

OED Précis



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Enhancing the Quality of Life in Urban Indonesia

World Bank efforts from 1970 to 1988 to improve the living conditions of Indonesia's urban poor met with success, finds a recent impact evaluation by OED. The report looks at the medium- to long-term impacts of four projects designed mainly to alleviate poverty by improving housing and basic infrastructure in low-income, densely populated areas known as kampungs. The projects were most successful in improving infrastructure; substantial environmental and institutional gains were recorded as well. The projects also improved the lives of residents in surrounding areas. Though substantial progress has been made, much remains to be done. The evaluation offers recommendations for addressing some of Indonesia's outstanding urban issues.*

Background

The four projects, Urban I-IV, were implemented during a time of rapid rural-urban migration of Indonesia's poor. Continuous urban growth led to increasing demand for basic infrastructural services. The projects' immediate goal was to support the government in meeting this demand in a cost-effective way. Kampung Improvement Programs (KIP), with their focus on basic infrastructure, became the primary vehicle for providing these services (see box).

OED's impact evaluation focused on changes to housing and

infrastructure, the urban environment, land/house values, ownership, markets, and institutional capacity, in kampungs in three cities targeted by the projects: Jakarta, Surabaya, and Denpasar.

To understand the extent to which these projects affected Indonesia's urban poor, certain developments must be factored in.

Macroeconomic conditions. Since the early 1970s, Indonesia has undergone an economic transformation: per capita gross domestic product has more than doubled and inflation has fallen considerably. Confidence in Indonesia's development has attracted external aid flows. The quality of macroeconomic management and the ensuing income growth most likely influenced project outcome by amplifying already positive results or by leading to improvements that were not part of the KIP effort.

Policies and initiatives during and after project implementation must also be considered. Important developments in family planning, health care, education, and poverty reduction have emerged in the past ten to 15 years. Poverty has been reduced from an estimated 60 percent of the population in the early 1970s to 15 percent today. Dramatic gains have been made in reducing infant mortality and population growth, and in increasing primary

and secondary school enrollment and adult literacy. Life expectancy has risen from 41 to 61 years.

Impacts

Housing and infrastructure

The projects induced housing and infrastructural improvements in low-income areas at a low cost of investment (ranging from an average of \$118 per person in Jakarta to \$23 in smaller cities, 1993 US dollars). They led to improved housing, footpaths, lighting, and education and health facilities.

One of the projects' most important outcomes was the spillover effect—that is, the KIP experience served as a prototype for investments and improvements in other areas. After about four years, housing, infrastructure, education, health, and other socioeconomic indicators in non-KIP kampungs (those not targeted for improve-

**Impact evaluation report, "Enhancing the Quality of Life in Urban Indonesia: The Legacy of the Kampung Improvement Program," Report No. 14747-IND, June 1995. OED reports are available to Bank executive directors and staff from the Internal Documents Unit and from Regional Information Service Centers.*

ment) had caught up with those in kampungs assisted by the projects. This was a result of Indonesia's macroeconomic and policy improvements, but also of informal and formal efforts to duplicate the KIP experience.

A 1983 evaluation in Jakarta, for instance, found that investments and housing conditions in KIP kampungs were better than those in non-KIP kampungs. Today, both KIP and non-KIP kampungs in all sites covered by the impact evaluation use "permanent" or high-quality materials, as opposed to bamboo and wood, to construct or upgrade houses. Most residents have brick/cement walls, tile/terrazzo and cement floors, and tile and zinc roofs. Improvements to KIP kampungs, however, came more rapidly. KIP kampungs also have larger lots and thus are less densely populated.

In addition to expert field observations, residents of KIP kampungs provided an assessment of the physical changes and facilities introduced by the projects. The majority felt that facilities had either improved or had not deteriorated. Observers found facilities in all kampungs to be good, regardless of whether improved under KIP.

Although KIP design standards have reduced the risk of fire in some areas, the use of modern flammable building materials and overcrowding have increased that risk. Moreover, narrow footpaths do not allow fire trucks access to interior areas.

Urban environment

The projects led to environmental improvements in the kampungs, including wider access to clean and safe water; better drainage and hence less frequent flooding; better solid waste management; and more common use and ownership of private toilets and septic tanks. Two of these components—solid-waste manage-

ment and drainage and flood control—were designed to have an impact at both the kampung and citywide levels. Although KIP has created much better environmental conditions in low-income areas, much still needs to be accomplished.

For example, *access to safe drinking water* is still not universal. The majority of residents in KIP kampungs have water piped into their homes, thanks to the main pipelines introduced by the programs. Non-KIP kampung residents tend to rely more on street vendors for water. But many residents, both KIP and non-KIP, also frequently use water from wells—because it is free and because they find piped water to be of poor quality (taste and smell) and quantity (low pressure limits the amount they can extract). Women in the Manggarai kampung put it best by saying they drink well water because it "tastes better, and there is no one down there adding things to it." However, this groundwater is often polluted by saline and other contaminants, with obvious health risks. And, use of wells contributes to land subsidence, flooding, saline intrusion, and damage to fisheries.

Most kampung residents now own *closet toilets with septic tanks*. This is a great improvement, at least for Jakarta, where, according to a 1974 staff appraisal report, most houses flushed their sanitary waste into open ditches along the roadside. These privately owned facilities have proven much more popular than have the community sanitation facilities introduced by the KIP. Yet, toilets in many households in Jakarta and Denpasar still empty directly into canals or rivers. Additionally, many septic tanks are rarely emptied and may be leaking into and polluting the soil and groundwater, or overflowing into drainage ditches. This poses serious health hazards, especially during the rainy season.

Improved drainage has helped reduce *flooding*. There are notable differences in rates of flooding in KIP

and non-KIP kampungs: 61 percent of KIP residents say they have no flooding in or outside their homes, compared with only 32 percent of non-KIP residents. The flooding problem is especially worse in non-KIP kampungs in Jakarta, where 80 percent of residents report having open drainage or no drainage system at all.

In kampungs where the drainage infrastructure was improved, contents sometimes emptied into areas that did not yet have drainage systems. Thus, the improved infrastructure was not always effectively integrated with the broader infrastructure. (See *Précis* No. 95, June 1995.)

Inadequate operation and maintenance—one of KIP's weakest points overall—also caused problems. A 1992 survey of kampung residents found that one of the main environmental problems was blocked drains. The practice of dumping rubbish and sewage into canals and rivers causes back-ups, especially during low flow, which could be avoided if the practice were stopped, but also if the drains were cleaned regularly.

Efforts to improve *solid-waste management* had mixed results. Most residents now use private or shared garbage bins though they complain about the cost and frequency of collection services. But some residents simply choose not to pay, especially with the many informal landfill sites where garbage disposal is encouraged by owners to build up land. This practice, as well as the public's proclivity for dumping solid waste in open areas, rivers, and canals, is creating breeding grounds for disease and water contamination.

The largest difference in solid-waste management was not found between KIP and non-KIP kampungs, but among cities. Kampungs in Surabaya, which has won several national and international awards for its clean streets, were found to be far cleaner than those elsewhere.

With rapidly emerging real estate markets, new construction is supplanting existing kampungs. Land is needed for housing development, social facilities, and infrastructure. Weak land-tenure claims make it difficult for residents to resist renewal efforts. They often lack the business savvy to recoup the real value of their land and houses when they do sell, and lack skill at managing their new fortunes. Moreover, they cannot afford to live in the replacement housing, which tends to cater to high-income residents.

Urban redevelopment threatens the very existence of kampungs. As more and more kampungs make way for high-rise and other modern structures, the question arises as to whether KIP investments were worthwhile. The study finds that, among other benefits, KIP residents enjoyed land values higher than those in non-KIP kampungs. Expressed as an annual stream of benefits over a conventional 15-year economic life, this potential capital gain from KIP investments yields an estimated 31 percent economic rate of return (ERR). If redevelopment reduced a project's life to five years, similar annual benefits would still yield an estimated ERR of 12 percent. (ERRs were calculated using conventional analysis for urban projects. Project costs are the initial capital investment, and benefits were estimated by converting increases in land value into an annual stream of imputed rental values for the project's life.) Thus, even with shortened lives, most project investments were justified from an economic point of view, owing to the substantial benefits residents enjoyed prior to kampung demolition.

Given the growing pressure on urban land, further redevelopment of kampungs seems inevitable. Clearly, the government has a monitoring and regulatory role

Box: Improving kampungs

Kampungs are located in strategic parts of cities, surrounded by more affluent neighborhoods, government centers, and shopping malls. Before the Kampung Improvement Programs were introduced, many kampungs lacked basic infrastructure and services. They were often referred to as slums, and kampung was synonymous with poverty. The improvement programs were designed to provide the poorest neighborhoods with a basic set of services:

- Upgrade and improve vehicular roads (including by adding drains).
- Upgrade and pave footpaths.
- Rehabilitate and create drainage systems.
- Provide garbage bins and collection vehicles.

- Provide safe drinking water through public taps.
- Construct public washing and toilet facilities.
- Construct neighborhood health clinics and primary school buildings.

Families today are healthier, better educated, and better off financially, a result in part of KIP.

Third generation families now inhabit settlements. Many have no rights to the land and are technically still squatters. Unfortunately, few are aware of their legal rights and the potential implications. The complexity of land rights in Indonesia sometimes stops projects such as KIP from entering areas where land-rights issues are contentious.

to play in ensuring that urban real estate markets work fairly, and that kampung residents' rights are recognized and their well-being safeguarded.

Institutional development

The four projects had some landmark impacts on institutional development. The government created new agencies to direct development and investment activities, while the managerial capabilities of existing agencies were strengthened considerably. In particular, a new government agency (National Urban Development Corporation) was established to manage low-cost housing development. Also, the state savings bank (Bank Tabungan Negara) was allowed to introduce Indonesia's first mortgage lending operations. These agencies remain important players on the urban stage in Indonesia.

But one of the projects' most lasting impacts was to keep important institutional development issues—notably cost recovery and decentralization—on the urban sector reform agenda.

Cost recovery. The projects sought to recover the costs of upgrading kampungs indirectly through city-wide property taxes and those of sites and services directly from purchasers of plots. Results were disappointing. Indonesia still relies little on local taxes for financing urban infrastructure. And, while government agencies have consistently kept to the principles of cost recovery embodied in successive urban projects, they have strong reservations about how and when to achieve effective cost recovery.

Decentralization. Although the projects were directed by the central government in Jakarta, special KIP units were established within the local administration of each project city. Performance of these units was mixed: procedures were not fully integrated into local administration and were discontinued after project completion. Some institutional improvements, however, particularly in cost accounting and auditing, have been mainstreamed within the more dynamic local administrations. Another important result is that specific functions, such as project implementation, have been devolved to local au-

thorities. Follow-on urban projects supported by the Bank have become important instruments for implementing the government's decentralization agenda.

Community voice and urban stability

Local governments need the cooperation of communities to maintain existing infrastructure and facilities. The extent to which communities were involved in project planning influenced how much they participated in implementation and how they perceive improvements.

Sixty-eight percent of residents said they were consulted during the planning of KIP; 73 percent said they participated in KIP implementation. Consultation during project planning took the form of meetings in the offices of local officials. Residents in some kampungs were consulted about such issues as the location of roads and footpaths. Meetings elsewhere, however, were sometimes strictly informational, with little or no residential feedback. The degree of participation also varied. In some kampungs, residents worked through local neighborhood associations to help with simple aspects of KIP implementation, such as the demolition of fences or dwellings. In others, residents merely observed construction activities.

To assess whether participation in KIP affected attitudes toward improvements, the study questioned residents about the overall environmental situation in their kampungs. Almost 80 percent of residents who were consulted and who participated in planning and implementation found environmental conditions to have improved after KIP. Residents with little involvement were not as en-

thusiastic; only about half thought that KIP had improved environmental conditions. These findings indicate that consultation generally led to participation, and that participation generally resulted in greater satisfaction with KIP outputs. Furthermore, community consultation and participation in the early stages of project preparation and design helped instill a sense of ownership among beneficiaries.

KIP appears to have contributed to residential stability, perhaps because of its rapid and extensive coverage. Project improvements did not induce wealthier people to move in and displace the neediest, as some had feared. Those who did move in tended to be from social groups similar to those of current residents.

Recommendations

- Corrective measures are needed to head off the apparent collision between rapid urbanization and a delicate environment. Drainage systems improved by KIP helped to reduce flooding. But they have also led to backlogs at the entrance to the main city drain. Clearly, improvements in one area should not have a negative impact on another. *An upgrade program is needed to integrate flood control measures and drainage networks at the citywide scale.*
- Some aspects of the infrastructure and environment can be controlled and managed by communities—housing conditions, road and footpath maintenance, solid-waste collection, and the upkeep of local drains. Other aspects, such as the illegal dumping of solid waste, the integration of kampung infrastructure with the citywide infrastructure, and the effects of pollution, are beyond the control of the communities. *They need to be*

controlled and managed by local governments with the assistance of central national authorities.

- The growing demand for urban real estate calls for concerted action to ensure that displaced kampung residents are not exploited. *The design of urban projects in Indonesia should include an assessment of the local real estate market to determine the likelihood of kampung redevelopment and address the issue of compensation for displaced families.*
- Poor operation and maintenance of kampung infrastructure highlights the need for action. *Future projects should promote working partnerships with, and the consultation and participation of, community groups and nongovernmental organizations (NGOs), to elicit their interest in and commitment to the operation and maintenance of existing and new facilities. Yet the concept of community consultation and participation still means different things to different people. Efforts should therefore be made to promote a more thorough understanding of the concept and to provide community members, NGOs, and project staff with better guidelines on how to achieve it.*
- The rich learning experience of these efforts was neither well-documented nor followed progressively, despite monitoring and evaluation components in two of the projects. *The institutional memory and lessons learned through these projects need to be maintained to help guide future endeavors and to facilitate the sharing of knowledge. With Bank support, BAPPENAS (Indonesia's National Development Planning Agency) will develop an in-house evaluation capability in all sectors, including impact evaluations. There is a special need to ensure that baseline data and evaluation systems are in place prior to project initiation.*

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