate and historical data from other community-led micro-finance program suggests that this typically ranges from 15% to 18%.

6. Livelihoods Training

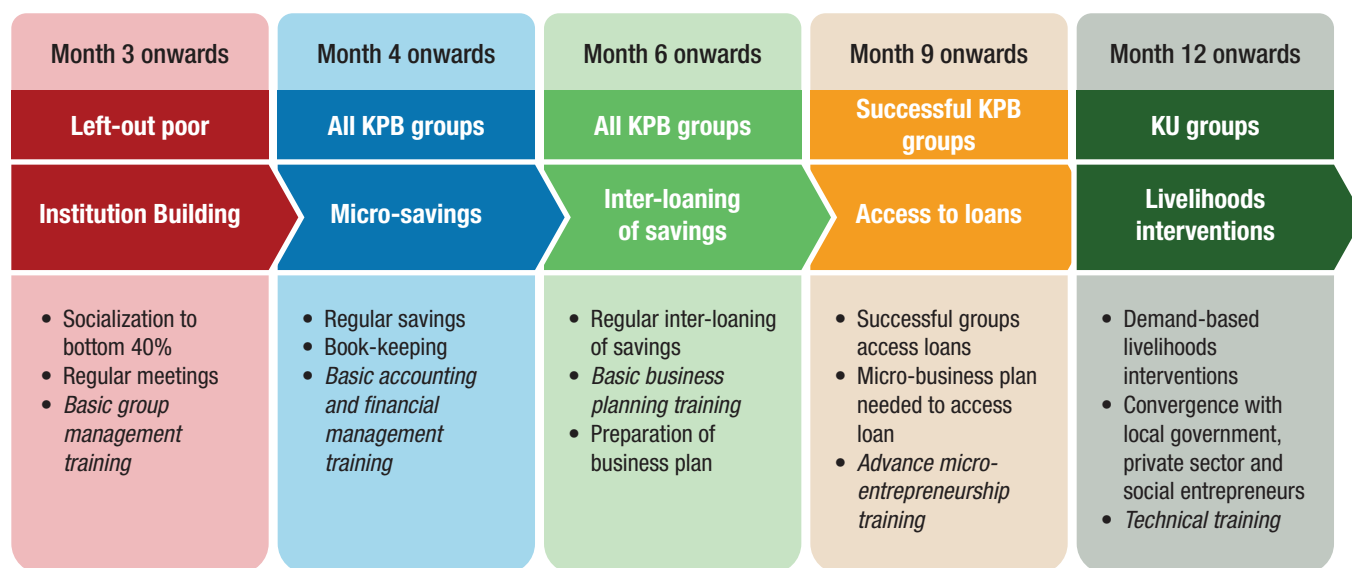
After households have accessed loans and grants, these households can enroll in one of the many technical training programs provided by the various ministries and other development programs converging with PKKPM (agriculture, fisheries, etc.).

7. Productive Infrastructure (PKKPM-PiE)

In addition to private goods activities, the communities can also use some of the funds provided for building productive infrastructure at the *kecamatan* (subdistrict) level.

The chart below provides a schematic summary of various activities of PKKPM with the suggested timelines.

Figure 2: Summary of PKKPM's approach



¹¹ See Banerjee (2013), Banerjee, Karlan, and Zinman (2015) and Stewart et al. (2012) for a summary of the recent evidence on microfinance.

¹² Although there is no research on comparing loan size, a recent review of the evidence of microfinance suggests that increasing the loan size could be one of the ways to improve the performance of micro-credit (Banerjee 2013).

PKKPM in its current form tried to address the following key issues:

- The existing government-run micro-loan program (RLF) has no focus on institution building and the groups that are formed are not very functional. PKKPM rectified that by increasing its focus on the appropriate functioning of groups.¹³
- The impact of commitment devices on household savings is positive overall; thus it is assumed that micro-savings and inter-lending of those savings are good first activities to build trust amongst groups members.¹⁴ In addition, it is also assumed that micro-savings combined with micro-loans can lead to improved performance of loans.¹⁵
- As discussed earlier, there is plenty of evidence, although inconclusive, suggesting that training combined with capital (assets) infusion can improve the performance of loans and grants.¹⁶ Various kinds of training provided under the program aim to achieve this objective and significant efforts have been made to simplify and customize training for the poor and poorest households. In addition, a significant proportion of the budget is also being spent on various training programs.
- Several micro-loans programs have failed to deliver positive outcomes for enterprise profits and impacts on income because households often divert the money for consumption. PKKPM addressed that by making the preparation of a business plan a pre-requisite to accessing loans and by closely monitoring the expenditure of funds according to the plan.
- PKKPM also gives small demand-driven skills grants so that households are not reluctant to access the training needed to improve their business productivity.
- Furthermore, as the program matures, more advanced business groups will be created from the members of savings groups, eventually forming a large social network. It is intended that this social network will accelerate the diffusion of technical knowledge and good practices.¹⁷
- Finally, PKKPM was still building its menu of technical training such as for agriculture, fisheries, formal sector linkages, etc. These training modules were intended to help poor households to move up the production curve and in some instances move to a different production curve. In some cases, these households could also diversify their livelihoods away from agriculture to other occupations.

¹³ A study of groups in Andhra Pradesh, India, (Deininger and Liu 2009) also suggests that focusing on formation and monitoring of groups can pay for itself.

¹⁴ The impact of higher savings on development outcomes is quite promising, impacting empowerment, promoting entrepreneurial investment and activities and increasing agriculture investment and production (Karlan, Ratan and Zinman 2014). Commitment devices, especially soft ones like group savings promoted by PKKPM, have shown promising results (Kast, Meier and Pomeranz 2012; Karlan, Ratan and Zinman 2014).

¹⁵ A few studies that have tried to assess the combined effect of micro-savings and micro-loans have found mixed results on development outcomes (Stewart et al. 2012).

¹⁶ See section 4 for the relevant literature.

¹⁷ Empirical evidence suggests that outcomes are correlated with the behaviour of the social group or neighbourhood to which a household belongs (Krishnan and Sciubba 2009). A growing body of literature has also shown that social networks are correlated with technology diffusion and farmers learn good practices from each other (Bandiera and Rasul 2006; Conley and Udry 2001; Conley and Udry 2010; Foster and Rosenzweig 1995; Udry and Conley 2004).

7. Intended Outputs and Outcomes



Intermediate Outputs

The project aimed to achieve the following intermediate outputs and outcomes:

Table 1: Key Indicators of the evaluation

Category		Research Question
Financial	% increase in savings	Wellbeing (1); Savings (4)
	% increase in asset ownership	Wellbeing (1)
	% increase in business revenues	Micro-entrepreneurship (2)
	% increase in income	Wellbeing (1)
	% increase in consumption	Wellbeing (1)
	% increase in business profits	Micro-entrepreneurship (2)
	% reduction in net interest rate	Capital Constraints (3)
Skills	# of group business plans prepared	Skills (5)
	% increase in households with higher skilled jobs	Skills (5); Economic Empowerment (6)
	% increase in proportion of income from higher skilled jobs	Skills (5); Economic Empowerment (6)
Entrepreneurship	% increase in proportion of income from self-employment (small businesses)	Micro-entrepreneurship (2); Economic Empowerment (6)
Others	% increase in community participation	

Annex 2 has more details on the survey instruments and questionnaires.

8. Design of Impact Evaluation



PKKPM: Roll-out plan and research design

In 2015, PKKPM was implemented in 20 *kecamatan*, with each *kecamatan* being allocated funds for 500 participant households. Treatment provinces, districts and *kecamatan* were pre-determined by the project staff and the planning ministry. As the list of 20 new *kecamatan* that would receive the PKKPM treatment in 2015 was pre-determined, a rigorous evaluation of the effects of the policy by comparing treated and non-treated *kecamatan* would have been difficult. Because of operational constraints, the plan in the first year (2015) was to initiate the program in a limited number of villages and gradually scale-up the program, both within the *kecamatan* (to cover all villages) and within districts (to cover all *kecamatan*). This gradual scale-up of the program helps us to design a strategy to rigorously evaluate the treatment effects of PKKPM. First, it was decided to provide the PKKPM treatment to a list of randomly selected villages within the *kecamatan*. This would enable a within-*kecamatan* analysis of the effects of the policy by comparing the randomly selected group of treated villages to a set of control villages in the short term. We would run regressions of the form:

$$Y_{hvk} = \alpha + \beta Tv1 + \gamma X_{hvk} + \varepsilon_{hvk}$$

Here Y_{hvk} is the outcome of interest for the household (h) in village (v) in *kecamatan* (k). denotes an indicator for randomly chosen treated villages for PKKPM, and X_{hvk} are control variables at the household level. The treatment effect is then given by β .

We believe that the likelihood of spillovers between treated and control villages (within a *kecamatan*) are higher than the spillovers between treated and non-treated *kecamatan* and hence our estimates of the treatment effect of the PKKPM policy change might be downward biased.

Additionally, the phase-wise roll-out of the program across *kecamatan* over the coming years will give researchers an opportunity to measure the treatment effects of PKKPM using a “difference-in-differences” methodology.

Assume that PKKPM covers the entire country (all *kecamatan*) in three phases, we could potentially compare Phase 1 treated *kecamatan* to non-treated Phase 2 and 3 *kecamatan* and also compare Phase 1 and Phase 2 treated *kecamatan* to Phase 3 non-treated *kecamatan*. This approach would require that we have parallel trends in pre-treatment outcomes for the treated and control *kecamatan*. We would run regressions of the form:

$$Y_{kt} = \alpha + \beta_1 post_t + \beta_2 treat_k + \beta_3 (post_t * treat_k) + \gamma X_k + \varepsilon_{kt}$$

Here $post_t$ could represent Phase 1 or Phase 2 and would represent the treated *kecamatan* by that phase. The across-*kecamatan* PKKPM treatment effect would be represented by β_3 , the coefficient on the interaction between $post_t * treat_k$.

A caveat with the DID identification strategy is that it is data-intensive and we would need to collect pre-treatment data. In the absence of pre-treatment data on both the treatment and control groups, we would not be able to show the parallel trends assumption satisfactorily and would not be able to provide credible estimates of the treatment effect. However, in the event that we do collect pre-treatment data, this identification strategy would provide additional estimates of the treatment effect of PKKPM.

The evaluation will be a cluster evaluation at the village level with three arms:

1. Treatment PKKPM villages within treatment *kecamatan*,
2. Control villages within treatment PPKM *kecamatan*,
3. Control villages within control PKKPM *kecamatan*.

The number of control villages in the control *kecamatan* would also be similar to the other two arms in treatment PKKPM *kecamatan*.

Sampling Strategy

The primary sampling focus of the evaluation is on assessing the effects of the two programs on two major sub-groups: bottom 40% and bottom 10% of Indonesia. However, a small sample of households from the rest of the village were surveyed to assess within-village spillover effects. The sampling strategy is provided in Annex 1.

The Population

As per PPLS 2011, the total population in treatment *kecamatan* of PKKPM was 733,562 individuals in 227,755 families. Of these, approximately 103,536 households were in the bottom 40%.¹⁸

Planned Surveys

For this impact evaluation, currently three rounds of survey were planned:

- A baseline survey was conducted from December 2015 to February 2016. It was to have been done before funds were dispersed for any of the programs,
- A mid-line survey was undertaken from June to August 2017 to assess the 18-month to two-year effects of PKKPM,
- A follow-up survey is to be conducted from March to May 2018 to assess the medium-term or three-year effects of PKKPM.

¹⁸ Approximately, 38,863 HHs are in the bottom 10% and 21,510 households are PKH beneficiaries.

9. Results of Baseline Study



The data collection was completed in February 2016 and this section discusses some of the key findings about trends from the data. In addition, the data collection was initiated seven months after the implementation of the program, so some of key indicators have shown some preliminary movements.

Although the sampling was done using PPLS, large targeting errors were found in the 2011 datasets. Thus, new sets of deciles were created based on actual consumption and have been used for descriptive analysis. Figure 3 and Figure 4 depicts per-capita household expenditure across the old decile and new deciles respectively.

Figure 3 Average per-capita household expenditure across old decile (IDR)

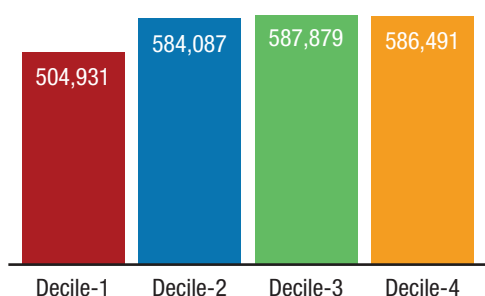
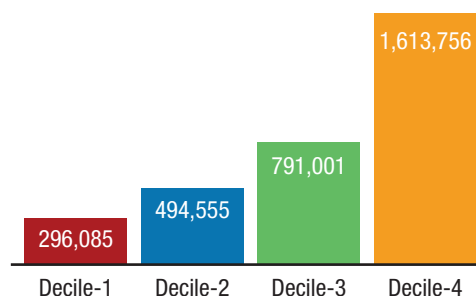


Figure 4 Average per capita household expenditure across new decile (IDR)^a



^a It can clearly be seen that there is no significant difference in the values across deciles in the old data, whereas the expenditures among deciles was about IDR 580,000 in most deciles. The new decile adjustment results are accurately distributed and better for description and analysis.

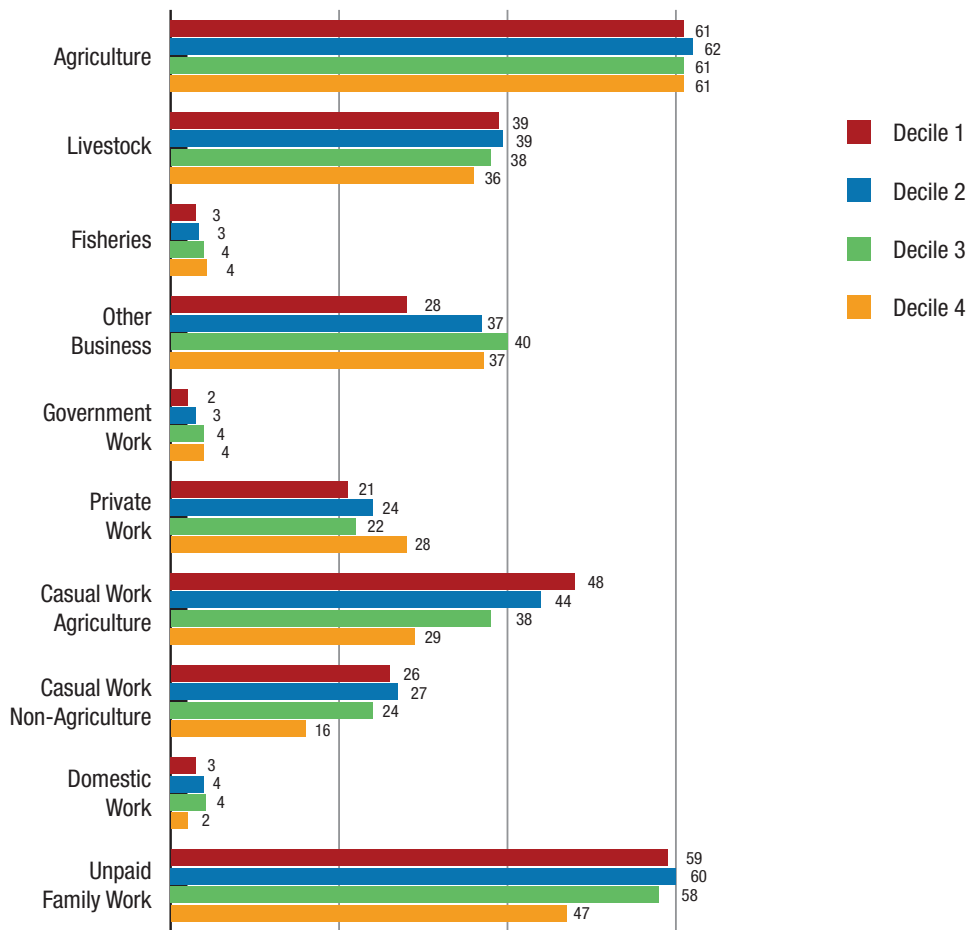
Descriptive Statistics of the Households

Nature of Livelihoods

Many poor households seem to have multiple occupations; however, as incomes increase they start engaging in fewer livelihoods. Households in decile 1 appear to have an average of 2.79 livelihoods. With a slight increase of 0.08 for household in decile 2, the number of livelihoods gradually decreased to 2.48 for those in decile 4. One plausible explanation is that a higher participation in formal sector livelihoods makes their income more secure and they need to engage in fewer livelihoods.

Based on the livelihoods trends, agriculture is the most significant livelihood with almost 60% of HHs engaged in self-employed agriculture in some way. It is followed by unpaid family work, casual work and other business. However, there is a marked decline in unpaid family work and casual work across decile. The increase in other businesses and the private sector is likely to compensate for that particular decline. Figure 5 provides a summary of various livelihoods according to deciles.

Figure 5 Percentage of households with any member engaged in the livelihoods, by decile (%)



Differential trends for male and female livelihoods were also analyzed. One distinctive feature is that men mostly earn their income through self-employed agriculture, whereas 42% of working age females are working in unpaid family jobs. Non-farm business and casual agriculture are the other prominent livelihoods of women.

Figure 6 Livelihoods of male, by livelihoods, by decile (%)

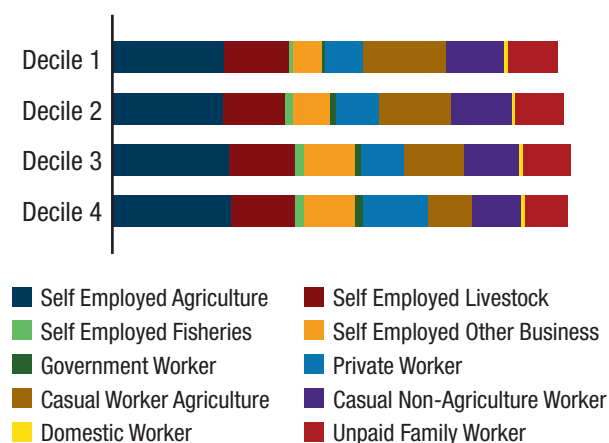
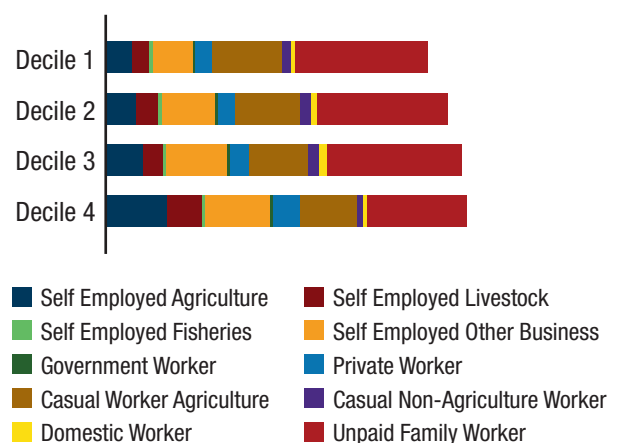


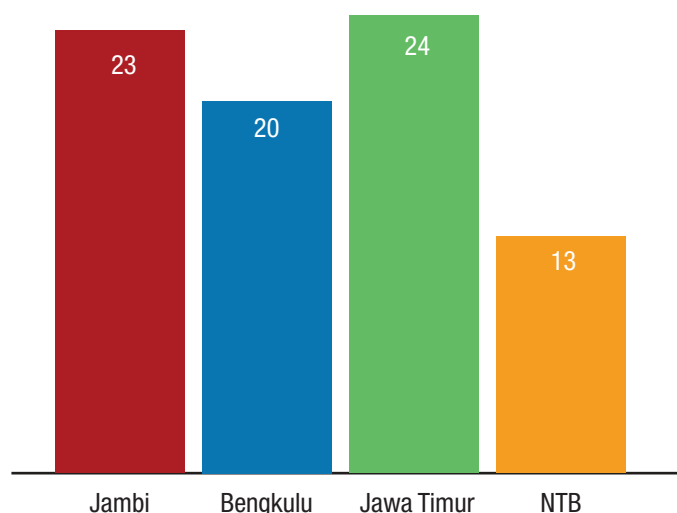
Figure 7 Livelihoods of female, by livelihoods, by decile (%)



Seasonal Migration

Migration is also a major source of income, as almost 18% of households have seasonally migrated in the last 12 months for livelihood-related purposes. The data shows a similar seasonal migration trend across deciles with 18% to 20% of the households migrating, with some variations across the four provinces. Jawa Timur and Jambi are found to have a high number of migrating households while Nusa Tenggara Barat (NTB) is the lowest amongst the lot. It is possible that NTB's low migration is due to the sample being concentrated on Lombok Island where there is no need to stay overnight to go from one place to another.

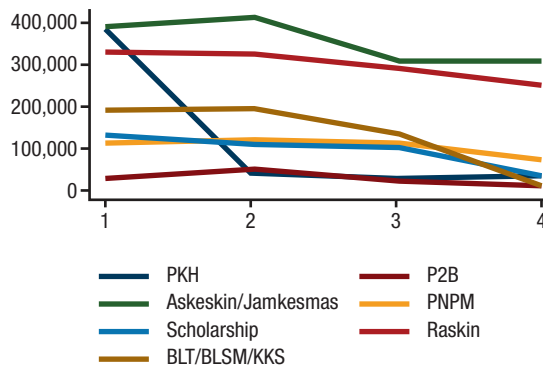
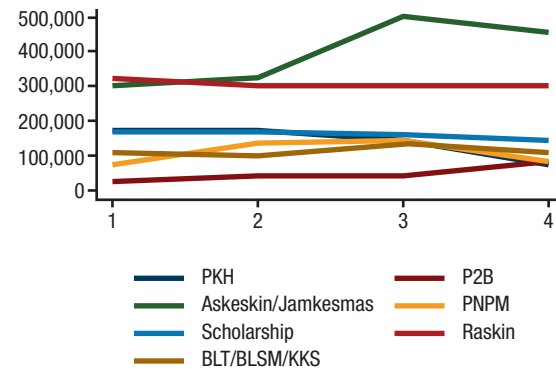
Figure 8 Percentage of households with any seasonal migration by province (%)



The average number of trips increases across deciles, except for decile 4. Households in decile-3 had 8.19 seasonal migration trips compared to 6.19 in decile 1. The number of migration trips significantly drops to 5.78 for households in decile 4. However, the length of each trip is much higher in decile 4 and could partially explain the reduction of trips. Another interesting observation from the data is the destination of migration. Most of the migrants in decile 1 and 2 are looking for other opportunities to work in rural areas. In contrast, people are likely to migrate to urban area as they become less poor. The reason for this trend would be further investigated in the qualitative study.

Social Assistance

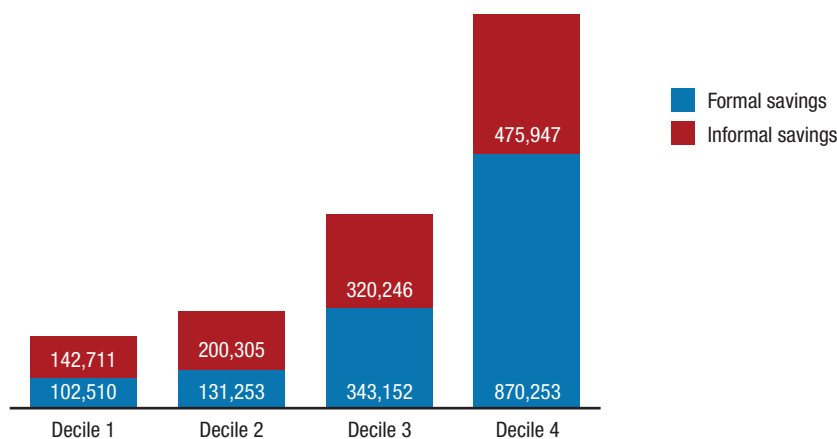
For social assistance, the trends have been analyzed based on the PPLS data, as well as on the adjusted deciles. As PPLS data is a key parameter for targeting various programs, the amount of assistance gradually drops with higher deciles (Figure 9). However, the situation is completely different in the new decile. The amount of assistance mostly remains constant, with a large increase in access to scholarships and the conditional cash transfer program (see Figure 10 for more details).

Figure 9 Average amount of assistance received by household (IDR), by old decile**Figure 10 Average amount of assistance received by household (IDR) by new decile**

Assets, Savings and Loans

A decrease in poverty is also reflected by the increase in land assets and other assets. In the sample location, the average landholding (which also includes the land under the house) among the poorest is about 5,000 m² and less poor HHs have access to more land. With regard to the most common type of assets owned among the poorest population, approximately 70% of households own or lease livestock. There is a definite increase in number of livestock assets owned and traded across deciles. The number of productive assets also increased across decile, except in decile 4, possibly because more small tools are needed for manual labour in agriculture. The ownership of consumptive assets shows robust increases across deciles, directly because of the higher purchasing power of less poor households.

Access to formal financial services goes hand in hand with the improvement of income. As Figure 11 illustrates, only 1 in 10 HHs in decile 1 has access to a bank account while it is almost 3 out of 10 among households in decile 4. The amount of HH savings in decile 4 is almost IDR 1.3 million, with a large proportion saved in formal institutions such as banks, post offices and village credit institutions. In contrast, at the level of IDR 245,000 households in decile 1 save a major proportion (58%) in informal institutions, such as with neighbours, schools, arisan groups¹⁹, PKKPM, PNPM, other groups, homes, employers and others. One positive finding is that the amounts of money saved tend to increase as households become less poor and shift to more formal sources.

Figure 11 Current savings according to source and deciles

¹⁹ 'Arisan' is a local name for rotating savings and credit associations (ROSCA).

A similar trend also applies to loans. On average, outstanding loans increase exponentially as incomes increase – about IDR 6.5 million for households in decile 4, almost three times that of decile 1. Most of the loans come from informal sources, with only one-fifth provided by formal institutions. A very large proportion of loans is spent on consumption and households tend to shift their loans from consumptive purposes to more productive ones²⁰ as they become less poor, as shown in Figure 12. Surprisingly, about 30% of HHs in the bottom 40% have no loans and have never applied for a loan, with the main reason being an inability to repay (see Figure 13 for more details).

Figure 12 Percentage of loans used for productive purposes

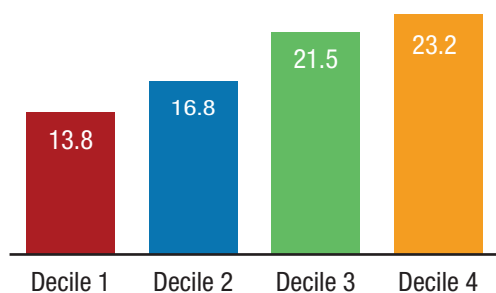
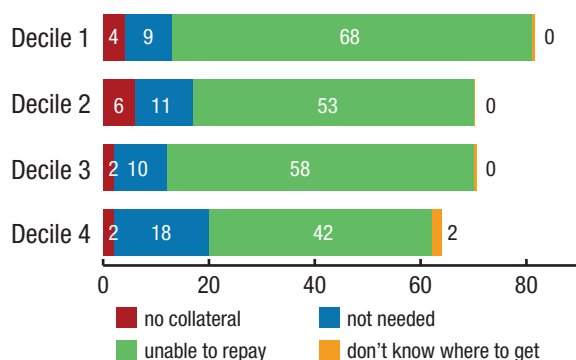


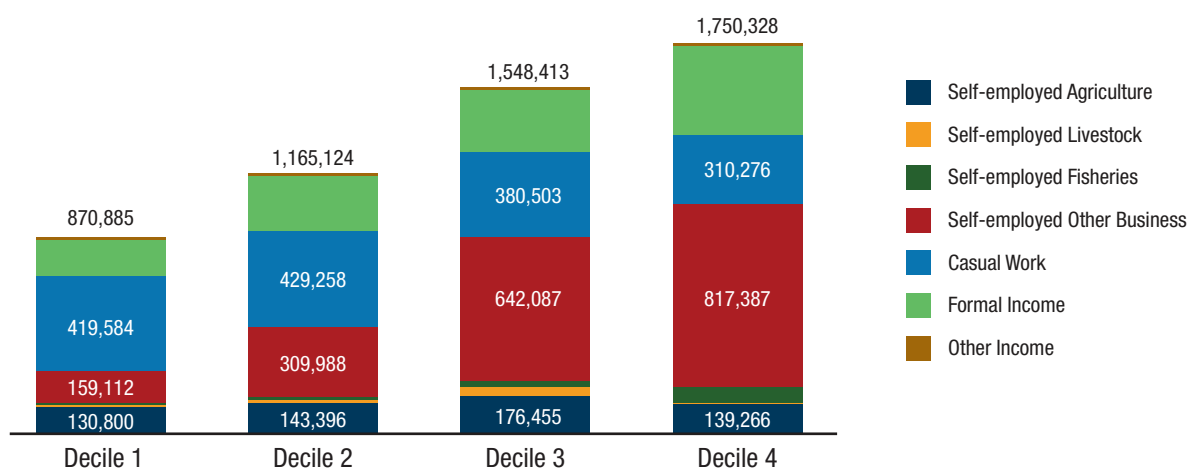
Figure 13 Reasons for not taking a loan



Consumption, Income and Labour Supply

As mentioned earlier, household expenditure doubles in size compared to the respective lower deciles. At IDR 1.6 million, the monthly per-capita expenditure in decile 4 is almost 5.5 times the expenditure of those in decile 1. Food expenditure is two-thirds of overall expenditure for each decile. In addition to consumption expenditure, detailed data was also collected for income. Figure 13 below provides a summary across deciles. On average, households in decile 1 earn about IDR 870,000 a month and households in decile 4 earn more than double of that (IDR 1.75 million). Another striking feature is that households tend to diversify away from self-employed agriculture and casual work. Casual work contributes IDR 419,584 (48%) to the household income in decile 1, but only IDR 310,276 (18%) in decile 4. This trend also occurs in the self-employed livestock sector as its contribution to household income declined substantially from 15% to 8% in decile 4. In this regard, less poor households seem to be focused on generating income from non-farm self-employment. The contribution of self-employment in other businesses rose from 18% in decile 1 to 47% in decile 4.

Figure 14 Total monthly cash income



²⁰ For financing the business, purchasing livestock and purchase/repair of productive assets.

Empowerment

In the analysis that follows, we employ three measures to assess female empowerment (Alsop and Heinsohn 2005). In the context of intra-household decision making, approximately 40% of decisions were taken by a woman in the household with a constant trend across deciles, with a slight increase for decile 4. An important finding is that women have substantial freedom to travel alone. In decile 1 43% of female respondents are able to travel alone outside the village. This trend increases across deciles as they become less poor and 50% of women in decile 4 are able to travel alone.

Figure 15 Women's role in decision making

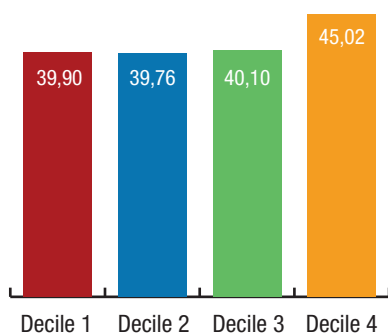


Figure 16 Self Labour Activity

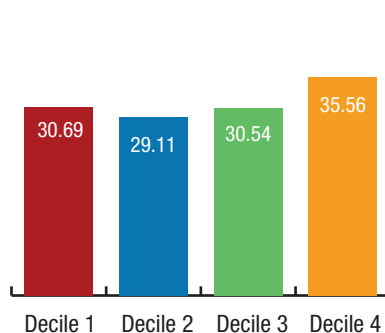
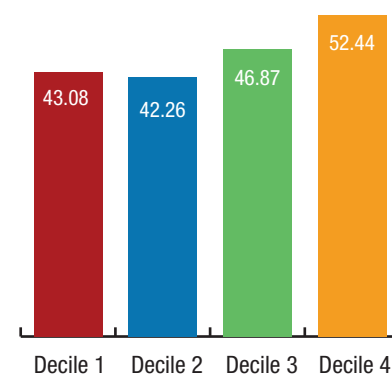


Figure 17 Mobility



In terms of the empowerment in terms of legal identity, the measurement of ownership of birth certificates illustrates that less than 20% of female respondents own one. Most of them said that they don't need one (55%) and they don't know how to obtain it (21%).

Figure 18 Access to birth certificates

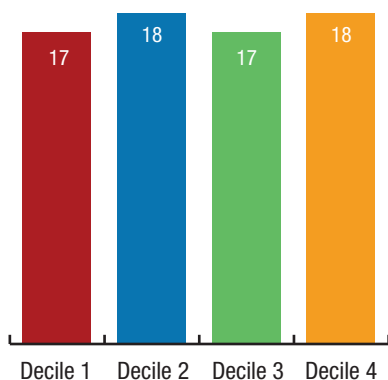
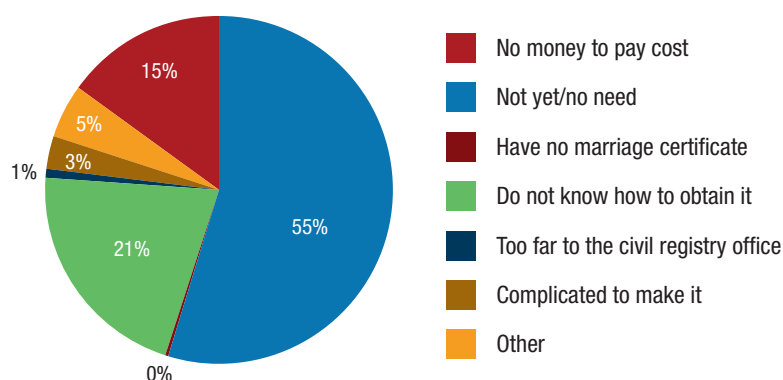


Figure 19 Reason for not having a birth certificate



Preliminary Impacts

As data collection took place, the program was implemented up to the point right before the loan disbursement phase. The data, therefore, is able to explain some preliminary results of the first few months, which constitutes six months of savings and inter-lending and two months of training. However, results should be interpreted with caution as these could be merely short-run effects that will not sustain in the long run²¹.

Networks

Conventional narratives of sustainable livelihoods programs emphasize the importance of social networks. Our findings suggest that PKKPM has increased the participation of beneficiaries. There is an increase of 24%* in the total number of household members who participated in a group. There is also an additional increase of 15%** and 35%*** for people in East Java and Bengkulu, respectively. Participants have also engaged in more diverse groups as there is a 20%** increase in group diversity in the treatment area (an additional 18%** and 7%** increase in Bengkulu and Jawa Timur, respectively). This was mostly caused by increases in labour, financial, farmers, savings and loans groups. Households in treatment areas also show a 30%* higher participation in community economic development programs.

The aforementioned results suggest that PKKPM in its current form has effectively enriched the social networks of its beneficiaries. It seems to not only strengthen the social fabric by encouraging people to participate in more groups, but also by diversifying their networks. People are now likely to join more productive groups that support their livelihoods, with stronger results in decile 1. While participating in a group has been an important aspect for poor Indonesians, the program has successfully tapped into the potential in the lowest decile.

Savings and Loans

As one of the core components of the program, some indicators of savings and loans have moved in a favourable direction. Although the overall current or additional savings has increased, the change is not significant. There is a 27%* increase in current formal savings, with a larger increase in decile 3 (24%***). Two possible takeaways from the evidence are that: 1) the unchanged overall savings might be because households are exposed to various kinds of savings and have moved their savings from one source to another, 2) a larger increase in decile 3 indicates that they might have attained a sufficient level of disposable income to save. However, anything conclusive can only be determined after a few years. Several loans indicators also show positive results. There has been a 24%* reduction in consumptive loans. One plausible explanation is that people are waiting for PKKPM loans to disburse, hence discourage them to take new loans.

Income, labour supply and migration

The number of hours worked in each of the livelihoods has increased marginally, but is not significant and nothing conclusive can be said. However, based on the direction and magnitude of change, we could say that men seem to work more in formal employment while their female counterparts seem to be more engaged in self-employed by raising livestock. The program has had a marked negative effect on seasonal migration. There is a 30%* reduction in the number of days that the households spend in seasonal migration, most likely because of a reduction in urban migration. One plausible explanation is that people spend more time in formal employment (both as government workers or as employees in the private sector) within the nearby rural areas. This is especially true for Jambi where there has been a huge increase in formal work.

²¹ For these factors, the tables for these results have not been reported and can be requested by email.

Consumption

In such a short run there has also been a significant change in food and overall consumption expenditure in the treatment areas. There has been a slightly higher increase in decile 3 and Jambi relative to the general population. The food consumption indicator was also disaggregated according to the amount purchased in the market place and self-produced, as well as by various commodity groups. In general, there is a significant increase in meat, eggs and fruit purchased from the market. This could imply that expenditures are mostly increasing because of additional income. However, given that the program was only implemented for seven months, these are only short-run results and nothing can be concluded yet about the long-term trends.

10. Conclusion

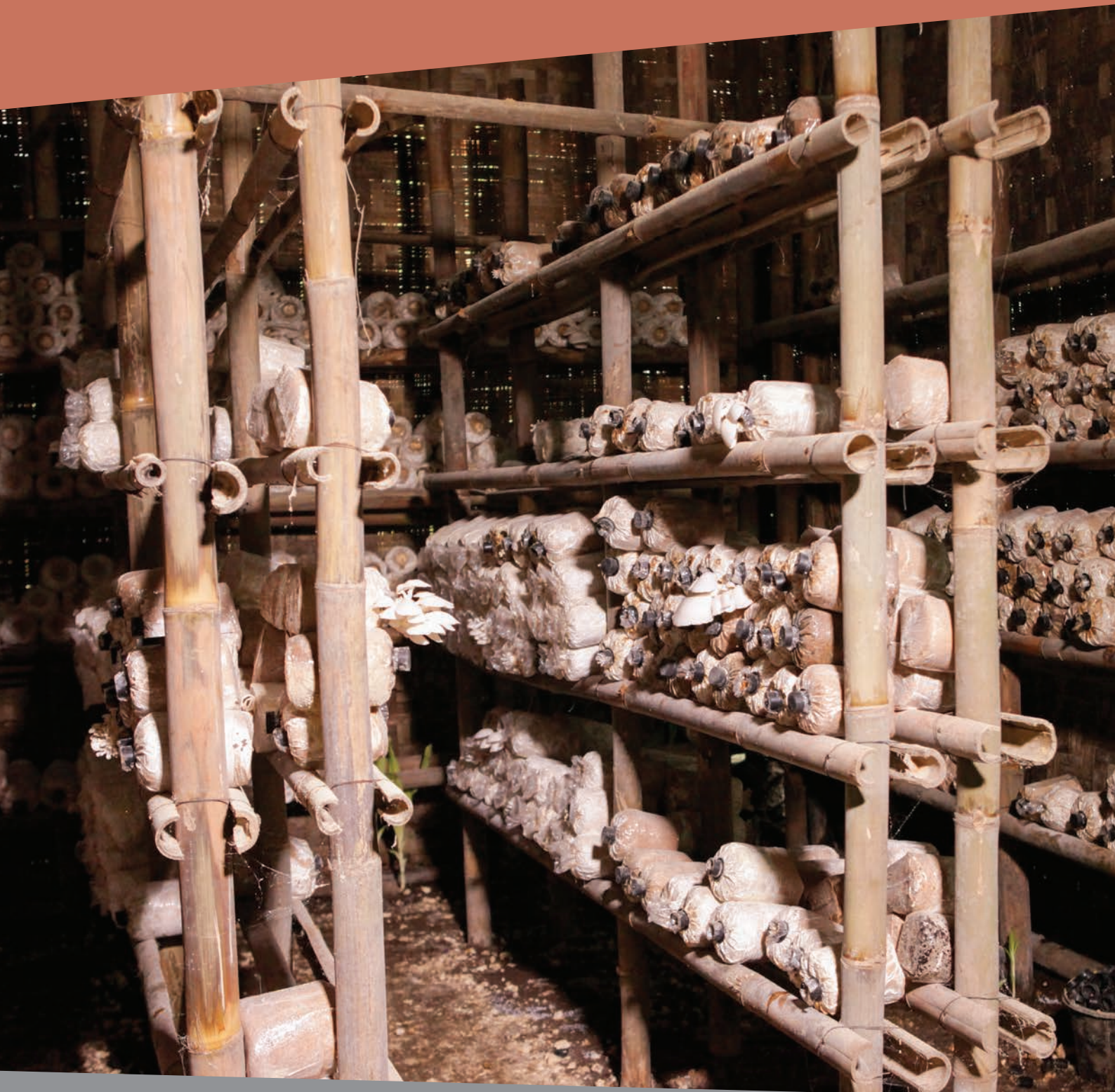


Peningkatan Kesejahteraan Keluarga Berbasis Pemberdayaan Masyarakat (PKKPM) was an ambitious multi-sectoral community-based livelihoods program linking both the demand and supply side of various aspects of livelihoods. The program was a core component of Pengembangan Penghidupan Berkelanjutan (P2B), designed by BAPPENAS. The major goal of the program was to help move economically vulnerable sections of the society to economic independence through social and economic empowerment, by providing a combination of institutional, financial and technical support.

In this baseline study, PKKPM was implemented in 20 *kecamatan*, with each *kecamatan* being allocated funds for 500 participant households. The PKKPM treatment was provided to a randomly selected set of villages within the *kecamatan*. The data collection was completed in February 2016 (just prior to the loan disbursement phase) – this constitutes six months of savings and inter-lending and two months of training. Our preliminary analysis suggests some gains in network participation of beneficiaries, with more participation in productive groups. Overall, we do not find any change in savings of treated households, but we find a reduction in consumptive loans. In terms of labour supply and migration, we do not find any evidence of change in the number of hours worked, although migration went down significantly. There is suggestive evidence for men increasing their engagement in formal employment, whereas women are self-employed by raising livestock. Finally, there is a significant increase in consumption expenditure in treated areas as compared to control areas – with more spending on meat, eggs, and fruit purchased from the market.

This evaluation provides a peek into the short-run results of an innovative community-based poverty reduction initiative in Indonesia. However, because of the timing of the data collection, not much can be said about the results in the medium term (post loans disbursement), or in the long term (after the handholding support is withdrawn). Although the PKKPM pilot has been completed and discussions are ongoing for its scale-up, the various other components of P2B continue to be implemented. Furthermore, the Government of Indonesia is also innovating with several other market-based entrepreneurship approaches and some of those are trying to leverage the UU desa framework and funds, but have similarities with the PKKPM approach. There is also significant interest amongst global policymakers in entrepreneurship. Thus, whether the results from PKKPM translate into long term changes should to be studied in greater depth in follow-up studies.

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Appendices



Annex 1: Power calculations and sampling

The primary sampling focus of the evaluation is on assessing the effects of the two programs on two major sub-groups: bottom 40% and bottom 10% in Indonesia. However, a small sample of households from the rest of the village were surveyed to assess within-village spillover effects. The sampling strategy for the evaluation is based on the following principles:

1. Various phases of PKKPM treatment *kecamatan* were pre-determined by the operations team. Their selection was a two-step process: First, all the Kube-P2B *kecamatan* were dropped from the list; second, four provinces were selected after consultations within the national government; third, 20 treatment *kecamatan* were selected based on the number of poor households (bottom 40%), poverty rate, convergence with a new agriculture livelihoods program in Eastern Indonesia and operational access.²²
2. A list of villages from the PKKPM treatment *kecamatan* were picked until the total number of eligible beneficiaries reached approximately 1,500 households per village²³.
3. From this long list of selected, half the villages were allocated to treatment and other half to control villages.²⁴ Each village had an equal probability of being picked as the PKKPM treatment and control village from the sampled villages in the treatment PKKPM *kecamatan*²⁵.
4. A list of *kecamatan* picked as control areas for PKKPM treatment *kecamatan* were selected based on a set of *kecamatan*-level observables – like number of households below the fourth decile, number of schools, number of other infrastructure stuff, banks, etc.²⁶
5. Villages from the PKKPM control *kecamatan* were picked until the total number of villages reaches the same number as the treatment villages.
6. Sample households were picked from each particular poverty class (deciles 1 to 4) of eligible beneficiaries in PKKPM treatment and control villages with a probability proportional to the population in the corresponding decile.²⁷
7. The samples are representative for each decile in deciles 1 to 4 for all treatment and control arms of PKKPM, but with a focus on the bottom decile.

Table 2 Number of households and distribution across deciles

Decile	decile 1	decile 2	decile 3	decile 4	bottom 40%
Number of households (all provinces)	20990	17562	15464	4211	58227

²² Phase 2 *kecamatan* for 2016 scale-up have also been selected based on similar criteria.

²³ Budget constraints only allow 500 households to participate in the program per *kecamatan* per year in the lending program.

²⁴ The final list that was generated ensured that each *kecamatan* had enough households to reach the budget limit of 500 households.

²⁵ Due to operational concerns a few treatment and control villages had to be dropped from the evaluation reducing the evaluation villages to 56. In addition, one treatment village had to be switched with the control village.

²⁶ Balance test of key *kecamatan*-level variables is enclosed in the Annex. Phase 2 *kecamatan* that will get the program in 2016 have been excluded from this list.

²⁷ Our primary sampling focus is on the bottom 10% (decile 1) and the bottom 40% (deciles 1 to 4). The number of households to be sampled in the treatment and control *kecamatan* is explained in the table below. The sampling scheme takes into account the population of each decile relative to the total population in the first four deciles.

Table 2 shows the distribution of the total number of households across the four deciles. The total number of households in the bottom 40% was 58227. The percentage of households across deciles was as follows:

- Decile 1: 36.04% (20990/58227)
- Decile 2: 30.16% (17562/58227)
- Decile 3: 26.55% (15464/58227)
- Decile 4: 7.23% (4211/58227)

The following table has the summary of the power calculations and planned sample for the evaluation.

Table 3 Assumption for the power calculations of the evaluation

Outcome = total monthly consumption (IDR)	PKKPM Treatment kecamatan only	PKKPM Treatment & Control kecamatan	Total
Mean ^a	285,000	285,000	
Standard deviation	52,479	52,479	
Intra-cluster correlation	0.15	0.15	
Significance level	0.05	0.05	
Baseline correlation	0.15	0.15	
Power	80%	80%	
Number of clusters (villages)	102	102 ^b	~160
Number of kecamatan	20	40	40
Number of districts	11	11	11
Assumed detectable difference for beneficiary households (10% increase) ^c	28,500	28,500	
Compliance amongst eligible households	50% ^d	50%	
Minimum detectable difference amongst eligible households	14,250	14,250	
Minimum detectable effect for a clusterized randomized evaluation amongst eligible households	0.276	0.276	
Cluster size	25 ^e	25	
Eligible households sample ^f	2820	2820	~4240
Non-eligible households sample ^g	510 ^h	N/A	~510
		Sample size - Total	~4750

^a Mean, standard deviation and intra-cluster correlation were based on data from Susenas in those districts and the past impact evaluation of Kube-P2B.

^b The treatment villages are the same as the treatment villages in the treatment kecamatan.

^c For PKKPM villages, it is assumed that two loan cycles will be completed in three years to the beneficiaries, which would lead to an approximate increase of 10% to 15% in total consumption (taken as 10% for power calculations).

^d For PKKPM, it is assumed there would be approximately 50% compliance within the eligible population in the treatment villages, as the numbers needs to be limited to 500 households per kecamatan.

^e The cluster size sample has been determined based on keeping the focus on the bottom decile with average of 10 households. Similarly, decile 2 (10 to 20), decile 3 and decile 4 will have eight, five and two households respectively.

^f This is households in bottom 40% for PKKPM.

^g These households are being surveyed to assess the spillover and to carry out a regression discontinuity design.

^h Approximately five households will be randomly sampled from the non-eligible households (41 to 100 percentile), or the rest of the population.

Based on the power calculations it was decided that 4,240 eligible households will be surveyed in the treatment and control areas (see Table 3). Following our strategy of sampling households according to the probability proportional to their population, we calculated the number of households to be sampled from each decile:

- Decile 1: 1,549 (which is approximately 36.5% of 4,240)
- Decile 2: 1,270 (which is approximately 29.9% of 4,240)
- Decile 3: 1,119 (which is approximately 26.4% of 4,240)
- Decile 4: 302 (which is approximately 7.1% of 4,240)

Table 4 Total number of households and number of sampled households by province

Province	Bengkulu	Jambi	Jawa Timur	NTB	Total
Total Population (bottom 40%)	8,001	11,140	16,208	23,753	59,102
Sample	574	799	1,163	1,704	4,240

Table 4 above shows the distribution of the sampled eligible households across provinces. *These calculations essentially translate into generating a 7.175% random sample from each decile in each village.* The sample will be representative for each decile in deciles 1 to 4 for all treatment and control arms of PKKPM.

However, this methodology resulted in some villages having a very small number of households in the list of to-be-sampled households. For example, assume that the second decile in a village only has 14 households. Following our 7.175% random sample would only generate one household to be sampled in the second decile in that village. This can cause a problem if this one randomly selected household does not respond because of a reason unrelated with the PKKPM program (for instance, no one was at home after multiple visits). To take care of such cases, we generated a back-up list of households. This back-up list was formulated as follows:

- Once the 7.175% random sample lists per decile by village were generated, we denoted all the other households in that decile-village pair as back-up households.
 - For each village, from this back-up household list in the decile, we create a random ordering of households.
 - In case of non-response by a household (for reasons unrelated to the PKKPM program), the survey agency will pick from the randomly ordered list of back-up households until they reach the total number of households from the decile that were initially decided to be sampled.
 - However, the survey agency needs to be careful about the exact form of non-response and needs to document it properly.
8. To assess spillovers, a small sample of non-eligible households (five to 10 deciles) in the treatment areas will also be sampled. The number of these sampled non-eligible households will be proportional to the sample of the eligible households in that village. For this sample, efforts will be made to take a balanced sample of non-poor households for interviews from two pools – non-poor households taken from poor *dusun* (an administrative unit below village) and non-poor households taken from the rest of the villages. It was assumed here that the list of sampled eligible households (explained earlier in the text) will generate a list of poor *dusun*.
- First, two thirds of the number of poor *dusun* (available from the sampled list of eligible households) and a third from the rest of the *dusun* will be selected. For example, if the total *dusun* in a village is 13 and the number of

dusun selected for the poor eligible-household sample is four, then the total number of *dusun* to be sampled for this listing will be six²⁸. In this case, three poor *dusun* (two-thirds of four) and three non-poor *dusun* (one-third of nine) are to be picked randomly from the list of *dusun*.

- The team will be given the number of non-poor households to be sampled in this village estimated based on PODES and PPLS. Twice this number from each *dusun* was listed. For example, if the number of non-poor households to be sampled is seven, the enumerators will need to ask each *dusun* head for 14 non-poor households. So, in this case we will have 42 non-poor households in the poor *dusun* and 42 non-poor households in other *dusun*.
- Next, the enumerators list all households separately in each pool to generate the sampling frame of the non-poor households. Any households in the non-poor household list that overlap with the PPPLS will be removed from the sampling framework. The final sample will be randomly picked with two-thirds from the poor *dusun* and the remaining one-third from the non-poor *dusun*. In this case, we will pick three non-poor households from the poor *dusun* and four non-poor households from the rest of the *dusun*.

Note that the sample will only be representative at the village level and not at any higher level of aggregation because of the limited number of clusters in the treatment areas.

²⁸ : $(2/3*4) + 1/3*(13-4) = 2.6 + 3 = 3+3=6$

Annex 2

Annex 2: Balance Tests

Table A.1 Table of means and balancing test at the *kecamatan* level²⁹

Indicator	Mean		p-value
	Treated	Control	
Total number of families in <i>kecamatan</i> – 2011	11,388	11,766	0.887
Total number of agricultural families in <i>kecamatan</i> – 2011	7,782	8,111	0.848
Total number of households in <i>kecamatan</i> with female household heads – 2011	1,059	1,247	0.659
Number of HHs in bottom 10% in <i>kecamatan</i> – 2011	1,943	1,858	0.867
Number of HHs in 11-20% in <i>kecamatan</i> – 2011	1,518	1,512	0.988
Number of HHs in 21-30% in <i>kecamatan</i> – 2011	1,318	1,316	0.996
Number of HHs in bottom 40% Desa in <i>kecamatan</i> – 2011	5,177	5,128	0.971
% of families using any electricity in <i>kecamatan</i> – 2011	0.79	0.83	0.438
% of families in agriculture in <i>kecamatan</i> – 2011	0.74	0.75	0.909
% of families using any electricity in <i>kecamatan</i> – 2011	0.79	0.83	0.438
% of residents currently working as migrant workers (TKI) abroad from <i>kecamatan</i>	0.01	0.01	0.834
Number of villages with location of the village/subdistrict on peak in <i>kecamatan</i>	0.10	0.05	0.591
Number of villages with location of the village/subdistrict in valley in <i>kecamatan</i>	0.85	0.42	0.468
Number of villages with agriculture as the primary source of income	11.75	12.11	0.808
Number of villages with PNPM RLF existing in village in <i>kecamatan</i> – 2011	5.40	5.21	0.899
Number of villages with any resident getting credit from any formal source in <i>kecamatan</i>	8.00	9.05	0.484
Does the <i>kecamatan</i> have PKH from 2007-2014?	0.95	0.95	0.971
Number of years in PKH for <i>kecamatan</i> in 2015	2.6	2.42	0.709

²⁹ Results show means for both treatment and control *kecamatan* for indicators from 2011 PODES and 2011 PPLS. P-values are derived via comparison of means tests. For all covariates, there are no significant differences between treatment and control *kecamatan* at the 10% level or less.

Table A.2 Table of means and balancing test at the village level for PKKPM treatment *kecamatan*³⁰

Indicator	Mean		p-value
	Control	Treatment	
Is there is any village/subdistrict area adjacent to the sea (2011)?	0.036	0.018	0.563
Number of families in 2011	779.8	810.9	0.869
Number of agricultural families in 2011	561.3	570.6	0.940
Main source of income of most of population in the village in 2011	13.214	13.571	0.531
Families using electricity from State Electricity Company (PLN) in 2011	330.2	363.4	0.767
Number of HHs in bottom 10% – 2011	138.7	148.9	0.813
Number of HHs in 11-20% – 2011	108.2	122.7	0.626
Number of HHs in 21-30% – 2011	91.9	104.4	0.621
Total population of village – 2011	2575.8	2709.7	0.823
Percentage of Families using any electricity – 2011	0.676	0.706	0.607
Percentage of village/subdistrict residents currently working as migrant workers in 2011	0.007	0.005	0.434
Is the village on a peak (2011)?	0.000	0.000	.
Is the village on a slope (2011)?	0.321	0.304	0.840
Is the village on a valley (2011)?	0.089	0.107	0.754
Is the land inclination a normal slope (2011)?	0.536	0.482	0.575
Is the land inclination a medium slope (2011)?	0.411	0.446	0.706
Is the land inclination steep (2011)?	0.054	0.071	0.699
Total institutions for skills education – 2011	0.500	0.482	0.954
Any market with permanent/semi-permanent buildings in village (2011)?	0.179	0.339	0.053
Total number of cooperatives – 2011	0.518	0.607	0.692
Any resident getting credit from any formal source (2011)?	0.571	0.589	0.850
Number of years village in PKH by 2015	1.875	1.857	0.942
Number of households in PKH in the village	89.3	82.2	0.803
Amount of PKH received by the HH within the last 12 months (IDR) – 2015/2016	151,230.13	167,014.64	0.55
Amount of Social Protection and Health benefits received by the HH within the last 12 months (IDR) – 2015/2016	353,957.49	387,184.14	0.73
Amount of cash loan from PNPM received by the HH within the last 12 months (IDR) – 2015/2016	86,691.31	107,385.97	0.58
Amount of scholarship funds (excluding BOS) received by the HH within the last 12 months (IDR) – 2015/2016	118,723.6	82,702.52	0.03**

³⁰ Results show means for both treatment and control villages within the treatment *kecamatan* for indicators from 2011 PODES and 2011 PPLS. P-values are derived via comparison of means tests. For all covariates, there are no significant differences between treatment and control villages at the 10% level or less.

Indicator	Mean		p-value
	Control	Treatment	
Amount of raskin received by the HH within the last 12 months (IDR) – 2015/2016	334,290.75	304,480.08	0.4
Amount of BLT received by the HH within the last 12 months (IDR) – 2015/2016	161,341.96	149,901.29	0.66
Amount of other assistance received by the HH within the last 12 months (IDR) – 2015/2016	1,209,476.14	1,280,517.51	0.61
Does the female respondent have a birth certificate? (Y/N) 2015/2016	0.18	0.19	0.79
Female respondent ownership of KTP (ID card) (Y/N) 2015/2016	0.93	0.94	0.54
Religion of the female respondent: Muslim (Y/N) 2015/2016	0.96	0.99	0.35
Religion of the female respondent: Catholic (Y/N) 2015/2016	0	0.00	0.33
Religion of the female respondent: Protestant (Y/N) 2015/2016	0	0.01	0.36
Religion of the female respondent: Buddhist (Y/N) 2015/2016	0.03	0.00	0.24
Religion of the female respondent: Hindu (Y/N) 2015/2016	0.01	0.00	0.17
Did the female attend school (Y/N) – 2015/2016	0.83	0.83	0.96
Female respondents' years of education – 2015/2016	4.84	4.95	0.76
Female respondents' ability to read and write in Indonesian (Y/N) – 2015/2016	0.19	0.18	0.59
Land area of building (m2)	51.78	55.19	0.43
Poor household floor type (Y/N)	0.2	0.27	0.19
Poor household roof type (Y/N)	0.01	0.01	0.88
Poor household wall type (Y/N)	0.32	0.40	0.3
Status of the occupied residential building: Owned? (Y/N)	0.92	0.92	0.94
Source of drinking water: unprotected well, unprotected spring, river water, rain water (Y/N)	0.26	0.27	0.92
Defecation facility: don't have toilet/use public toilet/shared latrine (Y/N)	0.47	0.43	0.57
Ownership of a valid family card (Y/N)	0.93	0.93	0.97
Ownership of bank account (Y/N)	0.17	0.19	0.39
Number of children	1.12	1.14	0.77
Number of non-working-age family members	1.31	1.32	0.87
Number of working-age family members	2.62	2.59	0.57
Number of labour force HH members	2.16	2.15	0.92
Age of household head (years)	47.31	47.35	0.97
Years of education of the head of HH	4.77	4.86	0.78
Household size	3.93	3.91	0.83
Response to economic loss: None (Y/N) in the last 12 months – 2015/2016	0.24	0.24	0.98
Total amount of loss caused by economic disruption (HH level) in the last 12 months – 2015/2016	2,775,410.51	2,085,718.52	0.21
Number of HHM participants in government groups or institutions	1.1	1.21	0.23

Indicator	Mean		p-value
	Control	Treatment	
Number of HHM participants in religion groups or institutions	1.78	1.95	0.16
Number of HHM participants in social service groups or institutions	1.19	1.15	0.5
Number of HHM participants in recreational groups or institutions	1.17	1.25	0.28
Number of HHM participants in mass organizations/political parties	1.16	1.21	0.79
Number of HHM participants in other groups/institutions	1.24	1.39	0.49
Age of each HH member (years)	30.98	30.75	0.84
Does he/she work/help to earn income in the last six months? (Y/N)	1.83	1.81	0.77
Self-employed in agriculture(Y/N)	0.17	0.17	0.89
Self-employed raising livestock(Y/N)	0.11	0.13	0.52
Self-employed in fisheries(Y/N)	0.01	0.01	0.2
Self-employed in other business(Y/N)	0.11	0.10	0.65
Government worker(Y/N)	0.01	0.01	0.89
Private worker(Y/N)	0.06	0.07	0.17
Casual worker in agriculture(Y/N)	0.16	0.16	0.86
Casual non-agricultural worker(Y/N)	0.08	0.08	1
Domestic worker(Y/N)	0.01	0.01	0.81
Unpaid family worker(Y/N)	0.24	0.23	0.86
Years of education of each HH member	4.66	4.69	0.88
Program/activity for community empowerment in transport development (Y/N) – 2015/2016	0.92	0.97	0.28
Number of families benefiting directly from transportation program – 2015/2016	646.2	771.74	0.54
Program/activity for community empowerment in education development (Y/N) – 2015/2016	0.61	0.62	0.88
Number of families benefiting directly from education program – 2015/2016	345.82	353.79	0.96
Program/activity for community empowerment in settlement/health development (Y/N) – 2015/2016	0.62	0.62	0.98
Number of families benefiting directly from settlement and health programs – 2015/2016	202.44	316.24	0.28
Program/activity for community empowerment in economic development (Y/N) – 2015/2016	0.33	0.43	0.25
Number of families benefited directly from economic programs – 2015/2016	93.08	244.83	0.12
Program/activity in capacity improvement through revolving agricultural funds (Y/N) – 2015/2016	0.25	0.31	0.44
Number of families benefiting directly from revolving agricultural funds program – 2015/2016	122.21	77.32	0.55

Indicator	Mean		p-value
	Control	Treatment	
Number of families benefiting directly from productive business grants program – 2015/2016	65.93	94.55	0.64
Program/activity in capacity improvement through productive business grants (Y/N) – 2015/2016	0.15	0.17	0.71
Number of families benefiting directly from grants for productive business program – 2015/2016	14.89	46.66	0.25
Program/activity for community capacity through marketing skills improvement (Y/N) – 2015/2016	0.07	0.09	0.67
Number of families benefiting directly from community marketing skills program – 2015/2016	4.18	24.17	0.15
Program/activity for community capacity through community social institution (Y/N) – 2015/2016	0.2	0.23	0.72
Number of families benefiting directly from social institutions program – 2015/2016	14.33	37.98	0.14
Did PNPM provide funds for economic-related community empowerment and village development activities (Y/N)? – 2015/2016	0.26	0.34	0.33
Funding source of community empowerment and village development: PNPM (Y/N) – 2015/2016	0.61	0.61	0.97
Funding source of community empowerment and village development: Dana Desa (Y/N) – 2015/2016	0.69	0.60	0.34
Funding source of community empowerment and village development: P2B- Others (Y/N) – 2015/2016	0	0.02	0.31
Funding source of community empowerment and village development: Kube - PKH (Y/N) – 2015/2016	0.02	0.00	0.33
Funding source of community empowerment and village development: Others (Y/N) – 2015/2016	0.84	0.88	0.5
Land use change: rice farmland to non-rice farmland (%) – 2015/2016	1.07	1.42	0.76
Land use change: rice farmland to non-agricultural land (%) – 2015/2016	0.9	0.93	0.97
Land use change: rice farmland to forest (%) – 2015/2016	0.57	0.00	0.11
Land use change: non-rice farmland to rice farmland (%) – 2015/2016	0.41	1.36	0.11
Land use change: non-rice farmland to non-agricultural land (%) – 2015/2016	2	2.29	0.84
Land use change: non-rice farmland to forest (%) – 2015/2016	0.33	0.31	0.94
Land use change: non-agricultural land to non-rice farmland (%) – 2015/2016	0	0.03	0.31
Land use change: forest to rice farmland (%) – 2015/2016	0.13	0.10	0.79
Land use change: forest to non-rice farmland (%) – 2015/2016	3.3	4.25	0.69
Land use change: forest to non-agricultural land (%) – 2015/2016	1.43	2.85	0.38
Land size of the village (km2) – 2015/2016	72.14	32.15	0.02**
Irrigated rice farmland (km2) – 2015/2016	9.28	1.29	0.29
Non-irrigated rice farmland (km2) – 2015/2016	2.15	1.40	0.48

Indicator	Mean		p-value
	Control	Treatment	
Non-rice agricultural land (km ²) – 2015/2016	33.71	22.87	0.24
Non-agricultural land (km ²) – 2015/2016	26.95	6.19	0.03**
Agricultural daily wage rate for males (IDR) – 2015/2016	58,196.72	59,189.65	0.73
Non-agricultural daily wage rate for skilled males (IDR) – 2015/2016	92,950.82	93,245.61	0.95
Non-agricultural daily wage rate for unskilled males (IDR) – 2015/2016	60,245.9	63,362.07	0.28
Agricultural daily wage rate for females (IDR) – 2015/2016	47,786.89	47,327.59	0.85
Non-agricultural daily wage rate for skilled females (IDR) – 2015/2016	61,428.57	64,411.76	0.62
Non-agricultural daily wage rate for unskilled females (IDR) – 2015/2016	44,276.6	43,184.21	0.73
Distance from the village office to the nearest market (km) – 2015/2016	10.65	6.85	0.19
Duration of one-way trip from village office to the nearest market by the most commonly used means of transportation (minutes) – 2015/2016	33.95	25.12	0.31
Cost of one-way trip from village office to the nearest market (IDR) – 2015/2016	14,726.23	8,303.45	0.13
Distance from the village office to the subdistrict town (km) – 2015/2016	12.36	9.72	0.31
Duration of one-way trip from village office to the subdistrict town by the most commonly used means of transportation (minutes) – 2015/2016	37.59	32.19	0.53
Cost of one-way trip from village office to the subdistrict town (IDR) – 2015/2016	16,873.77	14,504.31	0.58
Does the village have any public vocational training centres? (Y/N)	0.02	0.04	0.53
Does the village have any private vocational training centres? (Y/N)	0.07	0.04	0.44
Presence of direct cash assistance programs (Y/N) – 2015/2016	1	0.98	0.31
Presence of facilities/infrastructure programs (Y/N) – 2015/2016	0.69	0.88	0.01**
Presence of increasing employment opportunity programs (Y/N) – 2015/2016	0.08	0.12	0.49
Number of families in the village – 2015/2016	877.3	914.30	0.86
Percentage of Muslim HH in the village – 2015/2016	97.56	98.82	0.29
Percentage of Protestant HH in the village – 2015/2016	0.46	0.33	0.58
Percentage of Catholic HH in the village – 2015/2016	0.17	0.18	0.96
Percentage of Hindu HH in the village – 2015/2016	1.29	0.63	0.47
Percentage of Buddhist HH in the village – 2015/2016	0.53	0.06	0.29

Table A.3 Table of means and balancing test at the village level for PKKPM treatment and control *kecamatan*³¹

Indicator	Mean		p-value
	Control	Treatment	
Is there is any village/subdistrict area adjacent to the sea (2011)?	0.018	0.018	1.000
Number of families in 2011	741.8	562.0	0.209
Number of agricultural families in 2011	537.1	455.1	0.394
Main source of income of most of population in the village in 2011	13.255	13.909	0.467
Families using electricity from State Electricity Company (PLN) in 2011	312.0	227.8	0.304
Number of HHs in bottom 10% - 2011	128.6	80.3	0.122
Number of HHs in 11-20% – 2011	105.4	80.4	0.260
Number of HHs in 21-30% – 2011	91.309	72.145	0.324
Total population of village – 2011	2,430.5	1,974.6	0.298
Percentage of families using any electricity -2011	0.670	0.740	0.209
Percentage of village/subdistrict residents currently working as migrant workers in 2011	0.007	0.005	0.552
Is the village on a peak (2011)?	0.000	0.000	.
Is the village on a slope (2011)?	0.309	0.200	0.192
Is the village on a valley (2011)?	0.091	0.036	0.245
Is the land inclination a normal slope (2011)?	0.545	0.600	0.567
Is the land inclination a medium slope (2011)?	0.400	0.382	0.847
Is the land inclination steep (2011)?	0.055	0.018	0.313
Total institutions for skills education 2011	0.509	0.491	0.961
Any market with permanent/semi-permanent buildings in village (2011)?	0.182	0.255	0.360
Total number of cooperatives – 2011	0.509	0.618	0.543
Any resident getting credit from any formal source (2011)?	0.564	0.618	0.565
Number of years village in PKH by 2015	1.855	1.746	0.647
Number of households in PKH in the village	85.0	44.6	0.097*
Amount of PKH received by the HH within the last 12 months (IDR) - 2015/2016	174,991.37	167,014.63	0.77
Amount of Social Protection and Health benefits received by the HH within the last 12 months (IDR) – 2015/2016	381,917.17	387,184.14	0.96
Amount of cash loans from PNPM received by the HH within the last 12 months (IDR) – 2015/2016	152,933.56	107,385.97	0.45
Amount of scholarships (excluding BOS) received by the HH within the last 12 months (IDR) – 2015/2016	140,021.14	82,702.52	0.00***
Amount of raskin received by the HH within the last 12 months (IDR) – 2015/2016	297,652.08	304,480.08	0.84
Amount of BLT received by the HH within the last 12 months (IDR) – 2015/2016	192,516.82	149,901.29	0.12

³¹ Results show means for both treatment and control villages within the treatment *kecamatan* for indicators from 2011 PODES and 2011 PPLS. P-values are derived via comparison of means tests. Significance levels: *, 10 percent, **, 5 percent, ***, 1 percent.

Indicator	Mean		p-value
	Control	Treatment	
Amount of other assistance received by the HH within the last 12 months (IDR) – 2015/2016	1,359,225.42	1,280,517.52	0.65
Does the female respondent have a birth certificate? (Y/N) – 2015/2016	0.15	0.19	0.33
Female respondent ownership of KTP (ID card) (Y/N) – 2015/2016	0.92	0.94	0.26
Religion of the female respondent: Muslim (Y/N) – 2015/2016	0.98	0.99	0.68
Religion of the female respondent: Catholic (Y/N) – 2015/2016	0	0.00	0.46
Religion of the female respondent: Protestant (Y/N) – 2015/2016	0	0.01	0.44
Religion of the female respondent: Buddhist (Y/N) – 2015/2016	0.01	0.00	0.3
Religion of the female respondent: Hindu (Y/N) – 2015/2016	0.01	0.01	0.45
Did the female attend school? (Y/N) – 2015/2016	0.83	0.83	0.93
Female respondents' years of education – 2015/2016	5.03	4.95	0.8
Female respondents' ability to read and write in Indonesian (Y/N) – 2015/2016	0.21	0.18	0.28
Land area of building (m2)	49.69	55.19	0.19
Poor household floor type (Y/N)	0.14	0.27	0.02**
Poor household roof type (Y/N)	0.01	0.01	0.83
Poor household wall type (Y/N)	0.31	0.39	0.27
Status of the occupied residential building: Owned? (Y/N)	0.94	0.92	0.28
Source of drinking water: unprotected well, unprotected spring, river water, rain water (Y/N)	0.26	0.27	0.93
Defecation facility: don't have toilet/use public toilet/shared latrine (Y/N)	0.48	0.43	0.41
Ownership of a valid family card (Y/N)	0.94	0.94	0.82
Ownership of bank account (Y/N)	0.18	0.19	0.82
Number of children	1.29	1.15	0.06*
Number of non-working-age family members	1.44	1.33	0.08*
Number of working-age family members	2.6	2.59	0.9
Number of labour force HH members	2.09	2.15	0.5
Age of household head (years)	46.75	47.35	0.47
Years of education of the head of HH	5.05	4.86	0.56
Household size	4.04	3.91	0.36
Response to economic loss: None (Y/N) in the last 12 months – 2015/2016	0.19	0.23	0.26
Total amount loss caused by economic disruption (HH level) in the last 12 months – 2015/2016	2,537,680.33	2,085,718.52	0.4
Number of HHM participants in government groups or institutions	1.13	1.21	0.41
Number of HHM participants in religion groups or institutions	1.76	1.95	0.09*
Number of HHM participants in social service groups or institutions	1.19	1.15	0.47
Number of HHM participants in mass organizations/political parties	1	1.21	0.2
Number of HHM participants in other groups/institutions	1.17	1.39	0.35

Indicator	Mean		p-value
	Control	Treatment	
Age of each HH member (years)	28.85	30.75	0.07*
Has he/she worked/helped to earn income in the last six months? (Y/N)	1.89	1.82	0.12
Self-employed in agriculture(Y/N)	0.15	0.18	0.3
Self-employed raising livestock(Y/N)	0.08	0.12	0.02**
Self-employed in fisheries(Y/N)	0.01	0.01	0.21
Self-employed in other business(Y/N)	0.09	0.10	0.44
Government worker(Y/N)	0.01	0.01	0.23
Private worker(Y/N)	0.07	0.07	0.89
Casual agricultural worker (Y/N)	0.17	0.15	0.47
Casual non-agricultural worker(Y/N)	0.07	0.08	0.2
Domestic worker(Y/N)	0.01	0.01	0.4
Unpaid family worker(Y/N)	0.2	0.23	0.33
Years of education of each HH member	4.78	4.69	0.59
Program/activity for community empowerment in transport development (Y/N) – 2015/2016	0.95	0.96	0.72
Number of families benefiting directly from transportation program – 2015/2016	610.67	771.74	0.35
Program/activity for community empowerment in education development (Y/N) – 2015/2016	0.6	0.62	0.85
Number of families benefiting directly from education program 2015/2016	227.84	353.79	0.27
Program/activity for community empowerment in settlement/health development (Y/N) – 2015/2016	0.57	0.62	0.59
Number of families benefiting directly from settlement and health program – 2015/2016	184.7	316.24	0.18
Number of families benefiting directly from economic program – 2015/2016	172.4	244.83	0.49
Number of families benefiting directly from productive business grants program – 2015/2016	46.46	94.55	0.19
Program/activity in capacity improvement through productive business grants (Y/N) – 2015/2016	0.19	0.17	0.8
Number of families benefiting directly from grants for productive business program – 2015/2016	23.24	46.66	0.41
Program/activity for community capacity through production skills improvement (Y/N) – 2015/2016	0.3	0.38	0.37
Did PNPM provide funds for economic-related community empowerment and village development activities? (Y/N) – 2015/2016	0.3	0.34	0.61
Did Kube-PKH provide funds for economic-related community empowerment and village development activities? (Y/N) – 2015/2016	0.02	0.00	0.34
Did other community programs provide funds for economic-related community empowerment and village development activities? (Y/N) – 2015/2016	0.56	0.59	0.74

Indicator	Mean		p-value
	Control	Treatment	
Funding source of community empowerment and village development: PNPM (Y/N) – 2015/2016	0.73	0.60	0.14
Funding source of community empowerment and village development: Dana Desa (Y/N) – 2015/2016	0.67	0.61	0.47
Funding source of community empowerment and village development: P2B- Others (Y/N) – 2015/2016	0.02	0.02	0.95
Funding source of community empowerment and village development: Kube - PKH (Y/N) – 2015/2016	0.02	0.00	0.34
Funding source of community empowerment and village development: Others (Y/N) – 2015/2016	0.79	0.88	0.21
Land use change: rice farmland to non-rice farmland (%) – 2015/2016	2.59	1.42	0.52
Land use change: rice farmland to non-agricultural land (%) – 2015/2016	0.59	0.93	0.63
Land use change: rice farmland to forest (%) – 2015/2016	0.48	0.00	0.34
Land use change: non-rice farmland to rice farmland (%) – 2015/2016	0.14	1.36	0.03**
Land use change: non-rice farmland to non-agricultural land (%) – 2015/2016	1.35	2.29	0.44
Land use change: non-rice farmland to forest (%) – 2015/2016	0.02	0.31	0.16
Land use change: non-agricultural land to non-rice farmland (%) – 2015/2016	0.05	0.04	0.76
Land use change: non-agricultural land to forest (%) – 2015/2016	0.05	0.00	0.34
Land use change: forest to rice farmland (%) – 2015/2016	0	0.10	0.14
Land use change: forest to non-rice farmland (%) – 2015/2016	4.3	4.24	0.98
Land use change: forest to non-agricultural land (%) – 2015/2016	0.29	2.85	0.04**
Land size of the village (km ²) – 2015/2016	31.35	32.15	0.92
Irrigated rice farmland (km ²) – 2015/2016	0.67	1.29	0.07*
Non-irrigated rice farmland (km ²) – 2015/2016	1.1	1.39	0.57
Non-rice agricultural land (km ²) – 2015/2016	19.7	22.86	0.6
Non-agricultural land (km ²) – 2015/2016	9.88	6.19	0.27
Agricultural daily wage rate for males (IDR) – 2015/2016	55,809.52	59,189.65	0.26
Non-agricultural daily wage rate for skilled males (IDR) – 2015/2016	97,500	93,245.61	0.44
Non-agricultural daily wage rate for unskilled males (IDR) – 2015/2016	64,274.19	63,362.07	0.77
Agricultural daily wage rate for females (IDR) – 2015/2016	46,354.84	47,327.59	0.71
Non-agricultural daily wage rate for skilled females (IDR) – 2015/2016	71,428.57	64,411.76	0.38
Non-agricultural daily wage rate for unskilled females (IDR) – 2015/2016	47,735.29	43,184.21	0.18
Distance from the village office to the nearest market (km) – 2015/2016	6.35	6.86	0.82
Duration of one-way trip from village office to the nearest market by the most commonly used means of transportation (minutes) – 2015/2016	16.3	25.12	0.21
Cost of one-way trip from village office to the nearest market (IDR) – 2015/2016	7,722.22	8,303.45	0.81
Distance from the village office to the subdistrict town (km) – 2015/2016	8.14	9.71	0.39

Indicator	Mean		p-value
	Control	Treatment	
Duration of one-way trip from village office to the subdistrict town by the most commonly used means of transportation (minutes) – 2015/2016	16.94	32.19	0.02**
Cost of one-way trip from village office to the subdistrict town (IDR) – 2015/2016	6,607.94	14,504.31	0.01***
Does the village have any public vocational training centres? (Y/N)	0	0.03	0.14
Does the village have any private vocational training centres? (Y/N)	0.03	0.03	0.93
Presence of direct cash assistance programs (Y/N) – 2015/2016	0.98	0.98	0.95
Presence of credit/financial programs (Y/N) – 2015/2016	0.41	0.31	0.25
Presence of facilities/infrastructure programs (Y/N) – 2015/2016	0.86	0.88	0.72
Presence of community empowerment programs (Y/N) – 2015/2016	0.78	0.90	0.08*
Presence of increasing employment opportunity programs (Y/N) – 2015/2016	0.16	0.12	0.55
Number of families in the village – 2015/2016	744.32	914.30	0.33
Percentage of Muslim HH in the village – 2015/2016	98.74	98.81	0.92
Percentage of Protestant HH in the village – 2015/2016	0.34	0.33	0.97
Percentage of Catholic HH in the village – 2015/2016	0.49	0.17	0.36
Percentage of Hindu HH in the village – 2015/2016	0.23	0.63	0.43
Percentage of Buddhist HH in the village – 2015/2016	0.17	0.06	0.52
Percentage of Confucian HH in the village – 2015/2016	0	0.00	0.34

Annex 3: Survey Instruments

Table 5 Summary of the draft survey instruments³²

	Indicators	Respondents
A. HOUSEHOLD SURVEY		
Household characteristics	Data of all household members: (i) Name; (ii) Age; (iii) Marriage status; (iv) Current education/highest level of education; (v) Employment. Physical characteristics of the house.	Main respondent (e.g., household head)
Economic indicators	Income: (i) Non-business income; (ii) Salary; (iii) Agricultural income; (iv) Non-agricultural self-employment income. Consumption: (i) Food; (ii) Non-food, including details on health and education expenditure.	Main respondent (e.g., household head)
	Transfers, loans, gifts by source and amount.	Main respondent (e.g., household head)
	Assets: (i) Financial; (ii) Non-financial.	Main respondent (e.g., household head)
	Skills: (i) Financial; (ii) Economic; and (iii) Social. Entrepreneurship and current occupation details.	All respondents in all households
Empowerment indicators (see Pitt et. al. 2005)	Household decision making with regards to resources; finance; transaction management; mobility and networks; husband's attitudes and behavior; fertility and parenting; also, political activism.	Main respondent (and spouse when relevant)
Social capital	Social Networks: (i) Villagers; (ii) Officials; (iii) Strangers; (iv) KPB members. Participation in social (and political) activities.	Main respondent (and spouse when relevant)
B. VILLAGE SURVEY		
Infrastructure	Economic, education and community-development activities.	Village head

We will also collect the GPS information for all the locations of households and village offices.

³² As the groups would have not started adequately functioning during the baseline, the group module has been removed from the baseline survey.

Abstract

Improving the livelihoods of poor households in a sustainable manner is the priority of governments in many poor and middle-income countries. However, the evidence of what works and what doesn't in encouraging micro-entrepreneurship and enhancing livelihoods is limited, especially in middle-income countries such as Indonesia. Some of the promising initiatives (global and local) have tried to combine various activities by adopting a multi-sectoral approach (providing capital or assets, training, savings and consumption-easing support, social networks, market linkages, etc.) to help the poor graduate out of poverty. Thus, based on past experiences from Indonesia and current global evidence, the Government of Indonesia has designed an overarching umbrella of programs, Pengembangan Penghidupan Berkelanjutan (P2B), to improve the livelihoods and productivity of the poorest self-employed and poor households. This impact evaluation aims to assess the effectiveness of the core component of P2B: a community-based livelihoods program with a group loan (PKKPM).

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