Projet Generasi: Allocations globales conditionnées, à destination des communautés villageoises, Indonésie

Researchers:

Ben Olken

Junko Onishi

Susan Wong

Sector(s): Éducation, Santé, Économie Politique Gouvernance

Fieldwork: World Bank

Location: Indonesia

Sample: 300 sous-districts

Target group: Rural population

Outcome of interest: Enrollment and attendance Mortality Transparency and accountability Service provider performance

Intervention type: Monetary incentives

AEA RCT registration number: AEARCTR-0000332

Données: Download from Dataverse

Partner organization(s): Government of Indonesia, World Bank

Policy issue

En raison du succès des programmes de transferts sociaux conditionnés (Conditional Cash Transfers – CCT) tels que PROGRESA, opérant des transferts sociaux à destination des familles pauvres vivant dans les zones rurales du Mexique, transferts conditionnés par la scolarisation des enfants et des consultations médicales régulières, de nombreux pays ont mis en place des programmes similaires avec l'espoir d'augmenter les revenus des familles. Les programmes CCT cherchent à stimuler la demande en matière de santé de la mère et de l'enfant, ainsi qu'en matière scolaire, notamment en augmentant le niveau de liquidité des familles les plus pauvres. Cependant, de telles interventions ne sont pas forcément les plus adaptées dans des contextes où les bénéficiaires ne peuvent accéder facilement aux services de santé ou d'éducation. Les chercheurs étudient donc de nouvelles stratégies, comme par exemple les systèmes de "transferts globaux", qui ont également recours à des primes financières pour améliorer la santé et l'éducation.

Context of the evaluation

In 2007, the Government of Indonesia launched Generasi (the National Community Empowerment Program— Healthy and Smart Generation), a community block grant program to improve health and education in rural villages. Generasi provided communities with funds they could use for any purpose—from hiring extra midwives to opening new schools—that would improve health and education as measured by twelve performance indicators (see box below). Villages elected eleven-member management teams to conduct social-mapping exercises, participate in discussion groups, and consult with health workers and teachers to decide how to spend the funds.

Generasi targeted twelve indicators that donors chose as key markers of progress towards long-term improvements in health and education:

Health	Education
Prenatal care visits	Primary school enrollment
Distributing iron tablets to pregnant women	Primary school attendance
Childbirths with trained midwives	Middle school enrollment
Postnatal care visits	Middle school attendance
Immunizations	
Consistent infant weight gain	
Monthly weight checks	
Distributing vitamin A pills to children	



Schoolchildren in Indonesia.

Photo credit: World Bank

Details of the intervention

To measure the impact of community block grants and the additional effect of incorporating performance incentives, researchers randomly assigned 264 subdistricts, each with about twelve villages, to one of three groups:

Group	Number of subdistricts	Grant	Details
Comparison group	83	No grants	
Unconditional grants	88	Community block grants	Grant amounts were based on the number of potential beneficiaries—pregnant women and children—in each village.

Group	Number of subdistricts	Grant	Details
Incentivized grants	93	Community block grants	In the first year, grant amounts were based on the number of potential beneficiaries in each village. Subsequently, 80 percent of funds continued to be divided among villages according to the number of beneficiaries. The remaining 20 percent of funds allocated to each subdistrict formed a bonus pool, which was split among villages according to performance on the targeted indicators. Researchers surveyed households, village leaders, healthcare providers, and school officials 1.5 and 2.5 years after Generasi began. They collected information on the targeted indicators as well as long-term health and education outcomes, including childhood malnutrition and test scores.

Researchers surveyed households, village leaders, healthcare providers, and school officials 1.5 and 2.5 years after Generasi began. They collected information on the targeted indicators as well as long-term health and education outcomes, including childhood malnutrition and test scores.

Results and policy lessons

Community block grants issued through Generasi improved health and education. When all twelve targeted indicators were combined into a single measure, villages that received either version of Generasi performed 0.04 standard deviations above comparison villages after 2.5 years.

The most significant gains in individual indicators were in the frequency of weight checks for young children, school enrollment for children ages 7–12, and malnutrition. Generasi increased the average number of weight checks over three months by 0.15 checks from an average of 2.2 checks in comparison villages. School enrollment for children ages 7–12 increased by 0.8 percentage points over a 98.5 percent enrollment rate in comparison villages.

Improved performance on the targeted health indicators led to a 2.2 percentage point reduction in malnutrition among children under three. In comparison villages 22.8 percent of children were malnourished. However, the program did not affect learning, as measured by test scores in math and Indonesian, at the end of the 2.5-year evaluation.

Disadvantaged areas benefited most from Generasi. On average, the program was about twice as effective in villages at the tenth percentile of the targeted health and education indicators at the start of the program. Among these villages, Generasi reduced malnutrition by 6.2 percentage points—nearly three times the average effect—and increased school participation among children ages 7–12 by 1.9 percentage points—more than double the average effect.

Health indicators improved faster in villages that received grants with performance incentives. After 1.5 years, villages receiving incentivized grants performed 0.04 standard deviations higher than villages receiving unconditional grants across the eight health indicators. These villages logged more prenatal visits, more monthly weight checks, and lower levels of malnutrition. However, after 2.5 years, the differences in health indicators between villages receiving unconditional and incentivized grants were not statistically significant, but the estimates still suggest better performance in villages with incentivized grants. Incentives did not affect education indicators after either 1.5 or 2.5 years.

Although the incentives did not have a large impact, there was no evidence to support common criticisms of performance incentives. Officials in villages receiving incentivized grants did not manipulate immunization or school attendance records to show higher performance. Furthermore, the bonus money was not allocated to wealthier areas over poorer areas, which might have lower performance levels but would greatly benefit from additional aid.

Community block grants can improve performance in health and education. The Generasi program led to a 0.04 standard deviation improvement across twelve health and education indicators the program was designed to address. The most notable gains were in the frequency of children's weight checks, the incidence of childhood malnutrition, and primary school enrollment.

Community block grants may be especially effective in disadvantaged areas. Generasi had a greater impact in areas with low levels of health and education and in more remote provinces of Indonesia. These were the areas with the greatest need for development aid and the most room for improvement. In the future, Generasi and similar programs should prioritize areas that lag behind in the indicators that the program targets, as these are the places where additional resources and effort may have the greatest effect.

Incorporating performance incentives may lead to quicker improvements in targeted areas. In this context, incentivized grants led to greater gains on health indicators after 1.5 years, but villages receiving unconditional grants had partially caught up after 2.5 years. While the unconditional grants also had a positive impact on health, these results suggest that performance incentives may be useful in jumpstarting the process of social and economic development.

The absence of detrimental side effects suggests that performance incentives may be appropriate if carefully designed. Although performance incentives had mixed results in this context, the concerns of many critics were not borne out. There was no manipulation of records to show better performance. Furthermore, Generasi was carefully designed to compare villages within the same subdistrict. As nearby villages generally have similar income levels, this prevented wealthier subdistricts from drawing bonus funds away from poorer subdistricts. Researchers should test different incentive schemes across different contexts to determine how to design rewards that enhance performance while continuing to avoid negative side effects.

Based on the results of this evaluation, the Government of Indonesia moved exclusively to incentivized grants and increased annual funding for the community block grant program. In 2010, the Government of Indonesia committed to increasing funding for an incentivized community block grant program that has reached 3.7 million women and children in approximately 5,400 villages annually over four years, focused on areas where stunting and low access to health and education services are prevalent. For more details, see the evidence to policy case study.

Olken, Benjamin, Junko Onishi, and Susan Wong. 2014. "Should Aid Reward Performance? Evidence from a Field Experiment on Health and Education in Indonesia." American Economic Journal: Applied Economics 6(4): 1-34.