

# LAUNCH

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ABDUL LATIF JAMEEL Poverty Action Lab

TRANSLATING RESEARCH INTO ACTION









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## WELCOME LETTER FROM J-PAL

Dear J-PAL Southeast Asia Launch Guests, Colleagues, and Friends,

We are delighted to welcome you to the launch of J-PAL Southeast Asia, the newest addition to the Abdul Latif Jameel Poverty Action Lab's growing worldwide network of research centers.

Based within the Institute for Economic and Social Research (LPEM) at Universitas Indonesia, J-PAL Southeast Asia will expand J-PAL's work promoting evidence-based policymaking in Indonesia and the wider region. Our goal is to equip policymakers with rigorous evidence to inform the design of social programs that will make a lasting contribution to poverty reduction in Southeast Asia. We will also embark on a long-term effort to train more local researchers to run high-quality impact evaluations that are fully rooted in Indonesia and the region.

None of this work would be possible without the support of our partners, including AusAID, LPEM-UI, and the large number of NGOs, international development organizations, and Government Agencies that have collaborated with J-PAL on research, capacity building, and policy outreach. We thank them for their partnership and their continued dedication to finding innovative and rigorously proven approaches to fight poverty.

Thank you for being with us as we celebrate J-PAL's newest research center, and we look forward to working with you in the years to come.

Sincerely,

Rema Hanna Scientific Director Benjamin Olken Scientific Director Héctor Salazar Salame Executive Director





## WELCOME LETTER FROM AUSAID

Dear J-PAL Southeast Asia Launch Guests,

Australia and Indonesia have an effective development partnership that is changing millions of lives by improving health and education outcomes, boosting economic growth, providing support to protect the poor and vulnerable and strengthening democracy, justice and governance. Maintaining and growing this partnership remains a high priority for Australia. AusAID believes strongly that rigorous, high-quality research can lead to positive change for the world's poorest by enhancing the design and implementation of development policies and programs. That is why AusAID is committed to an innovative research portfolio and funds research partners such as J-PAL Southeast Asia.

We congratulate J-PAL on the launch of J-PAL Southeast Asia and look forward to the contributions that this new research center will make toward poverty reduction in the region.

Sincerely,

Jacqui de Lacy Head of AusAID Indonesia

## WELCOME LETTER FROM UI

Dear J-PAL Southeast Asia Launch Guests,

J-PAL's mission—to reduce poverty by ensuring that policies are based on scientific evidence—aligns precisely with the efforts that the University of Indonesia and its Economics Faculty have conducted over the past 50 years through the UI Institute for Economic and Social Research (LPEM). LPEM's research and training activities seek to solve the development problems for the benefit of Indonesian society. These are based on a strong research culture that includes the applications of theories in analyzing and providing policy recommendations.

As the institutional home for J-PAL Southeast Asia (SEA), we look forward to working together toward an expanded use of rigorous research and evidence to address some of the most critical challenges facing Indonesia and other countries in Southeast Asia. J-PAL SEA and LPEM will collaborate in translating research into action and, in so doing, help improve opportunities for low-income people in Indonesia and the broader region. On behalf of UI, its Economics Department and LPEM, we welcome J-PAL SEA and look forward to the work ahead.

Sincerely,

Prof. Dr. Ir. Muhammad Anis, M. Met President of University of Indonesia



## **ABOUT J-PAL**

The Abdul Latif Jameel Poverty Action Lab (J-PAL) was established in 2003 as a research center at the Economics Department at the Massachusetts Institute of Technology (MIT). Since then, it has grown into a global network of over 80 researchers who use randomized evaluations to answer critical policy questions in the fight against poverty.

J-PAL's mission is to reduce poverty by ensuring that policy is based on scientific evidence, and that research is translated into action. We do this through three main activities:

**Conducting Rigorous Impact Evaluations.** J-PAL researchers conduct randomized evaluations to test and improve the effectiveness of programs and policies aimed at reducing poverty. Our work spans several program areas: agriculture, education, environment, finance, health, governance, and youth and labor markets.

**Policy Outreach.** J-PAL's policy group analyzes and disseminates research results and builds partnerships with policymakers to ensure policy is driven by evidence and effective programs are scaled up.

**Capacity Building.** J-PAL equips practitioners with the expertise to carry out their own rigorous evaluations through training courses and joint research projects.



In addition to our global office at MIT, Cambridge USA and our new Southeast Asia office in Jakarta, J-PAL has regional centers in Africa at the University of Cape Town (Cape Town, South Africa); South Asia at the Institute for Financial Management Research (Chennai, India); Europe at the Paris School of Economics (Paris, France); and Latin America and Caribbean at Pontificia Universidad Católica (Santiago, Chile). J-PAL's regional offices coordinate evaluations of development programs and actively work in capacity building and policy outreach.

## ABOUT J-PAL SOUTHEAST ASIA

With the generous financial support of AusAID, J-PAL is delighted to launch a new research center in partnership with the Institute for Economic and Social Research (LPEM) at Universitas Indonesia. J-PAL Southeast Asia will serve as a hub for J-PAL's three core activities in Indonesia and other Southeast Asian countries by:

- generating new, policy-relevant evaluations with J-PAL affiliates,
- helping ensure that J-PAL evaluations build local capacity for rigorous research, and
- providing a platform with which to disseminate research and policy insights from J-PAL's global network to policymakers and researchers within Indonesia and throughout the region.

The establishment of J-PAL Southeast Asia builds on many years of partnership between J-PAL affiliated researchers and the Government of Indonesia. Together with counterparts from the GOI, the World Bank, and other partners, J-PAL affiliates have focused on generating evidence on governance, as well as on evaluating and improving the

effectiveness of anti-poverty programs such as PNPM-Generasi, Program Keluarga Harapan (PKH), and Raskin. Pages 11–17 describe three of these evaluations in more detail.



At the same time, J-PAL has sought to build local capacity to design and implement high-quality economic policy research. To that end, J-PAL has conducted numerous capacity building initiatives in Indonesia, include running training courses on randomized evaluations, organizing local conferences and seminars, and mentoring young researchers through research fellowships.

## WHY RANDOMIZE?

It is not always obvious which policy will have the largest impact on intended beneficiaries: What is the best way to increase school participation—incentives for parents, information on the economic benefits of schooling, or school inputs? Do quotas for women in politics reduce (or increase) biases against women politicians? What is the most cost-effective way to improve access to safe water and basic sanitation? To design good policy, we need to know how well a policy is working and whether it is a good value for the money.

Random assignment offers a simple way to generate these insights. In randomized evaluations, individuals are selected to receive a program based on a lottery. Those individuals who are not selected form a comparison group. Because the selection process is random, the two groups are similar in every respect, except that one group receives the program, while the other does not. Therefore if, after the program is implemented, the group that received the program has different outcomes (e.g. more or less healthy, or higher or lower test scores), we know that this difference was caused by the program. This clear attribution of what effects where caused by the program gives us insights about its effectiveness.

Randomized evaluations are particularly appropriate when programs are oversubscribed, scheduled to be rolled out in a gradual fashion, or are initially tested with pilot programs. In those cases, randomization is one of the fairest ways of determining participation, while simultaneously allowing for rigorous measurement of the program's impact.







Indonesia's National Community
Empowerment Program—Healthy and
Bright Generation (PNPM Generasi):
Performance Incentives and Community
Block Grants

#### **POLICY ISSUE**

Recently there has been an increased drive among governments, international organizations, and NGOs to tie development grants to performance. Requiring countries, communities, or individuals to achieve certain outcomes in order to receive additional funds may lead them to increase their effort in improving health and education. In 2007, the Indonesian government began a pilot program to test incentivized community-based grants, delivered through the government's National Community Empowerment Program for Rural Areas (PNPM-Rural) architecture. Under its predecessor program, KDP, the government had acquired nearly ten years of experience channeling resources directly to villages, but never in ways linked to performance. Under the program, known as PNPM Generasi, villages received annual block grants which they could allocate to any activity to improve one of 12 health, nutrition, and education indicators linked to lagging Millennium Development Goals.

#### **EVALUATION**

In 2007, J-PAL affiliate Benjamin Olken, along with Junko Onishi and Susan Wong from the World Bank, worked with the Government of Indonesia's Ministry of Home Affairs and National Development Planning Agency to evaluate the effectiveness of incentivized versus non-incentivized grants in the Generasi program. In some randomly selected communities, a portion of the subsequent year's grant was allocated based on their relative performance on the 12 health, nutrition, and education indicators.

#### **RESULTS**

Researchers found that community block grants that were linked to performance were more effective in improving maternal and child health outcomes than non-incentivized grants. Over thirty months, maternal and child indicators, including prenatal visits, delivery by trained midwives, childhood immunizations, and growth monitoring, were an average of 0.03 standard deviations higher in incentivized areas than in non-incentivized areas. This was driven primarily by increases in the number of prenatal visits, which was 5 percent higher in incentivized areas than non-incentivized areas, and immunization rates, which were 3 percent higher in incentivized areas. Childhood malnutrition declined by 2.6 percentage points, a 10 percent reduction relative to control areas.

#### **POLICY RESPONSE**

Following the results of the evaluation, the Government of Indonesia moved exclusively to incentivized grants, and increased its annual funding for the block grant program. The Government of Indonesia expanded its annual funding for the program from US\$15 million in 2011 to US\$40 million in 2012. As of 2013, approximately 5.4 million children and pregnant mothers benefitted from the continuation of the program.

Quoting the results of the PNPM Generasi evaluation, AusAID committed US\$125 million to scale up Generasi over the period 2010–2014. In 2011, the US Government's Millennium Challenge Corporation (MCC) signed a US\$600 million compact with the Government of Indonesia to fund projects to reduce poverty. Also citing evaluation findings, the MCC pledged over US\$130 million of the compact to support a holistic program of supply and demand-side interventions aimed at improving maternal and child nutrition. US\$81 million will support the next phase of PNPM Generasi, which includes design improvements to further target stunting and nutrition outcomes, which were identified as priorities by the Government of Indonesia. This brings the total funding for the scale-up from all sources to over US\$300 million. At its peak in 2015, Generasi Plus is expected to benefit 8.8 million people each year, in over 5,500 villages where rates of stunting and low birth weight in infants are particularly high.





## Effective Targeting of Cash Transfer Programs

#### **POLICY ISSUE**

Around the world, governments aim to target essential social safety net programs to the poor. Since many of the world's poor lack income records, identifying eligible households is a key challenge. Using inaccurate income data can result in eligible households being excluded from social programs and funds being diverted to richer, ineligible households.

To combat this problem, some governments select program beneficiaries using targeting methods that do not require income records. A proxy means test predicts a household's income by collecting simple information about the assets they own. In community-based targeting, governments allow local community members to select beneficiaries, believing that they have better information about their neighbors' poverty levels. Hybrid approaches allow community members to select the initial beneficiary list and then the government verifies whether the households are eligible. Self-targeting—having households apply for the program instead of being selected—may also screen out richer households.

In principle, there are good arguments for or against any of these methods. For example, the community method may incorporate more information about a household's circumstances than proxy means tests, but one might also be concerned about elite capture of the community-based process. Ultimately, then, it is an empirical question which targeting method performs best at identifying the poor.

#### **FVALUATION**

In partnership with Statistics Indonesia (BPS), the Department of Family Planning and Welfare at the Indonesian Ministry of Social Affairs (DEPSOS), and the Indonesian National Team for the Acceleration of Poverty Reduction (TNP2K), researchers tested the relative effectiveness of these four widely used targeting methods in identifying households eligible to receive national cash transfer programs. The evaluations were conducted by Vivi Alatas from the World Bank; J-PAL affiliates Abhijit Banerjee, Rema Hanna, and Benjamin Olken; Ririn Purnamasari and Matthew Wai-Poi from the World Bank; and Julia Tobias.

Researchers first conducted a randomized evaluation to test whether proxy means tests (PMTs), community-based targeting, or a hybrid approach led to more accurate targeting and improved community satisfaction. A second randomized evaluation tested whether having households

self-select into a cash transfer program resulted in better targeting than the PMT system that the government used to identify eligible beneficiaries.

#### **RESULTS**

In the first evaluation, researchers found that community-based targeting was less accurate than proxy means tests overall, but it greatly improved local satisfaction and better matched the poor's own concept of poverty. PMTs did better at identifying more households living on \$2 or less per day, but communities were more likely to be satisfied with the community-based method. The hybrid method was less accurate than PMTs and resulted in lower community satisfaction than community-based targeting.

In the second study, researchers found that compared to PMTs, self-targeting selected a poorer group of beneficiaries. Those who applied were poorer both in terms of the assets measured by the PMT but also along measures of poverty not collected in the PMT, indicating that self-targeting could perform better than a universally-administered PMT. Increasing the cost of applying by increasing applicants travel and wait times did not improve targeting accuracy further. This suggests that while requiring households to apply for a cash transfer program can induce self-selection by poorer households, increasing the difficulty of applying can impose additional costs on applicants without necessarily improving targeting.





## Farmer Decision-Making and Technology Experimentation in Bali

#### POLICY ISSUE

Despite regularly making decisions that affect their crop yields, farmers may lack information about how to appropriately use farming inputs or techniques. One explanation could be that farmers may fail to notice certain details about the cultivation process simply because they may not believe the information to be useful. J-PAL affiliates Rema Hanna and Sendhil Mullainathan, along with Joshua Schwartzstein, designed a randomized evaluation to test whether farmers learn about optimal farming techniques when they are presented with information that helps them notice new or previously neglected dimensions of the production process.

#### **EVALUATION**

Seaweed farming has been prominent in Nusa Penida district in Bali since the 1980s. It is cultivated by cutting seaweed into pods and planting it along the ocean floor. The size of the pods is an important factor affecting seaweed yield. Researchers randomly selected farmers to participate in an experimental trial to determine the optimal pod size for seaweed cultivation. Farmers in the treatment group assisted an agricultural extension worker to vary the seaweed pod size and weight on one of their plots. A couple months

later, enumerators re-visited farmers in the treatment group to give them information on the pod size and weight that produced the highest yields. Two months after the results were distributed, researchers conducted a survey to see if farmers changed their methods after receiving these results.

#### **RESULTS**

Researchers found that many farmers failed to use the optimal pod size and weight in seaweed cultivation. Watching an enumerator experiment with different seaweed pod sizes and weights did not lead farmers to change their techniques, which suggests that learning through observation and experience does not always guarantee effective use of technology. However, farmers in the treatment group report making large and significant changes in their production techniques after receiving specific recommendations about which pod size or weight improved yields. Training programs for farmers may be useful, not only for new technologies, but also for existing technologies with which individuals may have already had prior experience.

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